



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

Retain for future use 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 Behold for senere bruk Säilytä nämä käyttöohjeet tulevaa tarvetta marten Opbevar manualen til fremtidig brug Bewaren voor gebruik in de toekomst Conservare il presente manuale a l'uso futuro Păstrați acest manual pentru utilizare viitoare Conservar para futuras consultas Behall för framtida användning Uchovejte pro další použití Hranite za prihodnjo uporabo

Wood-Mizer®

Safety, Setup, Operation & Maintenance Manual

LX50SCEH7S (Super) rev.B1.02 LX50SCG14S (Super) rev. B1.02 LX50SG14 (Super) rev. B1.02



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

Form #850

This is the original language for the manual.

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

SECTION	1 SAFETY INSTRUCTIONS	1-1
1.1	Safety Symbols1-1	
1.2	Blade Handling1-2	
1.3	Sawmill Setup1-2	
1.4	Sawmill Operation1-2	
1.5	Refueling1-4	
1.6	Gas Engine Operation1-4	
1.7	Sawmill Maintenance	
1.8	Safety Instructions1-6	
	Observe Safety Instructions	
	Wear Safety Clothing	
	Keep Sawmill and Area Around Sawmill Clean	
	Dispose Of Sawing By-Products Properly	
	Check Sawmill Before Operation	
	Keep Persons Away	
	Keep Hands Away	
	Use Proper Maintenance Procedures Voor Safety Labely in Good Condition	
1.9	Keep Safety Labels in Good Condition Belt Sizes	
1.10	Blade Sizes 1-14	
1.10	Cutting Capacity	
1.12	Engine/Motor Specifications	
1.12	Noise Level 1-16	
1.13	Overall Dimensions 1-17	
1.14	Components	
1.13	Components1-18	
SECTION	2 SAWMILL ASSEMBLY	2-1
2.1	Mounting Parts of LX50 Sawmill2-1	
	Parts Specifications	
	Tools Necessary for Assembling the Sawmill	
2.2	Unpacking the Sawmill2-8	
2.3	Bed Frame Assembly2-10	
2.4	Log Clamp and Side Support Installation2-12	
2.5	Stop Blocks Installation2-14	
2.6	Bed Leveling2-15	
2.7	Saw Head Installation2-16	
2.8	Sawdust Chute Assembly2-30	
2.9	Water Bottle Installation2-31	
2.10	Blade Height Scale Installation2-33	
2.11	Catch Rail Installation2-34	
2.12	Clutch Lever Installation (Gas Sawmills)2-35	

SECTION	3 SAWMILL OPERATION	3-
3.1	Safety Instructions	
3.2	Sawmill Setup3-1	
3.3	Replacing the Blade3-3	
3.4	Tensioning the Blade	
3.5	Tracking the Blade	
3.6	Horizontal Adjustment of Idle-Side Blade Wheel3-6	
3.7	Motor Drive Pulley Alignment3-7	
3.8	Horizontal Adjustment of Drive-Side Blade Wheel3-7	
3.9	Vertical Adjustment of Drive-Side Blade Wheel3-8	
3.10	Vertical Adjustment of Idle-Side Blade Wheel3-10	
3.11	Saw Head Adjustment3-11	
3.12	Blade Deflection3-13	
3.13	Blade Guide Vertical Adjustment3-14	
3.14	Blade Guide Spacing Adjustment3-15	
3.15	Blade Guide Horizontal Adjustment3-17	
3.16	Blade Height Scale Adjustment3-18	
3.17	Engine/Motor Drive Belt Adjustment3-19	
3.18	Starting the Engine/Motor3-20	
3.19	Loading, Turning and Clamping Logs3-21	
3.20	Up/Down Operation3-23	
3.21	Blade Drive Operation3-23	
3.22	Gas Engine Operation (G14)3-25	
3.23	Feed Operation3-27	
3.24	Cutting the Log3-28	
3.25	Edging3-29	
3.26	Blade Height Scale3-29	
3.27	Stop Bolt Adjustment3-30	
3.28	Water Lube System3-31	
3.29	Transporting the Sawmill	
3.30	Troubleshooting3-33	
SECTION	MAINTENANCE	4-3
4.1	Maintenance Performed as Needed	
4.2	General Maintenance	
4.3	Motor/Engine Maintenance4-3	

Section-page

Table of Contents

Sawmill and Customer Identification

Each LX50 sawmill has an identification number including a Revision level. See the chart below for description of the Vehicle Identification Number (VIN).

LX50 Basic Model	S2 Bed Length	Main I	EH7 Motor Power apply Voltage	S Vers	
LX50 Basic Model	S2 Bed Length	G14 Engine Power and Fuel Type		S Vers	
Revision Number	A1. Major Revision Code Minor Revis Code		sion		

When you pick up your sawmill, you will receive a customer number. Both the sawmill identification number 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 No.	Sawmill Identification Number	Revision Level



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.

-i G24doc032724

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.

doc032724 -ii

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





-iii doc032724

CROATIA Krešimir Pregernik

Pregimex d.o.o.

S. Batušiæa 31, 10090 Zagreb Tel.:/Fax: +3851-38-94-668 Krešimir Pregernik GSM: +3851-98-207-106

e-mail: Kresimir.Pregernik@gmail.com

ITALY Pasquale Felice Wood-Mizer Italia Srl Cda. Capoiaccio SN

86012 Cercemaggiore Campobasso

Tel.:/Fax: +39-0874-798-357 GSM: +39-333-281-03-79 e-mail: wmitaliasrl@gmail.com **SERBIA Dragan Markov** Wood-Mizer Balkan d.o.o.

Svetosavska GA 3/3; P. Fah 25

23 300 Kikinda

Tel.:/Fax: +381-230-25-754 Tel.:/Fax: +381-230-23-567 GSM: +381-63-568-658 e-mail: office@woodmizer.co.yu

CZECH REPUBLIC Miroslav Greill Wood-Mizer CZ s.r.o.

7a Kasárny 946 339 01 Klatovy

Tel: +420-376-312-220 GMS: +420-608-111-104 Miroslav Greill

GMS: + 420-602-439-799 E-mail: woodmizer@woodmizer.cz **SLOVAKIA Wiktor Turoczy** Wood-Mizer Danubia s.r.o.

Hadovce 5, 94501 Komárno Tel.: +421-35-77-40-316 Fax: +421-35-7740-326 GSM: +421-905-930-972

e-mail: woodmizer@woodmizer.sk

CZECH REPUBLIC Lubomir Kudlik Wood-Mizer Moravia

Sovadinova 6 69002 Breclav

Tel.:/Fax: +420-519-322-443 Lubomir Kudlik

GSM: +420-602-734-792 e-mail: info@wood-mizer.net **LATVIA Vilmars Jansons** OBERTS Ltd

Gaujas str. 32/2 LV-2167 Marupe, Rigas Raj. Tel.: +371-7-810-666 Fax: +371-7-810-655 Vilmars Jansons GSM: +371-92-06-966

Andris Orols GSM: +371-28-33-07-90 e-mail: andris@oberts.lv Er-Ka Ahsap Profil Kerestecilik San. ve Tic. Ltd. Sti.

Adana Keresteciler Sitesi 191 sk No.41

ADANA

Tel.: +90-322-346-15-86 Fax: +90-322-345-17-07 GSM: +90-533-363-18-44 e-mail: info@erkaahsap.com.tr

FINLAND Howard Blackbourn Oy Falkberg Jordbruk Ab

Falkintie 220 25610 Ylonkyla Tel.: +358-2732-2253 Fax: +358-2732-2263 Howard Blackbourn

GSM: +358-440-424-339 e-mail: falkberg@woodmizer fi LITHUANIA Andrius Zuzevicius **UAB Singlis**

Savanoriu pr. 187, 2053 Vilnius Tel.: +370-5-2-32-22-44 Fax: +370-5-2-64-84-15 GSM: +370-620-28-645 e-mail: andrius.z@singlis.lt

Dmitrii Gaiduk GSM: +370-69-84-51-91 e-mail: dmitrijus.a@singlis.lt

Bakken Flaathe A/S

UKRAINE Ivan Vinnicki MOST UKRAINA

bul. Myru 3, Bajkivtsi Ternoplskyj r-j Ternopolska oblast 47711 Ukraine

Tel/Fax: +38 (0352) 52 37 74 GSM: +38 (067) 352 54 34 GSM: +38 (067) 674 50 68 E-mail: most-ukraina@ukr.net

FRANCE Tizoc Chavez

Wood-Mizer France 556 chemin des Embouffus ZAC des Basses Echarrieres 38440 SAINT JEAN DE BOURNAY Tel: +33-4 74 84 84 44

GSM: +33-607 52 02 82 Mail: tchavez@woodmizer.fr NORWAY Tor Bakken Flaathe

Løkenvegen 5, 2034 Holter Tel: + 47-638 74 989 Sales: + 47- 412 80 076 Service: +47- 975 87 588 post@woodmizer.no www.woodmizer.no

UNITED KINGDOM & IRELAND Wood-Mizer UK

Hopfield Barn Kenward Road, Yalding Kent MF18 6.IP UK Tel.: +44-1622-813-201 Fax: +44-1622-815-534 e-mail: info@woodmizer.co.uk

SLOVENIA Jan Fale FAMTEH d.o.o.

Gacnikova pot 2. 2390 Ravne na Koroskem Tel.: +386-2-62-04-232 Fax: +386-2-62-04-231 Jan Fale GSM: +386-2-62-04-230

e-mail: jan.fale@famteh.si

Tel.: +386-2-62-04-232 GSM: +386-31-775-999 e-mail: matjaz.kolar@famteh.si

> doc032724 -iv

GERMANY\AUSTRIA Klaus Longmuss

Wood-Mizer GmbH

Dorfstraße 5, 29485 Schletau

Büro

Tel: +49-5883 988 010

Werkstatt

Tel: +49-5883 988 220 Ersatzteilservice

Tel: <u>+49 58 83 - 98 80 250</u>

Schärfservice

Tel: +49-58 83 - 98 80 270

E-mail:

info@woodmizer.de www.woodmizer.de Klaus Longmuss

Tel.: +49-5883-9880-12 GSM: +49-17-298-55-892 e-mail: <u>KLongmuss@woodmizer.de</u> Subagent:

SWEDEN Kjell Larsson Mekwood AB

Slingan 14, 812 41 Gästrike-Hammarby

Tel.: +46-290-515-65 **Kjell Larsson**

GSM: +46-706-797-965 e-mail: kjell.larsson@mekwood.se IRELAND

Wood-Mizer Ireland Stephen Brennan

Cum Lahardane Ballina County Mayo Tel:+353 96 51345

E-mail: <u>brennanmill@ericom.net</u>

Subagents:

DENMARK Kevin Christiansen

Kevin Christiansen's

Arnborgvej 40, 7330 Brande- Fasterholt

Mobile: +45 61468763 Mobile: +45-23495828 Info@woodmizer.dk www.woodmizer.dk ROMANIA Adrian Echert SC WOOD-MIZER RO SRL

TRANSILVANIEI Nr. 5 Sibiu, Cisnadie 555300 Tel::/Fax::+40-369-405-433 GSM:+40-745-707-323 e-mail: aechert@woodmizer.ro Regional Manager - Asia Robert Moxham Regional Direction - Asia

Wood-Mizer Asia Manufacturing Co., Ltd. No.2, Gongyequ 40th Rd. Xitun District, Taichung City, 40768, Taiwan, R.O.C.

TEL: +886-4-2359 3022 FAX: +886-4-2359 3205 CELL: +886-9-0568 7708 EMAIL: RMoxham@woodmizer.com

www.woodmizerasia.com Skype: r.g.moxham

NETHERLANDS Gerlo Breukers

Breukers Houtzagerij en Bosbouwmachines Hazenweg 5, 7481 PC Haaksbergen

Tel: +31-535741326 Mobile: +31-620419412 info@woodmizer.nl www.woodmizer.nl Subagent:

ROMANIA M. Echert S.C. Echert Comprod s.r.l

Str. Schitului Nr. 6, Apt.7 etajul-1 725 70 Vatra Dornei, Romania Tel.:/Fax: +40-230-374-235 Tel.: +40-740-35-35-74 Regional Manager - Africa

Gavin Prowse

Regional Sales Director - Africa Wood-Mizer Africa (Pty) Ltd. Unit 1,Leader Park 20 Chariot Street

Stormill Ext.5 Maraisburg, Johannesburg South Africa TEL: +27 11 473 1313 FAX: +27 11 473 2005 CELL: +27 71 398 8010

EMAIL: gprowse@woodmizer.com www.woodmizerafrica.com Skype: gavin.prowse

USA World Headquarters

Serving North & South America, Oceania, East Asia

Wood-Mizer LLC 8180 West 10th Street Indianapolis, IN 46214

Phone: 317.271.1542 or 800.553.0182 Customer Service: 800.525.8100

Fax: 317.273.1011

Email: infocenter@woodmizer.com

Canadian Headquarters

Serving Canada

Wood-Mizer Canada 396 County Road 36, Unit B Lindsay, ON K9V 4R3

Phone: 705.878.5255 or 877.357.3373

Fax: 705.878.5355

Email: ContactCanada@woodmizer.com

Brazil Headquarters

Serving Brazil

Wood-Mizer do Brasil

Rua Dom Pedro 1, No: 205 Bairro: Sao Jose

Ivoti/RS CEP:93.900-000

Tel: +55 51 9894-6461/ +55 21 8030-3338/ +55 51 3563-4784

Email: info@woodmizer.com.br

Europe Headquarters

Serving Europe, Africa, West Asia

Wood-Mizer Industries Sp z o.o. Nagorna 114 62-600 Kolo, Poland

Phone: +48.63.26.26.000 Fax: +48.63.27.22.327

Branches & Authorized Sales Centers

For a complete list of dealers, visit www.woodmizer.com

v doc032724

SECTION 1 SAFETY INSTRUCTIONS

1.1 Safety Symbols

These symbols call your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions.



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



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



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

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.

Before operating the LX50 sawmill, read the operator's manual and all additional manuals provided with the machine. Observe all safety instructions included in these manuals!

Always be sure that all safety decals are clean and readable. Replace immediately all damaged safety decals to prevent personal injury or damage to the equipment. Contact Wood-Mizer Customer Service or the Wood-Mizer distributor in your area to order a new decal.

IMPORTANT! It is always owner's responsibility to comply with all applicable federal, state and local laws, rules and regulations regarding the ownership, operation and transport of your LX50 sawmill. All Wood-Mizer owners are encouraged to become thoroughly familiar with these applicable laws and comply with them fully while using the sawmill.

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.

1.2 Blade Handling



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



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

1.3 Sawmill Setup



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

WARNING! Keep all persons away from area while loading and unloading the sawmill. Failure to do so may result in serious injury or death.

1.4 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 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 is 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 the sawmill or loading and turning logs. Failure to do so may result in serious injury.

DANGER! Maintain a clean and clear path for all necessary movement around the sawmill and lumber stacking areas. 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 may result in serious injury.

WARNING! Always wear eye, ear, respiration and foot protection as well as safety clothing when operating or servicing the machine. 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 the log is clamped securely before sawing. Failure to do so may result in serious injury or death.

WARNING! Use ONLY water or alcohol solution 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. Failure to do so may result in damage to the up/down system.

CAUTION! Be sure to stop the blade before returning the saw head. 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! If optional loading ramps are used to load a log onto the sawmill bed, remove them from the brackets on the bed frame before sawing. The saw head may hit the ramp stops when adjusted for low cuts and get damaged.



CAUTION! Never clean the blade or 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/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.

1.5 Refueling



WARNING! Store gasoline away from sawdust and other flammable materials. Failure to do so may result in serious injury.

1.6 Gas Engine Operation



DANGER! Operate your machine in well ventilated areas only. Exhaust gases of your engine can cause nausea, delirium and potentially death unless adequate ventilation is present.

DANGER! Never operate the engine with a fuel or oil leak. The leaking fuel or oil could potentially come in contact with hot surfaces and ignite into flames.

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

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.



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



WARNING! Do not for any reason adjust the engine drive belts or belt support bracket with the engine running. Doing so may result in serious injury.

WARNING! Do not operate the engine without proper and operational spark arrester/muffler. Sparks emitted from the engine exhaust could ignite surrounding materials, causing serious injury or death.

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

WARNING! Always wear proper and necessary safety equipment when performing service functions. Proper safety equipment includes

eye protection, breathing protection, hand protection and foot protection.



IMPORTANT! Always dispose of coolant, oil, fuel, oil filters and fuel filters in a responsible manner and in accordance with local, state and federal regulations.



WARNING! Always disconnect the sawmill battery cables before servicing.



DANGER! Batteries expel explosive gases. Keep sparks, flames, burning cigarettes, or other ignition sources away at all times.

1.7 Sawmill Maintenance



CAUTION! Reinstall the track wiper so that it lightly touches the track rail. If the wiper presses too firmly against the rail, it can cause the forward/reverse movement to bind.

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

1.8 Safety Instructions

NOTE: ONLY safety instructions regarding personal injury are listed in this section. Caution statements regarding 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 athose posted on the machine. Keep this manual with the machine at all times, regardless of ownership.

Also read all additional manuals that you received with the machine (such as: engine/motor manual) and observe safety instructions included in these manuals.

IMPORTANT! 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 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 owners are encouraged to become thoroughly familiar with these applicable laws and comply with them fully while using the 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 as well as safety clothing 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 may 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 may result in serious injury.

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



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

Keep Hands Away



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

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

DANGER! Always keep hands away from moving bandsaw blade. Failure to do so may 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.

1-8 doc032724 Safety Instructions



WARNING! Use extreme caution when spinning the blade wheels by hand. Make sure your hands are clear of the 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 engine/motor or sawmill. Failure to do so may result in serious injury.



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



NOTE! 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.

Keep Safety Labels in Good Condition



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

IMPORTANT! When replacing any component having a safety decal affixed, be sure to place an identical safety decal on the new component.

See Table 1-1. See the table below for descriptions of the pictographic warning and informational decals placed on the LX50 sawmill.

TABLE 1-1

Decal View	Decal No.	Description
096317	096317	CAUTION! Read thoroughly the operator's manual before operating the sawmill. Observe all safety instructions and rules when operating the machine.
099220	099220	CAUTION! Close all guards and covers before starting the machine.

1-10 doc032724 Safety Instructions



- C + 099219	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 away from work area when operating the machine.
1 0 € 096316	096316	CAUTION! Do not open or close the electric box when the switch is not in the "0" position.
1	096319	CAUTION! Disconnect power supply before opening the box.

-		T
096321	096321	Blade movement direction
Service Servic	S12004G	CAUTION! Always wear safety goggles when operating the sawmill!
S. Targeto	S12005G	CAUTION! Always wear protective ear muffs when operating the sawmill!
	501465	CAUTION! Always wear safety boots when operating the sawmill!
	501467	Lubrication point

P11789b	P11789	Tracking the blade on the blade wheels
CE	P85070	CE certification marking
EAC	eac	Russian safety certification
S20097)	S20097	Motor rotation direction
3-4 mm	P85066	Blade positioning

1.9 Belt Sizes

See Table 1-2. Belt sizes for the LX50 sawmill are shown below.

Description Belt Size		
Drive-Side Blade Wheel Belt EH7	BX69 CONTITECH	
Drive-Side Blade Wheel Belt G14	BX71 CONTITECH	
Idle-Side Blade Wheel Belt	B47.5 ¹	

TABLE 1-2

1.10 Blade Sizes

See Table 1-3. Wood-Mizer offers three types of blades for all models of sawmills to provide efficient sawing. The engine/motor size of your sawmill and type of wood you saw should determine which blade you choose for optimum performance.

Engine/Motor Size	Recommended Blade for Sawing:		
	Thickness Length		
EH7S/G14	0.035" (0.90mm) 0.039" (1 mm) 0.042" (1.07 mm) 0.045" (1.14mm)	3340mm (131,5")	

TABLE 1-3

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

1.11 Cutting Capacity

See Table 1-4. The log size capacities of the LX50 sawmill are listed below.

	Maximum Diameter	Maximum Length
LX50	66 cm	3.7 m

TABLE 1-4

¹ To insure proper blade tracking, use Goodyear, Dayco Super II, or Browning belts only.

1.12 Engine/Motor Specifications

See Table 1-5. The power options available for the LX50 sawmills are listed below.

Engine/Motor Type	Manufacturer	Model Number	Other Data
Electric Motor, EH7S 5.5 kW	Indukta, Poland	Sg132S-2A-HM	3 x 400V, 50 Hz
Electric Motor, EH7 5.5 kW	Indukta, Poland	Sg132S-2A	3 x 400V, 50 Hz
Electric Motor, EC7 5.5 kW	Indukta, Poland	Sg132S-2A	3 x 400V, 50 Hz
Electric Motor, EB7S 5.5 kW	Indukta, Poland	Sg132S-2A-HM	3 x 230V, 50 Hz
Electric Motor, EB7 5.5 kW	Indukta, Poland	Sg132S-2A	3 x 230V, 50 Hz

TABLE 1-5

See Table 1-6. Specifications of power supply for the LX50E7 sawmill are given in the table below.

3-Phase V	Circuit Breaker	Recommended Wire Size
400 VAC	16 A	2.5 mm ² Maximum length: 15 m

TABLE 1-6



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

See Table 1-7. See the table below for specifications of the engine used on the LX50G14 sawmills.

Engine	Manufacturer	Model Number	Other Data
G14 Gas Engine	Kohler, USA	CH440-3149	14 hp

1.13 Noise Level

See Table 1-8. The average level of noise generated by the LX50 sawmill is given in the table below 12.

Sawmill	Noise Level:
LX50E7	L_{pA} = 84 dB (A); L_{WA} = 100 dB (A)
LX50G14	$L_{pA} = 96 \text{ dB (A)}; L_{WA} = 112 \text{ dB}$ (A)

TABLE 1-8

^{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.

^{2.} The measured values refer to emission levels, not necessarily to noise levels in the workplace. Although there is a relation between emission and exposure levels, it is not possible to determine with certainty if preventives are needed or are not needed. The factors affecting a current level of noise exposure during work are inter alia room characteristics and characteristics of other noise sources, e.g. number of machines and machining operations nearby. Also the permissible exposure level 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.

1.14 Overall Dimensions

See Figure 1-1. The overall dimensions of the LX50 sawmill are shown below.

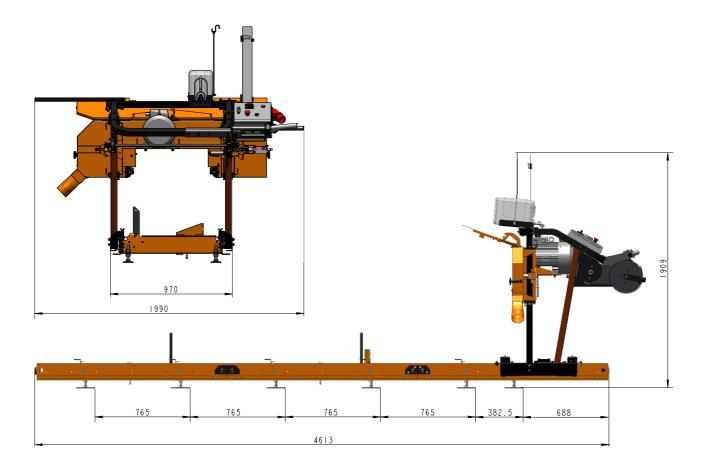


FIG. 1-1

See Figure 1-2. See the figure below for the operator's work-place.

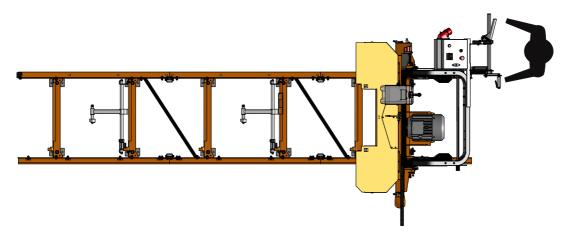


FIG. 1-2

1.15 Components

See Figure 1-3. The major components of the LX50EH7S sawmill are shown below.

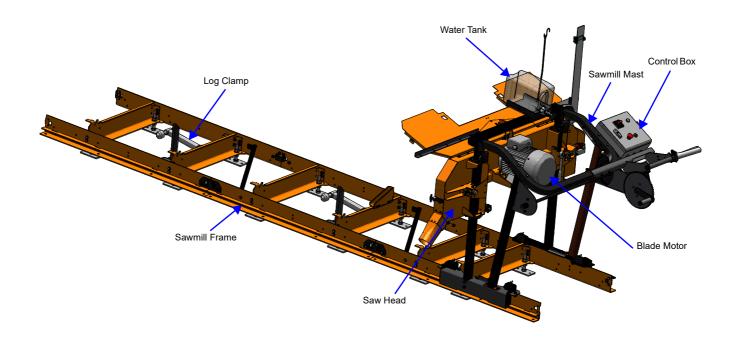


FIG. 1-3

See Figure 1-4. See the figure below for the main components of LX50G14S sawmill.

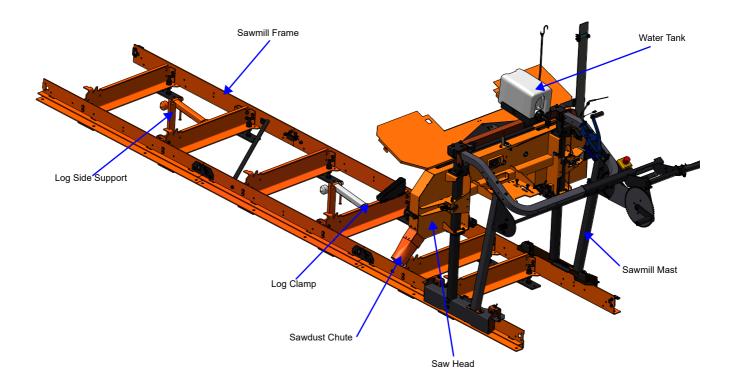


FIG. 1-4

SECTION 2 SAWMILL ASSEMBLY

2.1 Mounting Parts of LX50 Sawmill

2.1.1 Parts Specifications

Scan to see the assembly video.



Fig.	Wood-Mizer No.	Description	QTY LX50 Electric		LX	TY 250 as
			CE	RPA	CE	RPA
	514996-1	Bed Foot, Complete	12	12	12	12
	507563	Stud w/Rod, Log Clamp - Com- plete	2	2	2	2
	530676-1	Log Side Sup- port, Complete	2	2	2	2
	530674	Bracket, Side Support Mount- ing	4	4	4	4
	T00414	Cap, Mounting	2	2	2	2
•	094821	Indicator, Blade Height Scale	1	1	1	1
⊕ _{,98} ⊕	532335-1	Spacer, Scale	1	1	1	1
	096499	Handle, Blade Distance	1	1	1	1

		Tubic 1.				
	516939	Key, A6x6x14 Parallel	1	1	1	1
	519161	Key, A6x6x22 Parallel	1	1	1	1
	532328-1	Bushing, Winch Friction Pad	1	1	1	1
	532329	Washer, Fric- tional	2	2	2	2
	532331-1	Plate, Clamping	1	1	1	1
(P)	531997-1	Crank, LX50	1	1	1	1
	532332	Bushing, Slide	4	4	4	4
	532319-1	Sprocket, LX50	1	1	1	1
	532365	Chain, L=939 73-Link	1	1	1	1
	091625	Link, Master	1	1	1	1
	531988-1	Plate, Support	1	1	1	1

Table 1:

		Table 1:				
	594382-1	Plate, Main Sup- port	1	1	1	1
	594381-1	Blade Height Scale Assembly	1	1	1	1
O DITA	532306	Roller, Winch Guide	2	2	2	2
	X100-1273	Plate, Bent	4	4	4	4
	X100-1272	Plate, Flat	4	4	4	4
	X100-1275	Block, Stop	2	2	2	2
	X100-1155	Plate, Flat	2	2	2	2
	014151	Pin	1	1	1	1
	532326	Up/Down Sys- tem Steel Cable	2	2	2	2
	X100-1179	Bar, Scale Stiff- ener	2	2	2	2
	R01885	Tubing, Water Lube	105cm	105cm	105cm	105cm

		Table 1.				
	F81082-5	Tie Wrap, 4.8x240mm	5	5	5	5
	LX50G/E	Bolt Kit	1 kit	1 kit	1 kit	1 kit
	594384-1	Plate, Support	1	1	1	1
of the second of	532323-1	Sprocket, Large	1	1	1	1
	532333	Bushing Slide	2	2	2	2
	530701	Arm, Clamp	2	2	2	2
	593260	Retaining Ring	1	1	1	1
	X100-1105	Sawdust	1	1	1	1
	X100-1260	Sweeper	2	2	2	2
	X100-1139	Plate, Bent	4	4	4	4
	X200-957	Bearing, LLU 6302	4	4	4	4

	1					
	X200-903	Bearing, LLU6200	8	8	8	8
	X100-1138	Bushing	4	4	4	4
	593254	Blade Guide Assembly, Drive Side	1	1	1	1
	593258	Blade Guide Assembly, Idle side	1	1	1	1
	532363	Lever, Clutch	0	0	1	1
·	LTBGAT	Tool, Blade Guide Adjust- ment	1	1	1	1
	534518	Cable, Ten- sioner	0	0	1	1
——————————————————————————————————————	550814	Cable, Throttle	0	0	1	1
	550887-1	Sheave, G13/14	0	0	1	1
	551001	Belt	0	0	1	1

		Table 1.				
	110187	Deflector Kohler	0	0	1	1
	X100-1266	Plate, Bent	6	6	6	6
	X100-1268	Plate, Bent	3	3	3	3
	X100-1277	Plate, Bent	2	2	2	2
	550790-1	Rail, Cross	6	6	6	6
	595712-1	Tube, Front Left	1	1	1	1
	594397-1	Tube, Front Right	1	1	1	1
	X100-1132	Tube, Retaining	2	2	2	2
o o o	532400-1	Tube	1	1	1	1
	532394-1	Tube, Back	1	1	1	1

		Table 1.				
	517062	Bottle Assembly	1	1	1	1
	X100-1123	Wldmt, Lower Carriage Mem- ber - Left	1	1	1	1
	X100-1129	Wldmt, Lower Carriage Mem- ber - Right	1	1	1	1
	531993-1	Plate, Scale	1	1	1	1
	594386-1	Bracket, Electri- cal Box	0	0	1	1
	593259-1	Shaft, Winch	1	1	1	1
0 0 0 0 0 0 M M M M M M	532327-1	Angle 30x30	1	1	0	0
	515059-1	Clamp, Log	2	2	2	2
	X100-1295	Handle	0	1	0	0
		Electric Box	1	0	0	
	LX50G/E	Bolt Kit	1 kit	1 kit	1 kit	1 kit

2.1.2 Tools Necessary for Assembling the Sawmill

Table 2:

Required tools	
Flat Wrench #8	1 pc
Flat Wrench #10	2 pcs
Flat Wrench #13	2 pcs
Flat Wrench #17	2 pcs
Flat Wrench #19	2 pcs
Ratchet Wrench #30	1 pc
Hammer	1 pc
Allen Wrench #4	1 pc
Allen Wrench #5	1 pc

2.2 Unpacking the Sawmill



WARNING! Assemble the sawmill bed on firm, level ground. Fasten the sawmill to the ground to prevent moving during operation. Failure to do so may cause the saw head to tip, resulting in serious injury or death.

Needed tools:

- Strap cutter
- Screwdriver set
- Socket wrench set (sizes: 10, 13, 17 and 19)
- Socket wrench extension bar (option)
- Flat wrench set
- Allen wrench set
- Moving equipment (such as a fork-lift truck) and a belt to lift the sawmill with this equipment

Leave enough room around the sawmill for the operators, sawdust removal, log loading, and board removal.

See figure 2-1.



FIG. 2-1

- 1. Cut the bands holding the components together.
- 2. Unbolt frame segments from the pallet. Remove all sawmill parts from the pallet and put them on the level surface.



WARNING! When removing the saw head, use extreme care and keep all persons at a safe distance. Failure to do so may result in serious injury or death.

See figure 2-2.



FIG. 2-2

2.3 Bed Frame Assembly

IMPORTANT! When assembling the sawmill, do not tighten the bolts/screws too much at the begining. The fasteners should be tightened fully only when all parts are already mounted.



CAUTION! Assemble the sawmill bed on firm, level ground. Failure to do so may cause the saw head to tip, resulting in serious injury or death.

1. Place the track rails on level ground. Attach them to the cross rails using the M10x30 bolts. Repeat it for all bed segments.

See figure 2-3.

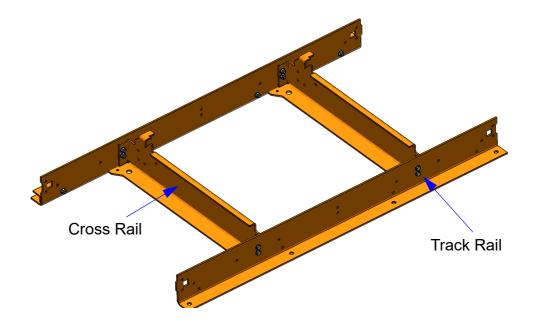


FIG. 2-3

2. Position all three assembled bed sections end-to-end in the order shown on figure 2-4.

See figure 2-4.

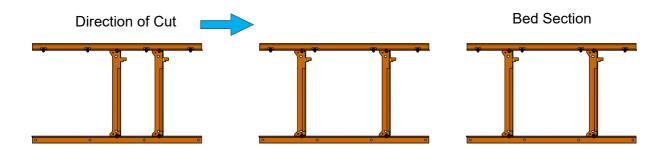


FIG. 2-4

3. Connect the bed sections using the connecting plate, clamp and bolts shown in Figure 2-5. Set the clamp in place by inserting the smaller notch k in first and tilting the clamp downward to catch the larger notch j.

See figure 2-5.

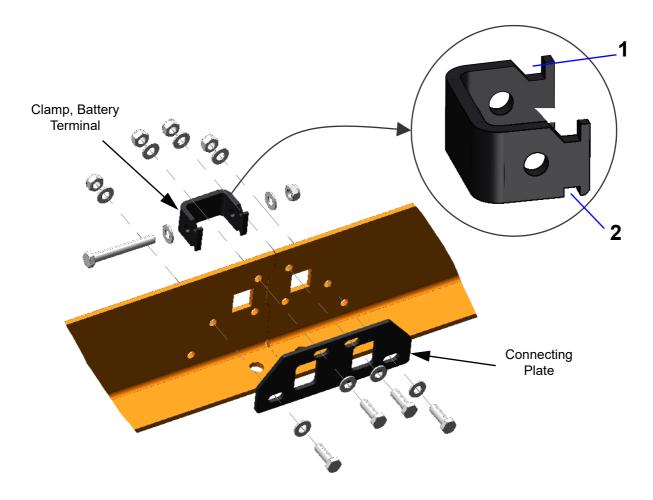


FIG. 2-5

Log Clamp and Side Support Installation

NOTE: Before tightening the bolts, be sure the track rails (top and side surfaces) of each bed section are aligned.

Repeat the above steps for the remaining bed section connections.

Optional bed extension sections may be added at this time, in the same manner as the standard bed sections.

See figure 2-6. Mount the reinforcing bracket using M10x30 bolts, washers and nuts.

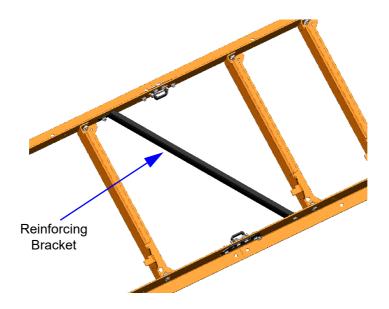


FIG. 2-6

2.4 Log Clamp and Side Support Installation

1. To mount the log clamp, first dismount the mounting bracket on one side of the log clamp rod, insert the log clamp arm onto the rod and side support and reinstall the mounting bracket with

M10x20 bolts. Attach the complete log clamp in the middle of the bed using the M10x30 bolts.

See figure 2-7.

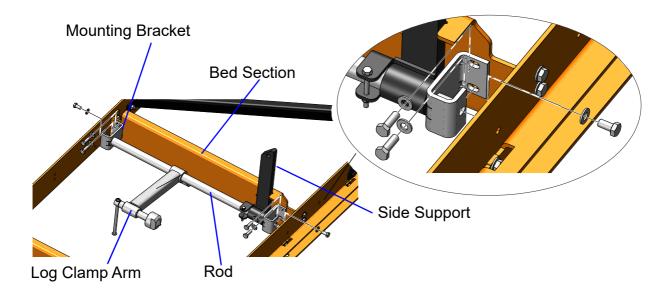


FIG. 2-7

2-13 15doc032724 Sawmill Assembly

2.5 Stop Blocks Installation

1. Install the stop blocks at both ends of the bed to prevent the saw head from sliding off the bed. Attach the stop blocks on the outside surfaces of the front and last bed sections. Use M10x30 bolts.

The stop blocks can also be used to prevent accidental saw head movement - see <u>Section 2.7 Saw Head Installation</u>, <u>step 5</u>.



WARNING! Failure to do so may result in serious personal injury or machine damage.

See figure 2-8.

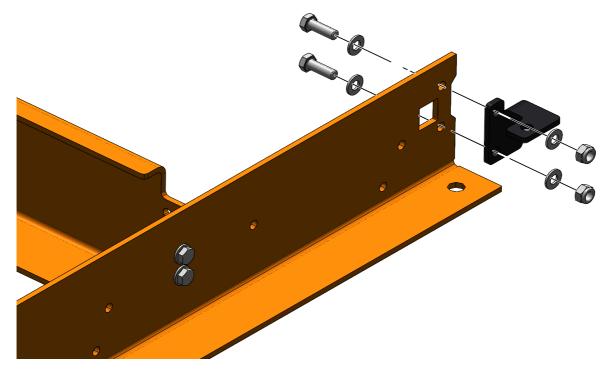


FIG. 2-8

2.6 Bed Leveling

1. Use a min. 4-foot (120cm) level (or laser level) to level the bed in all directions. CAUTION! It is important that the bed be level for the saw head to travel smoothly over the rails.

See figure 2-9.

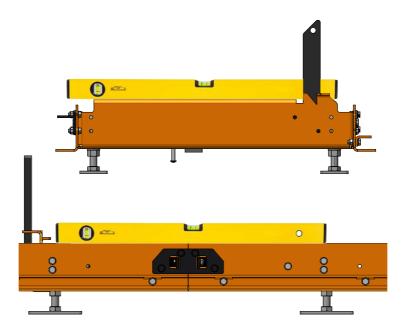


FIG. 2-9

2. If your sawmill is equipped with the optional adjustable legs, use these legs to level the bed. Adjust the bed height by turning the lower nut (B) and lock the bed position with the upper nut (A).

See figure 2-10.

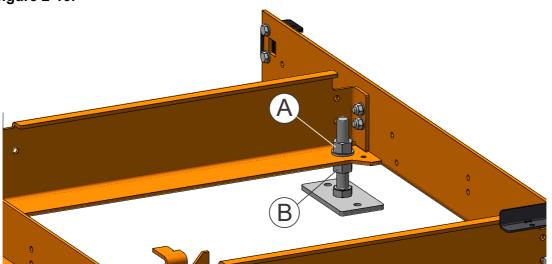


FIG. 2-10

2.7 Saw Head Installation



WARNING! When removing the saw head, use extreme care and keep all persons at a safe distance. Failure to do so may result in serious injury or death.

1. Before installation of the mast tubes, loosen the mounting bolts located on four mast guide brackets. The figure below shows one of these brackets.

See figure 2-11.

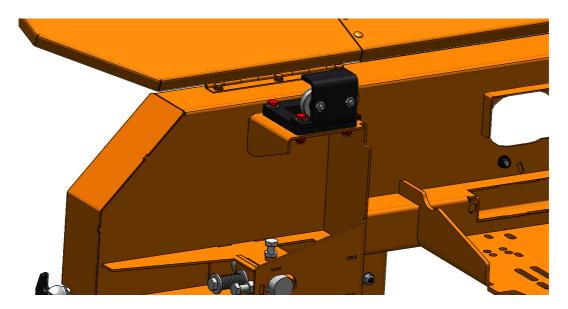
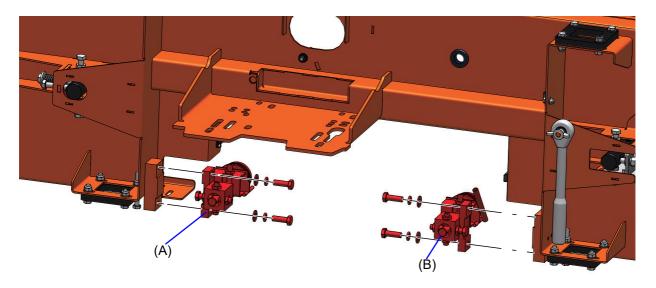
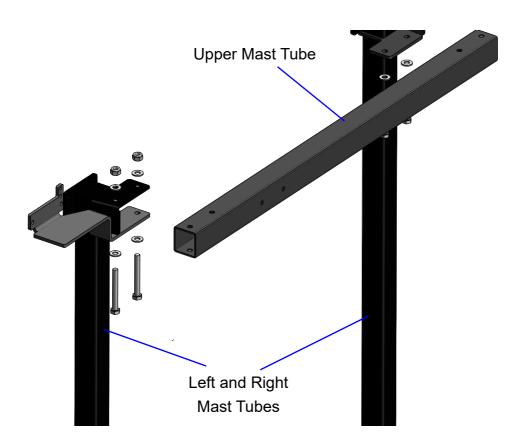


FIG. 2-11

2. Screw the blade guides (A, x100-1106) (B, x100-1107) to the saw head, fastening them with M10x30 screws. See "Blade Deflection."

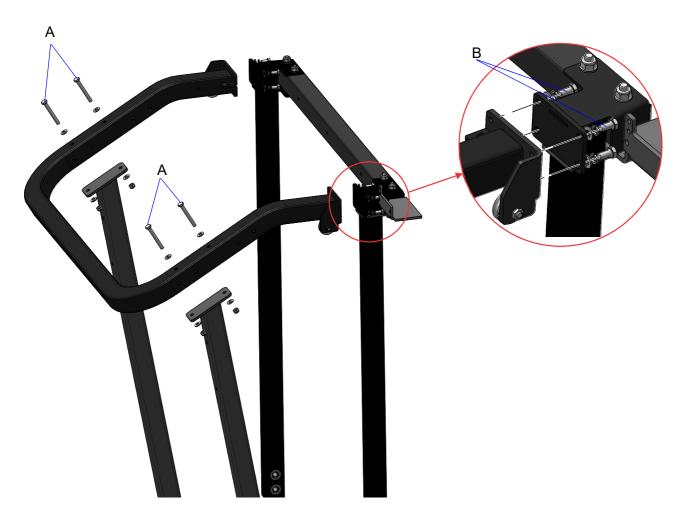


3. Connect the left and right mast tubes with the upper mast tube before inserting them into the guide brackets. To do this, insert the upper mast tube into the brackets and tighten using the M10x80 bolts. See the figure below.



4. Insert the connected tubes into the mast guide brackets. The saw head should be placed vertically and stable on the table. Fasten the mast guide brackets so that they are a little loose for the mast to move properly.

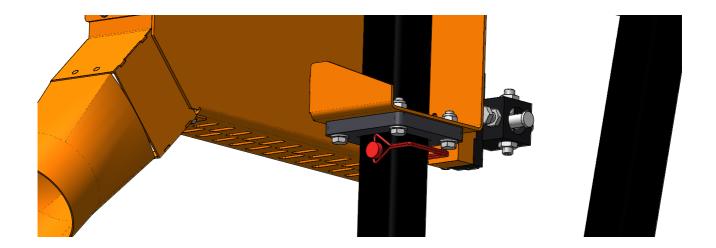
5. Next, fasten the remaining mast elements using M8x70 (A) and M8x16 (B) bolts as shown in the figure below.



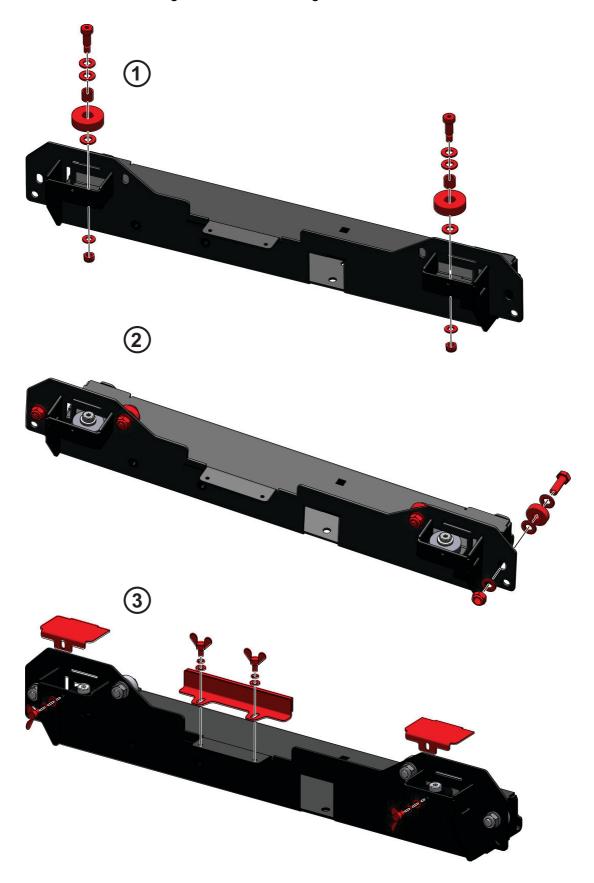
6. The saw head should be set at the top position on the mast so that you can easily access the bottom ends of the vertical mast tubes and the holes at half the height of the tubes. Install the head-locking stop pins in these holes on both tubes. These pins will prevent the saw head from



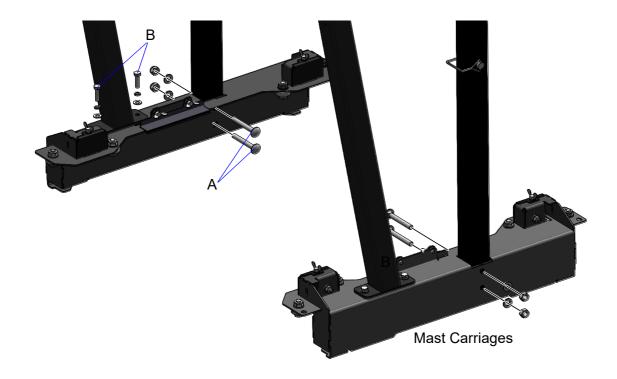
lowering.



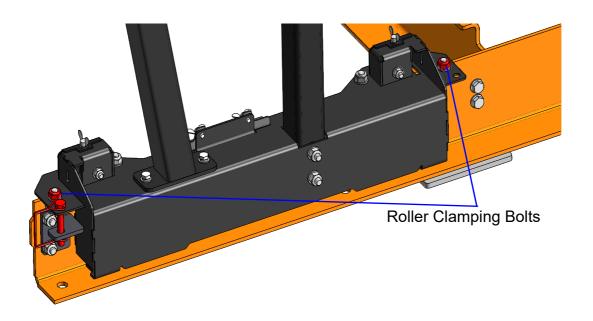
7. Assemble the mast carriages as shown in the figure below.



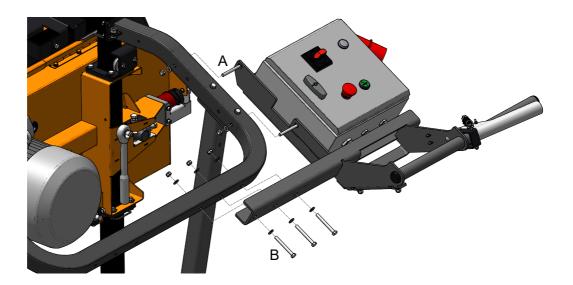
8. Slide the mast uprights into the mast carriages and secure with (A) M10x75 and (B) M8x30 bolts as shown below.



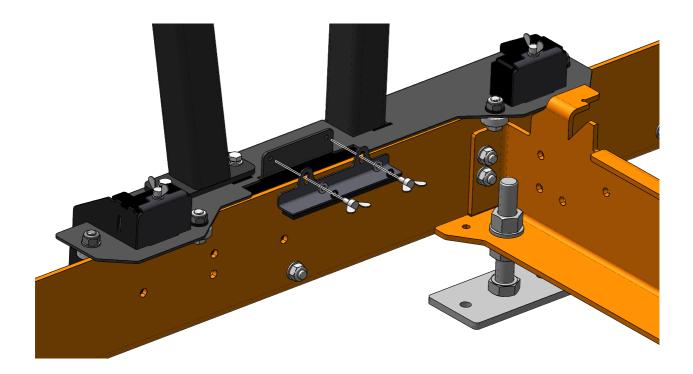
- **9.** Loosen M10x30 roller set. Using lifting equipment, place the saw head with the mast on the sawmill bed. Make sure the track rollers ride smoothly on the track rail.
- **10.** Position the saw head at the front of the bed to secure it with a locking pin that will prevent accidental saw head movement.
- 11. The side bearings must be properly clamped against the track rail so that there is no clearance between the bearings and the track rail while the saw head is being moving. The side bearings should lightly touch the vertical surface of the track rail. If adjustment is needed, use the bearing nuts. Be sure to tighten the nuts to lock the bearings in the adjusted position. If the bearings press too firmly against the rail, it will cause the saw head to not move easily on the rail and will result in premature bearing wear. Make this adjustment for all side bearings.



12. Install the electric box to the sawmill mast using the (A) M8x75 bolts. Bolt the electric box plate bracket to the sawmill mast using (B) M8x70 bolts.



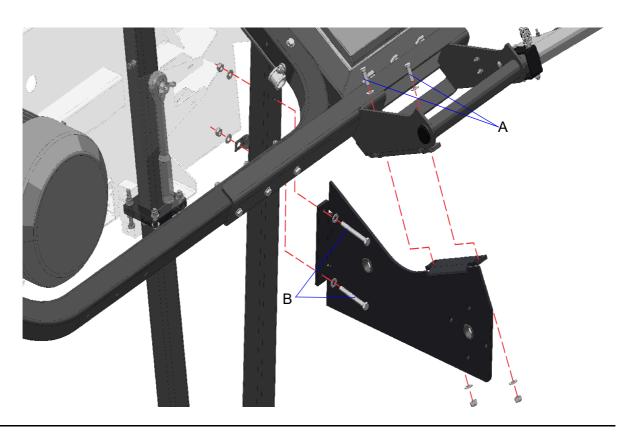
13. Adjust the track wiper so that the felt touches the track rail surface and the saw head moves freely on the bed. Use the wing nuts to fasten the track wiper.



14. To mount up/down system, first insert the plastic bushings into the holes located on up/down brackets.



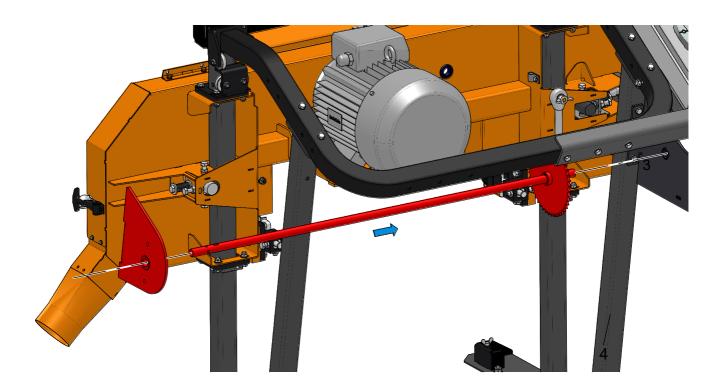
15. Use (A) M8x25 and (B) M8x70 bolts to install the up/down bracket near the control box.



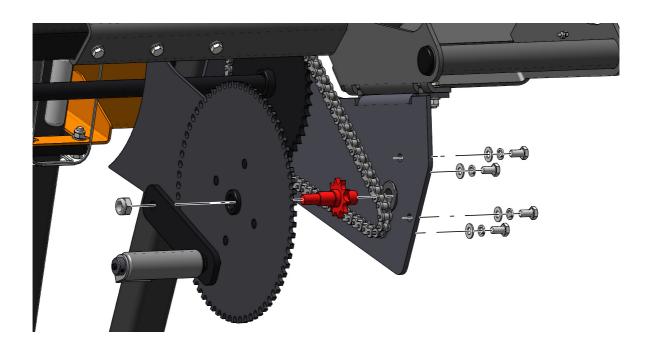
16. Insert the key (1) into the slot in the winch shaft. Slide the sprocket onto the shaft and tighten the screw (2) to prevent the sprocket from slipping off the shaft. Install the bushings at the other side of the shaft, as shown below.



17. Place the complete winch shaft in the bracket on the operator's side and fasten the other end of the shaft to the sawmill mast using the M8x70 bolts. (See the figure below.)

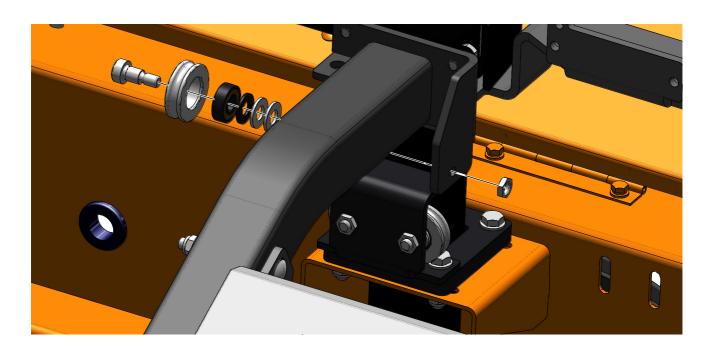


18. Install the chain on the dial and insert the crank shaft through the hole in the dial. Install the other end of the chain on the winch shaft sprocket and connect the chain ends with the master link. Make sure the crank handle is bolted parallel to the dial. The distance between A and B should be equal in each crank handle position (+/- 2mm).

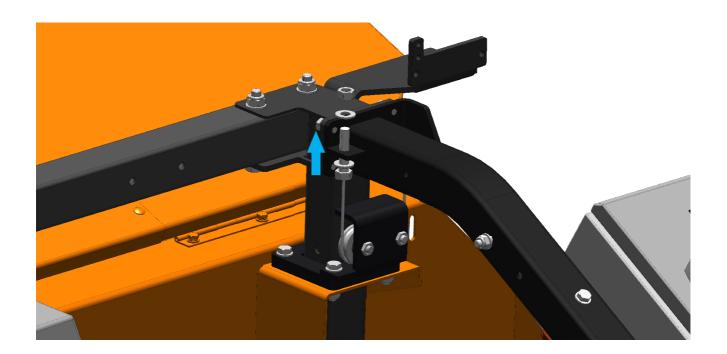




19. Mount the cable guide roller and secure with the washers and M8 nut as shown in the figure below. Repeat on the other side of the machine.

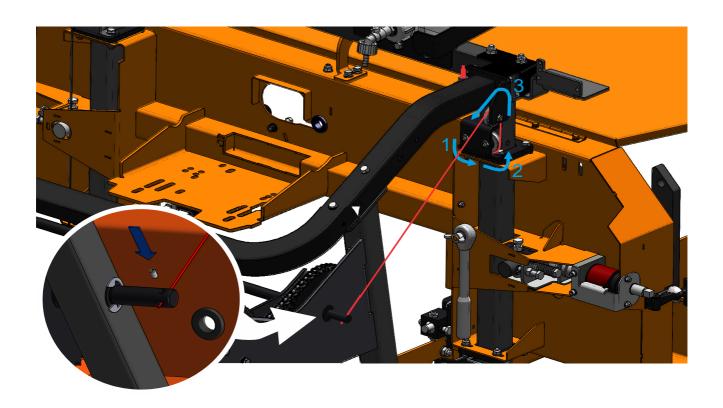


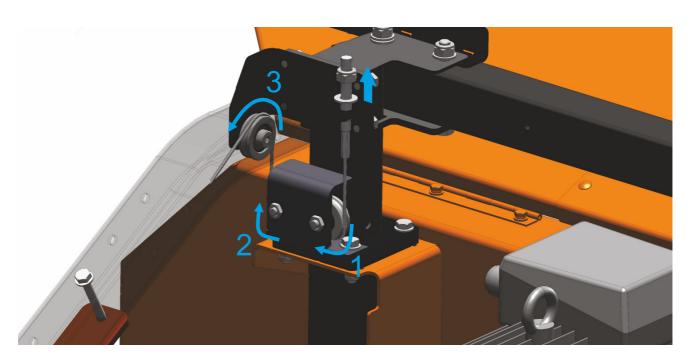
20. Thread the end of the steel lift cable through the hole in the mast (from the bottom). Lock the cable in place using the washer and M10 nut as shown below. Repeat for the other cable.



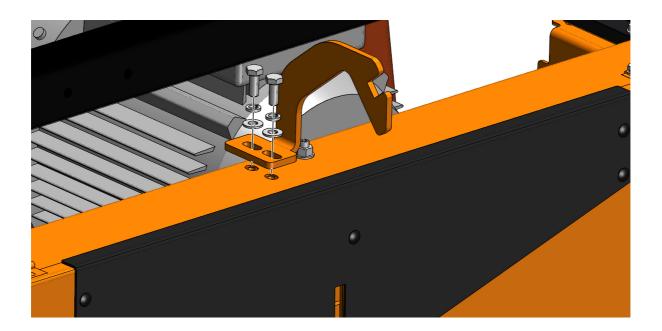
21. Remove the head-locking stop pins from both vertical mast tubes to lower the saw head all the way down. When the saw head is at its lowest position, route the lift cable as it is shown below. Next, route the lift cable through the hole in the winch shaft bushing. Make sure the lift cable is tensioned and secured with the bolt.

Repeat on the other side of the saw head.





22. Install the saw head cover latch using two M8x20 bolts.



2.8 Sawdust Chute Assembly

1. Open the saw head cover and fasten the sawdust chute using the (A) M4x16 bolts.

See figure 2-12.

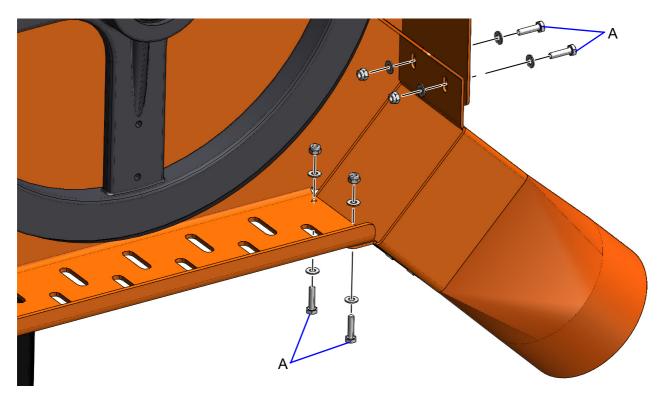


FIG. 2-12

2.9 Water Bottle Installation

1. Install the water bottle tray to the mast cross tube using the M8x70 bolts. Before bolting, place a cable clamp on one of the hex head bolts.

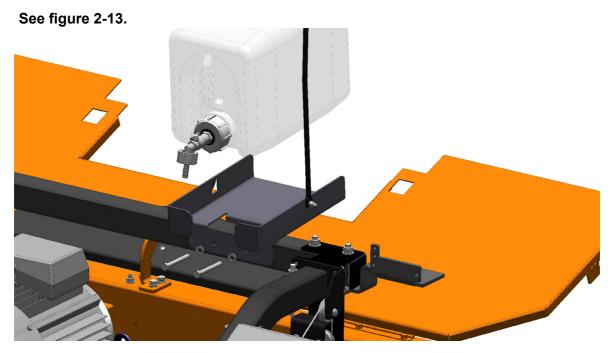


FIG. 2-13

2. Slide the rubber water tube onto the water bottle pipe fitting (A). Place the other end of the water tube on the fitting located on the blade guide.

See figure 2-14.

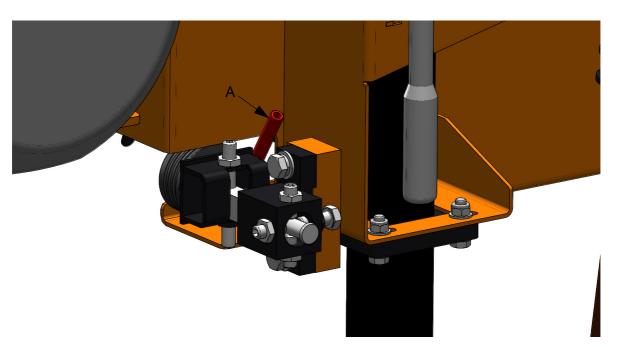


FIG. 2-14

3. Attach the power cord bracket (A) to the mast tube (B). Use bolts to screw them together. The cord bracket can be mounted on either side of the mast.

See figure 2-15.

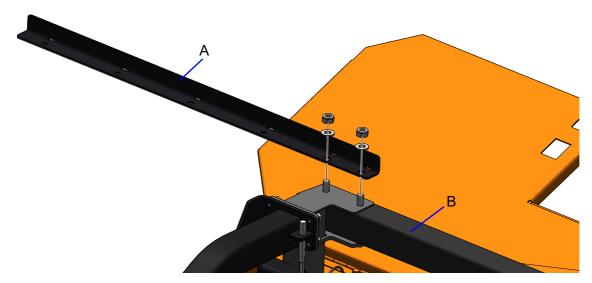


FIG. 2-15

4. Install the power cord (A) on the mast using the cable clamps (B).

See figure 2-16.

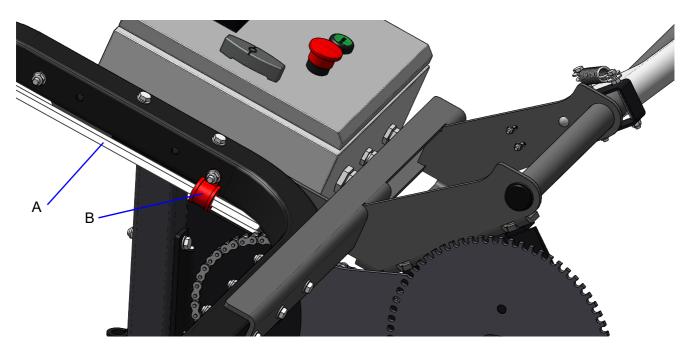


FIG. 2-16

2.10 Blade Height Scale Installation

1. Open the saw head cover to install the blade height scale. Use (A) M8x20 bolts to attach blade height scale to the saw head cover. Bolt the scale guide blocks on both edges of the scale using (B) M6x30 bolts. Use (C) M5x35 bolts to install the blade height indicator.

See figure 2-17.

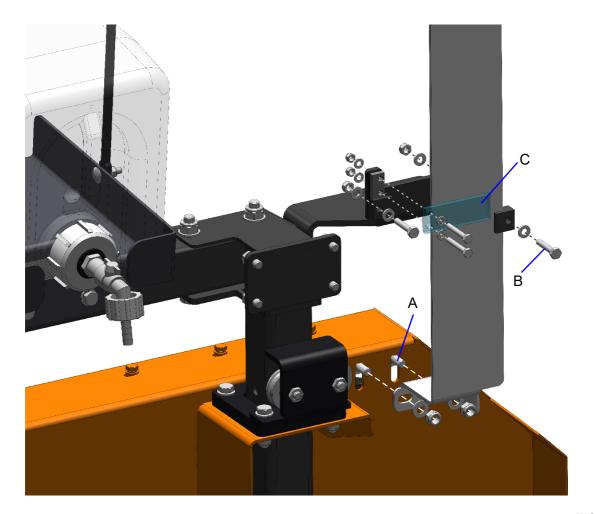


FIG. 2-17

2.11 Catch Rail Installation

1. Place the safety catch rails along the sawmill bed and prepare the fasteners (M10x30 bolts, nuts and washers). Set the rails in proper position as shown below. First, bolt the A and B rails to the bed. Then move the saw head to the middle of the bed and attach the C rail.

See figure 2-18.

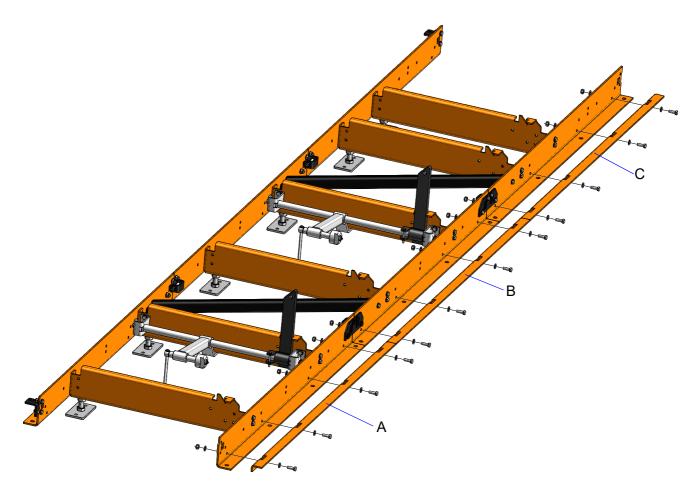


FIG. 2-18

2.12 Clutch Lever Installation (Gas Sawmills)

1. Install the emergency stop button (EU markets only) on the control box.

See figure 2-19.

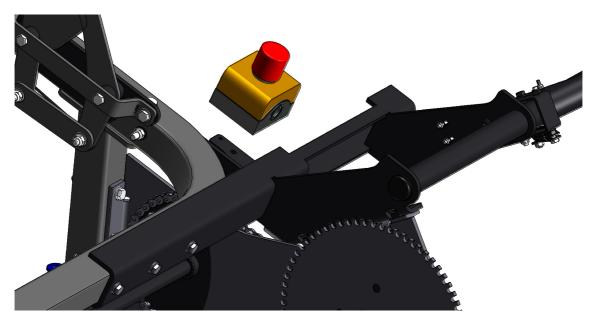


FIG. 2-19

Bolt the clutch cable to the lever. Secure the clutch cable in its middle position for later adjustment.
 See figure 2-20.

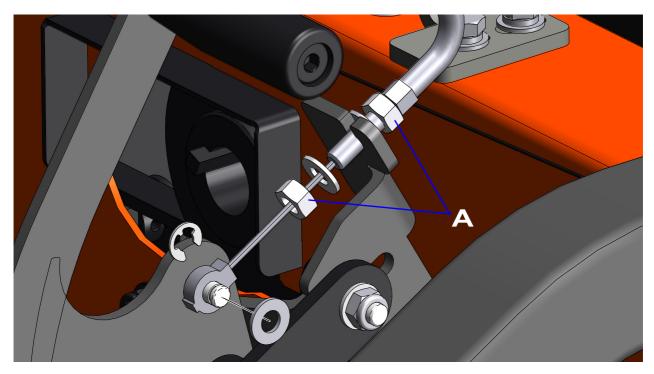


FIG. 2-20

3. Install the safety switch (Part No. 100910) to the clutch lever bracket using the two screws as shown below.

See figure 2-21.

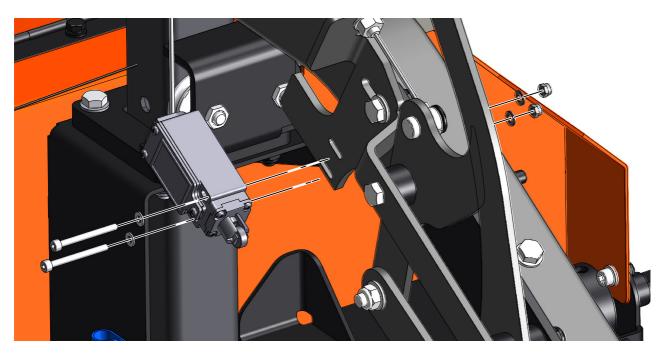


FIG. 2-21

4. Install the safety switch to the clutch lever bracket using the screws as shown below.

See figure 2-22.

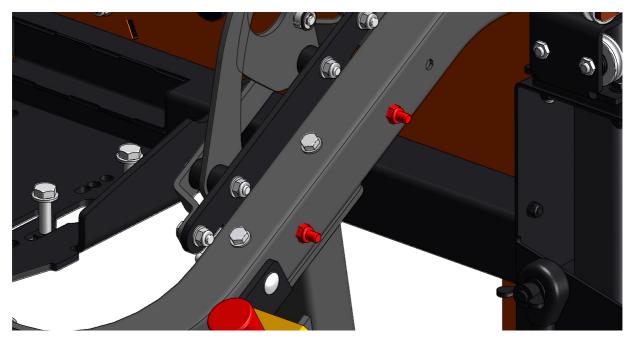


FIG. 2-22

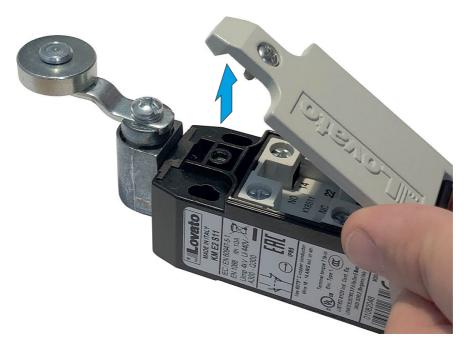
Follow the steps below to change position of the safety switch activation lever.

See figure 2-23.



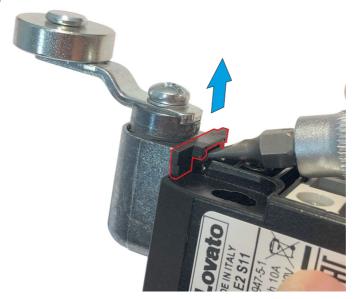
RYS. 2-23

See figure 2-24.

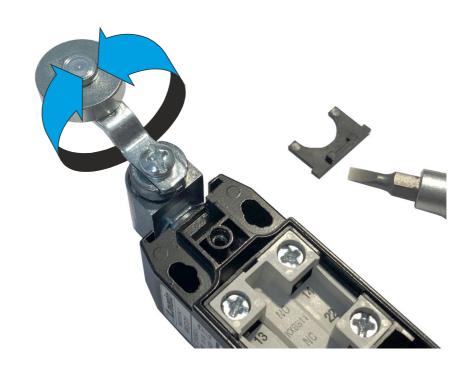


RYS. 2-24

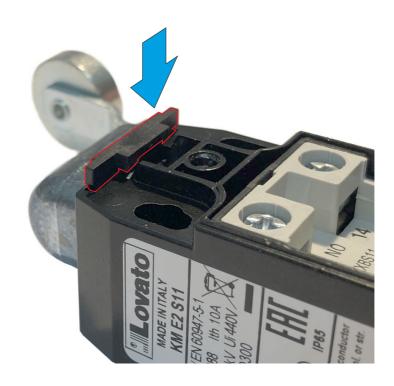
See figure 2-25.



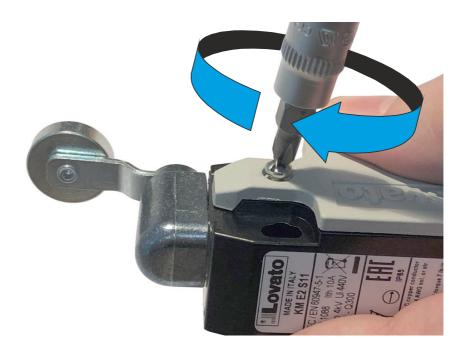
See figure 2-26.

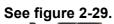


See figure 2-27.



See figure 2-28.







SECTION 3 SAWMILL OPERATION

3.1 Safety Instructions



DANGER! Make sure that the motor/engine is off before performing any maintenance. Failure to do so may result in serious injury or death.



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



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 eye, ear, respiration and foot protection as well as safety clothing when operating or servicing the machine. Failure to do so may result in serious injury or death.



WARNING! Always keep a safe distance from the sawdust chute when operating the sawmill. Failure to do so may result in serious injury or death.



WARNING! Assemble the sawmill bed on firm, level ground. Failure to do so may cause the saw head to tip, resulting in serious injury or death. If you have the stationary sawmill, fasten it to the floor.



WARNING! If the blade or drive belt breaks, wait until all moving parts stop completely. Failure to do so may result in serious injury.

CAUTION! Release the blade tension when the mill is not in use (for example at the end of a shift). Tension the blade again before starting the motor/engine.

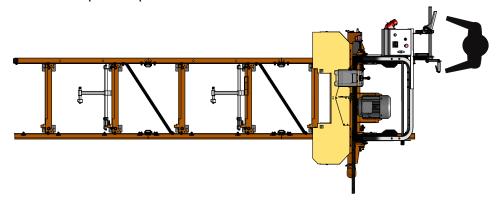
3.2 Sawmill Setup



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

- Clear the area. Inspect the sawing site for debris or uneven surfaces that may become a trip hazard. Ensure that eye, ear, and respiration protection are readily available. Ensure that the operator is wearing foot protection and proper work clothing.
- ■Check the engine oil level. (See the Engine Manual.)
- The sawmill must not be operated indoors without a sawdust collection system connected and started.

- AC sawmills must not be used outdoors when it is raining or snowing. In such a case, they must be used and stored under roof or indoors.
- Gas sawmills must not be used indoors. Such sawmills can be operated outdoors without a sawdust collection system, but the operator should be positioned downwind. It will prevent the operator from being exposed to sawdust and engine exhaust gases.
- The sawmill can be operated in the temperature range of -15° C to 40° C.
- ■The intensity of light at the operator's work-place must be at least 300lx.
- The sawmill's operator position is shown below.



■ EU market only: 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.

See Table 3-1.

3-Phase Volts	Circuit Breaker	Suggested Wire Size
400 VAC	16 A	2.5 mm ² Maximum length: 15 m

TABLE 3-1



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. 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! If the blade or drive belt breaks, wait until all moving parts stop completely. Failure to do so may result in serious injury or death.



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

The LX50 sawmills are only partially aligned at the factory. Some assemblies need to be aligned by the user before first usage of the sawmill.

Assemblies aligned at the factory:

- Engine r.p.m. (DC sawmills only),
- Blade wheels (in vertical and horizontal planes).

3.3 Replacing the Blade



DANGER! Always disengage the blade and shut off the sawmill motor/engine 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. Keep all other persons away from area when coiling, uncoiling, carrying or changing a blade. Changing blades is safest when done by one person! Failure to do so may result in serious injury.

Turn the blade tensioner screw to decrease the blade tension until the blade is lying loose in the blade housing. Lift the blade out of the blade housing.

Place a new blade loosely around the blade wheels. When installing the blade, make sure the teeth are pointing the correct direction. Adjust the blade track as instructed in See Section 3.5 "Tracking the Blade".

3.4 Tensioning the Blade

See Figure 3-1.

A wrench for tensioning the blade is located at the rear of the saw head. Place the wrench on the tensioner screw. Turn the tensioner screw right until the tension indicator is in the middle of the notch indicating the correct tension.

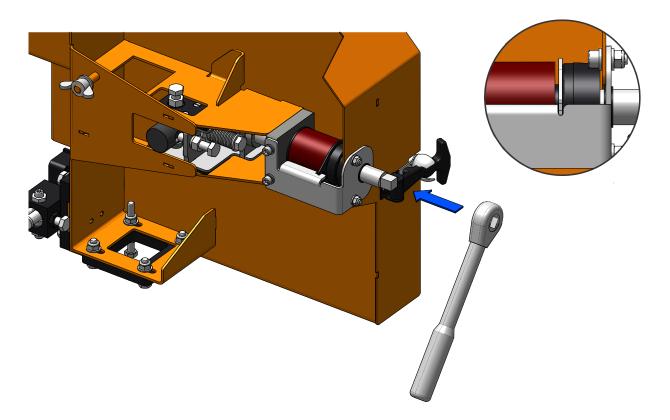


FIG. 3-1



CAUTION! Release the blade tension after you have finished using the sawmill (e.g. after each shift). Place information on the machine for other operators that it is necessary to tension the blade again before further sawmill operation.

3.5 Tracking the Blade

After tensioning the blade, check its position on the blade wheels.

See Figure 3-2. Position 1 1/4" (32 mm) wide blades on the blade wheels so the blade teeth are 9 -10 mm (±1 mm) out from the edge of the wheel. Make sure the rear edge of the blade is lying flat on the wheels and is no more than 3 mm out from the edges of the blade wheel belts.

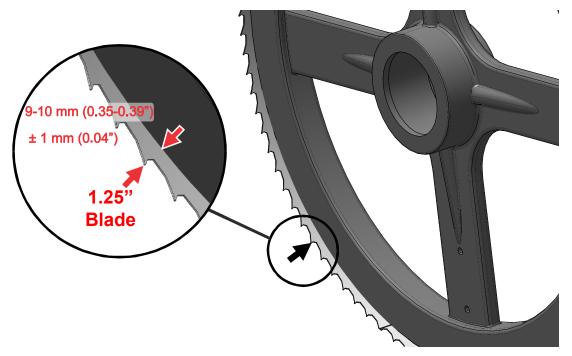


FIG. 3-2

To track the blade properly on both blade wheels:

- (CE electric version) open the blade housing cover, set the key switch to the "H" position and spin the blade wheel by hand a few times.
- (Non-CE electric version) open the blade housing cover and spin the blade wheel by hand a few times.
- (Gas engine version) open the blade housing cover and spin the blade wheel by hand a few times.

Two cant control bolts are located at the rear of the saw head, on both sides.

3.6 Horizontal Adjustment of Idle-Side Blade Wheel

Adjust the idle-side blade wheel horizontally. To do this, loosen the set nuts on the adjustment bolts and tilt the blade wheel until it is properly aligned.

See Figure 3-3. The bolt for adjusting the idle-side blade wheel is shown below.

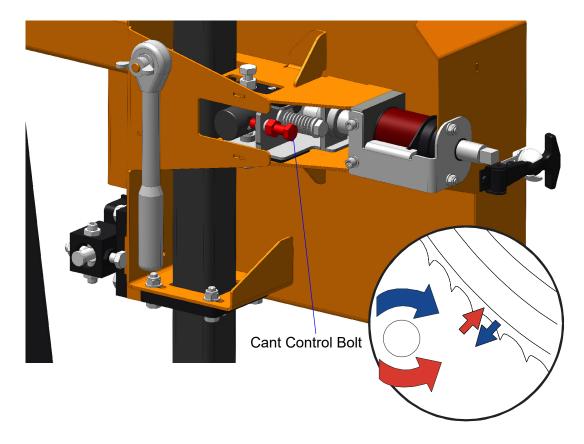


FIG. 3-3

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

3.7 Motor Drive Pulley Alignment

See Figure 3-4. Check that the motor drive pulley is aligned with the blade wheel using a ruler as shown below.

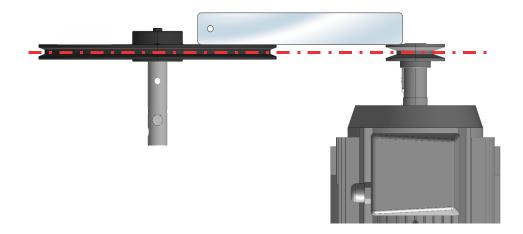


FIG. 3-4

To align the pulleys, loosen or tighten the bolts in the motor mount plates on both sides of the motor. Incorrect pulley alignment may result in premature drive belt wear.

3.8 Horizontal Adjustment of Drive-Side Blade Wheel

Check the position of the blade on the drive-side blade wheel. The blade should be positioned on this wheel as described for the idle blade wheel. If not, adjust the drive wheel horizontally.

See Figure 3-5. Use the adjustment screw shown below to adjust the drive-side blade wheel horizontally. First, loosen the nut on this screw. If you want to move the blade on the wheel away from the machine, loosen the screw. To move the blade towards the machine, tighten the screw. Be

sure to tighten the nut after adjustment.

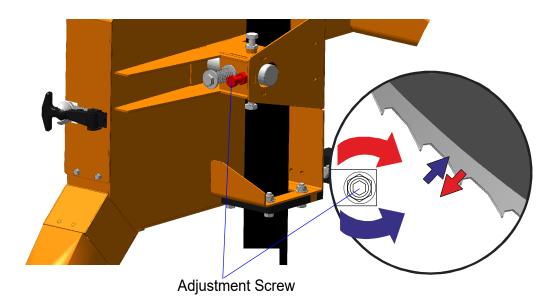


FIG. 3-5

3.9 Vertical Adjustment of Drive-Side Blade Wheel

The blade wheels must be square to the sawmill bed and parallel to each other in the vertical and horizontal planes. If the blade wheels are tilted up or down, the blade will not be properly adjusted in relation to the sawmill bed and sawn wood. If the blade wheels are tilted horizontally, the blade will not track properly on the wheels.

Use the blade guide alignment tool to check the vertical alignment of each blade wheel.

1. Attach the alignment tool to the blade near the drive-side blade guide. Be sure the tool does not rest on a tooth or burr, and is lying flat against the blade.

See Figure 3-6.

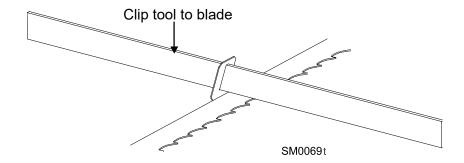


FIG. 3-6

2. Move the saw head 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 head 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 3-7. Use the screws shown below to adjust the drive blade wheel vertically. To tilt the wheel down, loosen the top adjustment screw a half 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 a half turn. Loosen the jam nut on the top adjustment screw and tighten the screw. Tighten the top and bottom jam nuts.

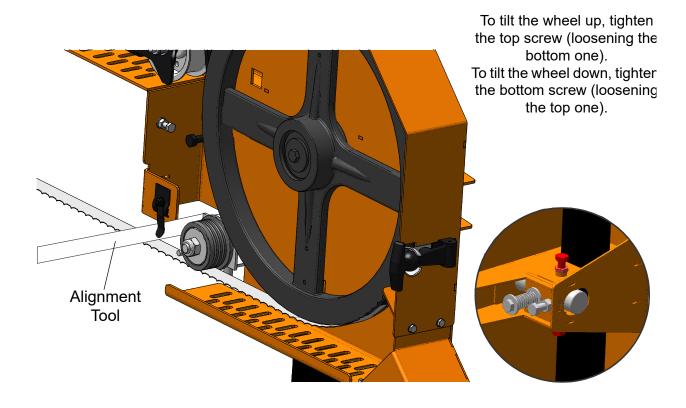


FIG. 3-7

5. Measure again the distance between the tool and the bed rail at both ends of the tool. If the measurements at the front and rear ends of the tool still differ by more than 1/16" (1.5 mm), readjust the drive-side blade wheel in the vertical plane.

3-9 doc032724 Sawmill Operation

3.10 Vertical Adjustment of Idle-Side Blade Wheel

- 1. Attach the alignment tool to the blade near the idle-side blade guide.
- 2. Measure from the bottom of the tool to the bed rail at both ends of the tool. If the measurements are not equal (± 1.5 mm [0.06"]), adjust the idle-side blade wheel in the vertical plane.

See Figure 3-8. To tilt the idle-side blade wheel up, loosen the lower nut and adjustment screw 1/2 turn, loosen the nut on the upper adjustment screw and tighten the upper screw. Then tighten the upper and lower nut.

To tilt the idle-side wheel down, loosen the upper adjustment screw 1/2 turn, loosen the nut on the lower adjustment screw and tighten the lower screw. Tighten the upper and lower nut.

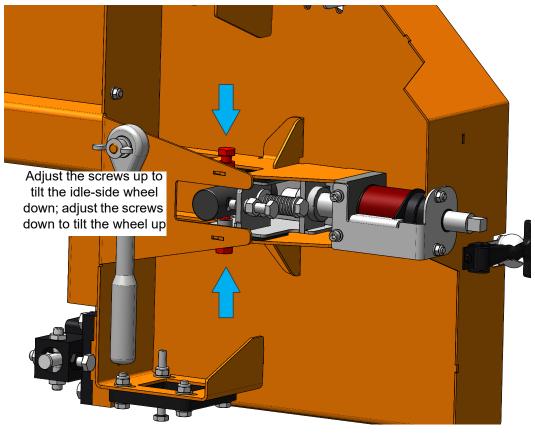


FIG. 3-8

- **3.** Recheck the vertical tilt of the idle-side blade wheel. If it is still incorrect, repeat the adjustment procedure.
- 4. Check the position of the blade on the blade wheel.

See Figure 3-9. The figure below shows the screws for positioning the blade on the blade wheels.

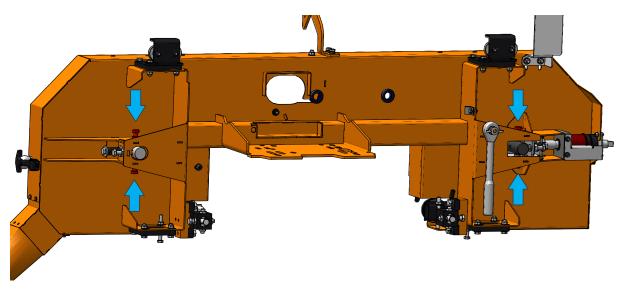


FIG. 3-9

3.11 Saw Head Adjustment

- 1. Check that the tensioned blade is parallel to a bed rail. To do this, measure the distance between the blade and the bed rail on both sides of the saw head. If the two measurements are not the same, adjust the saw head in relation to the bed on one or both sides, as necessary.
- 2. To adjust the saw head, move the threaded rod (on which the lift cable is installed) up or down. To move the saw head up, loosen the lower jam nut and tighten the upper nut. For the user's safety, the lift cable bracket with the cable locking screw must be tightened all the way. After adjustment, the lift cable locking screw should be in the same position as before.
- **3.** When adjusting the saw head, be careful not to loosen the upper nut completely as it can cause the saw head to lower.

See Figure 3-10. The figure below shows the screws for positioning the blade on the blade wheels.

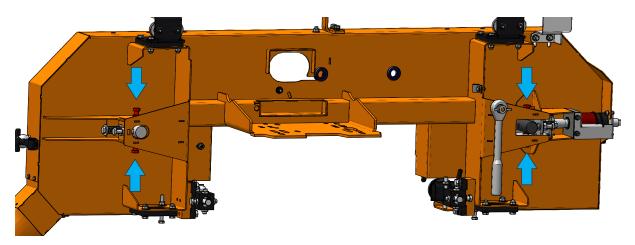


FIG. 3-10

3.12 Blade Deflection

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

1. Position the saw head so that the blade is above a bed rail. Measure the actual distance with a tape from the top of the rail to the bottom of the blade.

See Figure 3-11.

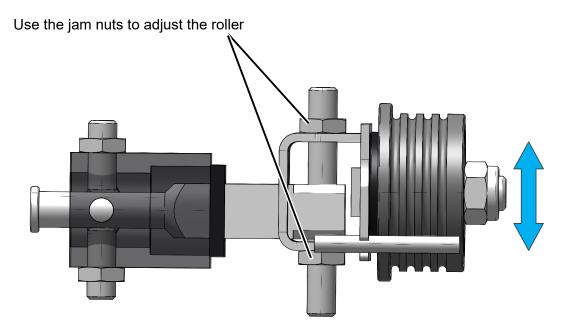


FIG. 3-11

- 2. Loosen the bottom jam nut and tighten the top jam nut until the blade guide deflects the blade down 3 4 mm (0.12"-0.15").
- 3. Repeat for the other blade guide.

NOTE: Be sure the blade guard clears the blade. It should be checked with the blade guard all the way in and all the way out.

3.13 Blade Guide Vertical Adjustment

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

1. Attach the alignment tool to the blade. Position the tool close to a blade guide roller. Be sure the tool does not rest on a tooth or burr, and is lying flat against the blade.

See Figure 3-12.

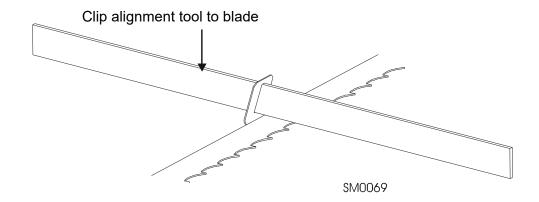


FIG. 3-12

- 2. Measure the distance from the bottom of the tool to the bed rail.
- 3. Move the saw head so that the front end of the tool is positioned above the bed rail.
- 4. Measure again the distance between the tool and bed rail.
- **5.** The two measurements should be the same. If they are not, loosen one side set screw of the guide assembly and adjust the blade guide in the vertical plane using the screws shown in Figure 3-12.

See Figure 3-13.

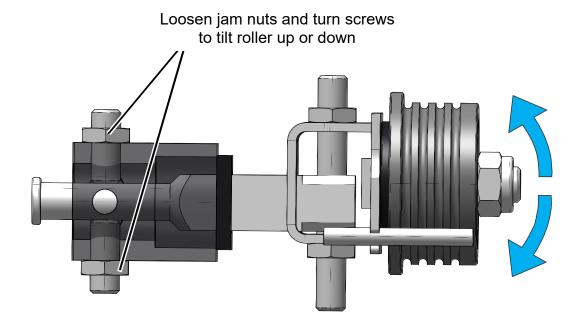


FIG. 3-13

- **6.** Move the saw head in the cutting direction so the back end of the tool is over the bed rail. Measure the distance between the tool and the bed rail.
- **7.** This measurement should equal the two earlier measurements. If it is not the same, adjust the blade guide using the screws shown in the figure above.
- 8. Move the tool close to the other blade guide and repeat the adjustment procedure described above.

NOTE: If any adjustments to blade guide tilt were made, make sure the blade deflection is correct (3 mm [0.12"]).

NOTE: After adjusting the blade guides, start the blade drive for a moment. Then stop the blade and check again if the blade guides are properly positioned.

3.14 Blade Guide Spacing Adjustment

Note: To adjust the spacing between the roller flange and the blade, loosen one top and one side set screw only. This will ensure horizontal and vertical adjustments to the blade guide tilt are maintained when the set screws are retightened.

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

3-15 doc032724 Sawmill Operation

See Figure 3-14.

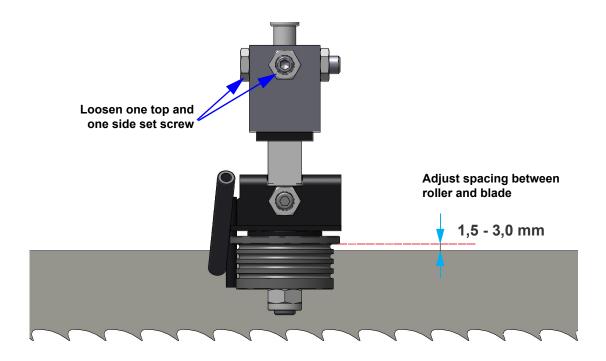


FIG. 3-14

- **3.** Tighten the set screws.
- 4. Repeat the above adjustment procedure for the other blade guide.

NOTE: After adjusting the blade guide spacing, start the blade drive for a moment. Then stop the blade and recheck the spacing.

3.15 Blade Guide Horizontal Adjustment

See Figure 3-15.

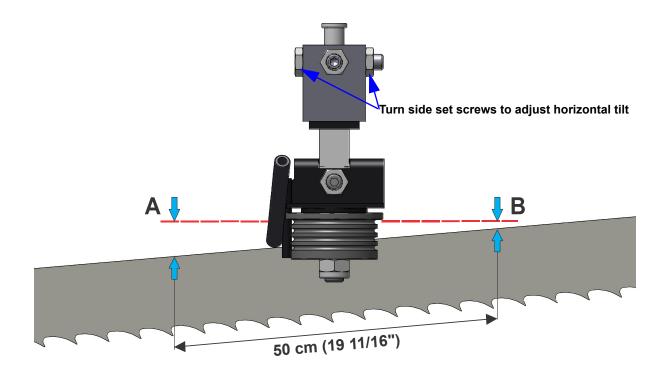


FIG. 3-15

- 1. Place the Blade Guide Alignment Tool against the face of a blade guide roller and center it on throller as shown above.
- 2. Measure between the back edge of the blade and the tool at one end of the tool ("B").
- 3. Measure between the back edge of the blade and the other end of the tool ("A").
- **4.** The blade guide roller should be parallel to the blade (A=B) or slightly tilted in the horizontal plane as shown in Figure 4-13 (A=B-6 mm). If this condition is not met, adjust the roller in the horizontal plane using the side set screws on the blade guide.
- 5. Repeat the above steps for the other blade guide.

NOTE: Once the blade guides have been adjusted, any cutting variances are most likely caused by the blade.

3-17 doc032724 Sawmill Operation

3.16 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.

See Figure 3-16.

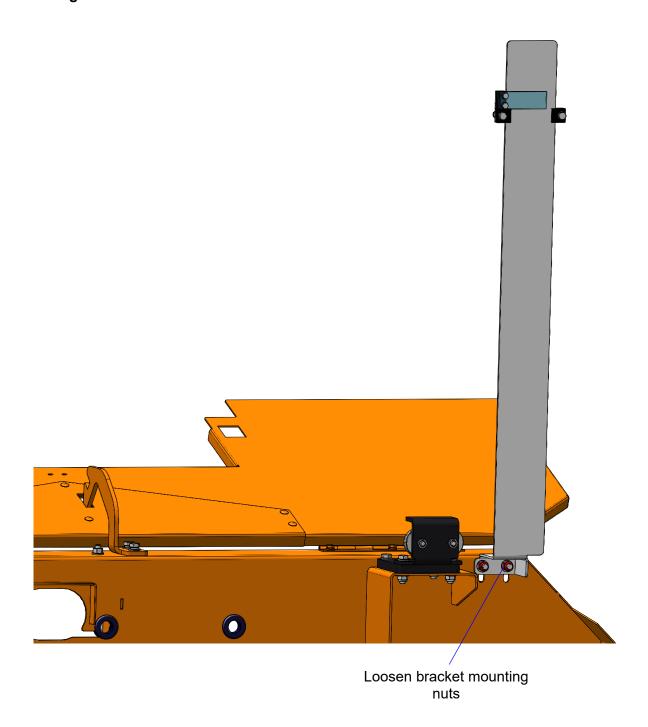


FIG. 3-16

- **1.** Move the saw head 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.
- 2. Loosen the scale bracket mounting bolts and nuts, adjust the scale position until the scale indicator reads the distance measured in the previous step. Re-tighten the bracket mounting bolts and nuts.

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

3.17 Engine/Motor Drive Belt Adjustment

1. On LX50 sawmills equipped with the electric motor, the drive belt is adjusted by adjusting the tensioner screw nuts (marked with red color on the figure below).

See Figure 3-17.

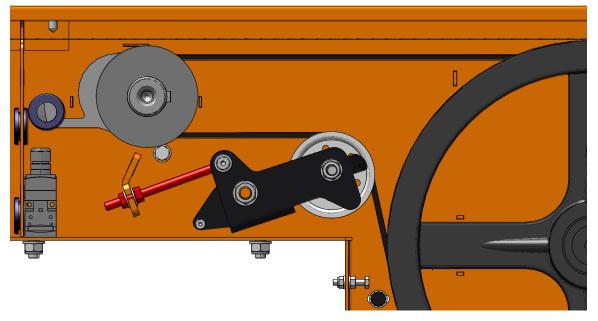


FIG. 3-17

2. To adjust the drive belt on sawmills with the gas engine, increase or reduce the steel cable connecting the tensioner handle with the belt tensioner. If necessary, adjust also the length of the throttle cable connecting the tensioner with the engine throttle. The drive belt is tensioned properly if the drive pulley is fully engaged when the tensioner handle is in the down position. The throttle cable is adjusted properly if the engine runs at full rotational speed (3600 r.p.m.) when the tensioner handle is pushed down. When the tensioner handle is released, the engine should return to idle and the drive pulley should stop spinning.

3-19 doc032724 Sawmill Operation

See Figure 3-18.

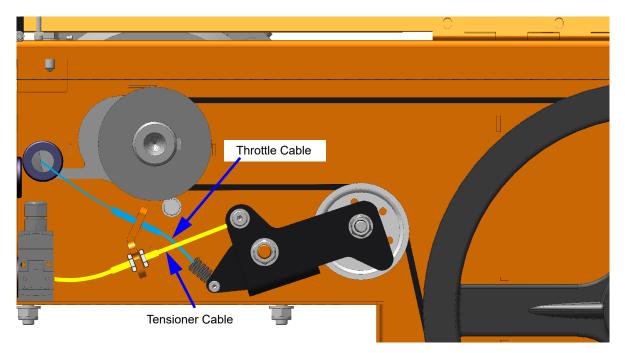


FIG. 3-18

3.18 Starting the Engine/Motor

See the engine/motor manual supplied with your machine 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. If the rotation direction is incorrect, invert the phases in the phase inverter in the power socket. Setting the phases in the phase inverter correctly will ensure correct rotation directions of all sawmill motors (it concerns sawmills with electric 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 may result in serious injury.



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

3.19 Loading, Turning and Clamping Logs

To load a log:

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



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

2. Lower the log clamp completely and move it toward the loading side of the sawmill frame.



CAUTION! Be sure the log clamp is 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 parallel to the sawmill bed.

Tensioner Cable

5. Use a cant hook to roll the log onto the sawmill bed. Position the log against the side supports.

If your sawmill is not equipped with the loading ramps, use other log loading equipment to load the log onto the sawmill bed. You can also use boards to do this.

To turn a log:

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

To clamp a log:

- 1. Position the log clamps against the log, far enough down so they are below your cuts on a given side of the log. Using the clamp handle, move the log firmly against the side supports.
- 2. Be sure to leave the crank in the bottom position to avoid damage to the blade during sawing operation.

3-21 doc032724 Sawmill Operation

See Figure 3-19.

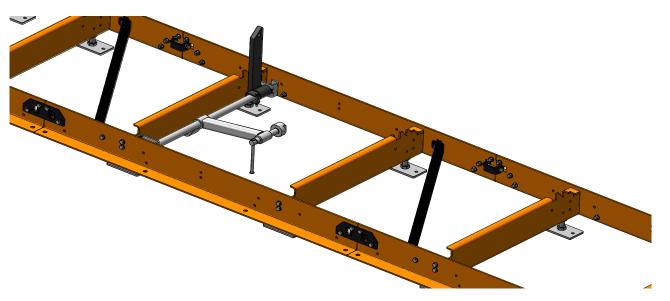


FIG. 3-19

3. Make sure the side supports are positioned low enough for the blade to pass over them. If they are not, back the clamp 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 log:

Shim one end of the log (e.g. using an optional leveling wedge) until the heart of the log measures the same distance from the bed rails at each end of the log.

See Figure 3-20.

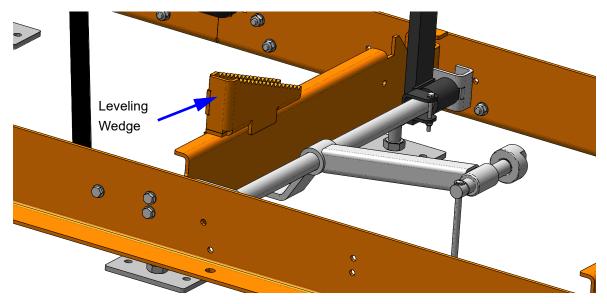


FIG. 3-20

3.20 Up/Down Operation

- 1. Install a blade, if needed, and check for correct blade tension.
- 2. Using the crank handle, set the saw head to the desired height (the blade height scale shows the height of the blade above bed rails). One full turn of the crank handle moves the saw head 12,21 mm (0.5"). If you rotate the crank handle by one tooth on the disc, the saw head will be raised/lowered 0,18 mm (0.007").

See Figure 3-21. Use the crank handle to raise or lower the saw head.

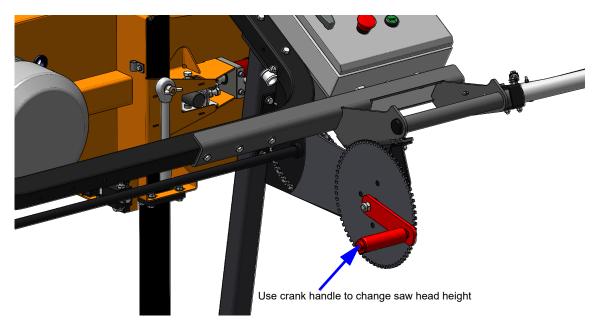


FIG. 3-21



CAUTION! DO NOT try to force the saw head above the 50 cm (20") mark or below the 2,54 cm (1") mark. Damage to the up/down system may result.

3.21 Blade Drive Operation



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.

Be sure the blade housing cover is closed and secured before starting the engine or motor. Use the rubber latches to fasten the blade housing cover shut. If the blade housing cover is not closed and secured, the safety switch located on it makes starting the motor/engine impossible. If you open the cover during sawmill operation, the blade engine/motor will be stopped.

3-23 doc032724 Sawmill Operation

For Sawmills with the Electric Motor

- 1. Clear any loose objects from the area of the blade, motor, and drive belt.
- **2.** Make sure the clamps and side supports are positioned low enough for the blade to pass over them. Make sure the log is clamped securely.
- **3.** Start the motor. Turn the main switch to the "I" position. Then push and hold the safety handle and start the blade motor by pressing the green button on the electric box.

See Figure 3-22.

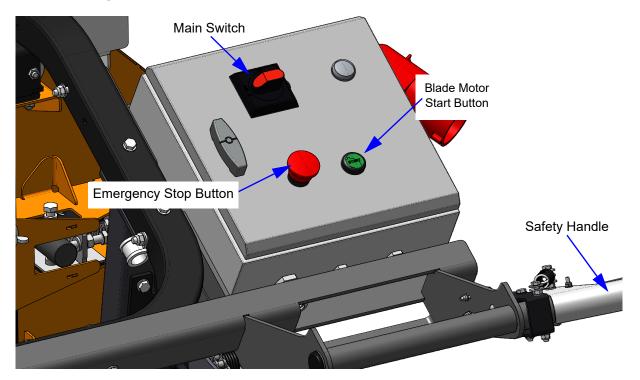


FIG. 3-22



CAUTION! If at any time you need to immediately stop the blade motor, press the emergency stop button located on the electric box.

4. To turn off the blade motor, release the safety handle.

3.22 Gas Engine Operation (G14)



WARNING! Do not start the engine if the drive belt tensioner handle is ENGAGED. Always be sure the blade is disengaged and all persons are out of the path of the blade before starting the engine.



IMPORTANT! Read the engine manual for instructions and safety precautions before operating the engine.

- 1. Clear any loose objects from the area of the blade, engine, and drive belt.
- **2.** Make sure the clamps and side supports are positioned low enough for the blade to pass over them. Make sure the log is clamped securely.



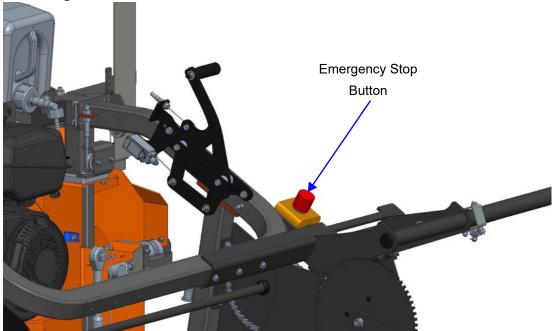


FIG. 3-23



CAUTION! If at any time you need to immediately stop the blade engine, press the emergency stop button located on the operator's handle.

- **3.** Open the fuel supply valve and turn on the ignition by moving the ignition/fuel lever to the "ON" position.
- **4. Cold engine:** Close the engine choke by moving the choke lever to the "ON" position. Disengage the tensioner handle (by moving it away from you).
- **5. Warm engine:** Disengage the tensioner handle (by moving it away from you). A warm engine usually does not require choke on.
- **6.** Pull the engine starter cord slowly until you feel resistance, then pull the cord quickly to start the engine.

3-25 doc032724 Sawmill Operation

- **7. Cold engine:** When the engine starts, slowly open the choke all the way by moving the choke leverto the "OFF" position.
- 8. Press and hold the safety handle (CE sawmills only).
- 9. Engage the tensioner handle by pushing it toward you as shown below.

See Figure 3-24.

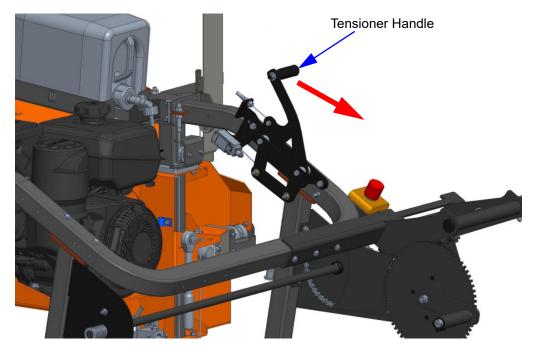


FIG. 3-24

NOTE: Let the engine idle for about 1-3 minutes (depending on ambient temperature) to warm up before starting the sawing operation.

Engine Shutoff

- **1.** Disengage the tensioner handle (by moving it away from you) to stop the blade.
- **2.** The engine should run with no load for 15 seconds. Stop the engine by moving the ignition/fuel lever to the "OFF" position.



CAUTION! When stopping the engine, reduce the load slowly. Do not stop the engine suddenly as it may cause the temperature to raise abnormally.

3.23 Feed Operation

The feed operation is performed by pushing the saw head manually. The speed at which the saw head travels should be as steady as possible. Be sure the saw head will not hit any bed components while it is being moved forward or backward.

NOTE: To get a straight cut in the first part of the log, 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 blade and drive belt wear, and also produces a wavy cut.



CAUTION! Be sure to stop the blade when returning the saw head. 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.

3-27 doc032724 Sawmill Operation

3.24 Cutting the Log

The following steps guide you through normal operation of the LX50 sawmill.

- 1. Once the log is placed where you want it and clamped firmly, position the blade close to the end of the log.
- 2. Use the blade height scale to determine where to make your first cut. Set the blade to the desired height. Make sure that the blade will clear the clamps and side supports.
- 3. Make sure all covers and guards are in place and secured. Start the motor/engine.
- **4.** Feed the blade into the log slowly. 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!
- **5.** 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 handle to stop the blade (electric sawmill version), or disengage the tensioner handle and set the throttle lever in SLOW position (gas sawmill version). Remove the slab that you have just cut from the log.
- **6.** Return the saw head to the front of the sawmill Always disengage the blade before returning the saw head for the next cut.
- 7. 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.
- 8. If the leveling wedge was used, remove it from the sawmill bed. Release the clamps and turn the log 90 or 180 degrees. Make sure the flat side of the log is placed against the side supports if the log was turned 90 degrees. If the log was turned 180 degrees, its flat side should rest on the bed rails. If the log was turned 90 degrees and it is necessary to level it on the bed, follow the leveling instructions below.
- **9.** Repeat the steps used to cut the first side of the log until the log is square. Then cut boards from the cant.

Example: Remember that the blade cuts a 2 mm (0.08") wide kerf. If you want to get 25 mm (1") thick boards, lower the carriage 27 mm $(1\ 1/16")$ for each board.

3.25 Edging

The following steps guide you through edging boards on the LX50 sawmill.

- 1. Raise the side supports to 1/2 the height of the boards that need to be edged.
- 2. Stack these boards on edges against the side supports.
- **3.** Clamp the boards against the side supports halfway up the board height. (Wider boards should be placed to the clamp side. When they are edged, flip them over to edge the second side without disturbing the other boards 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 boards and repeat steps 2-5.

3.26 Blade Height Scale

See Figure 3-25. The blade height scale is mounted on the vertical mast. It includes:

- a blade height indicator,
- a centimeter and inch scale.

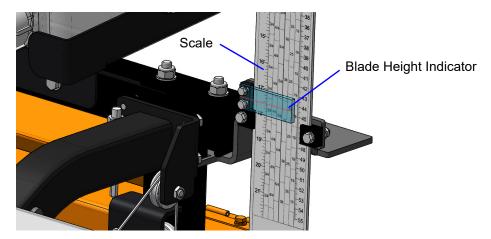


FIG. 3-1

Blade Height Indicator

Readings should be taken with eyes level with the indicator. This will allow to avoid the parallax error (different scale readings depending on the angle of vision).

Scale

The blade height indicator shows how many centimeters the bottom of the blade is above the bed of the sawmill. 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 1" (25 mm) random width boards from a log. Position the blade for the first cut. Move the saw head to an even measurement on the scale. Make a trim cut. Return the saw head for the second cut and lower it 27 mm below the original measurement. (The extra 2 mm allows for saw kerf and shrinkage of the lumber.)

3.27 Stop Bolt Adjustment

Adjust the saw head stop bolts so that the distance between the top of the bed rail and a down-set tooth of the blade is 25 mm (1").

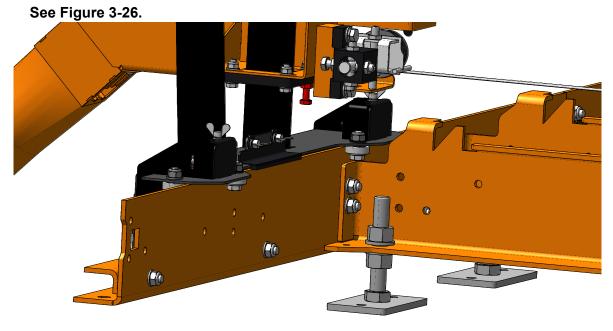


FIG. 3-2

3.28 Water Lube System

The Water Lube System keeps the blade clean during sawing. 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 3-27. Open the valve on the water bottle to start water flow to the blade.

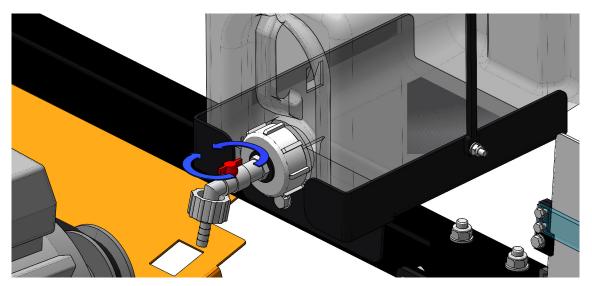


FIG. 3-3

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. A squirt of liquid dishwashing detergent in the water bottle will help clean the blade when cutting wood with a high sap content.



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

Before removing the blade, engage the clutch/brake lever (sawmills with the gasoline engine only). Let the blade spin with water running on it for about 15 seconds. This will clean the blade of sap buildup. Wipe the blade dry with a rag before storing or sharpening.

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

3.29 Transporting the Sawmill

The assembled sawmill can be transported in an appropriately equipped pickup truck.

- 1. Move the saw head to one of the segments equipped with the stop block and secure it in place with the locking pin.
- 2. Divide the bed frame into the segments.
- 3. Slide the bed frame segments into the truck.
- **4.** Use a forklift to load the saw head with the mast and bed segment into the truck and secure it with transport straps.



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.

3.30 Troubleshooting



DANGER! Before performing any service to this machine, turn off the motor/engine and remove the key. Moving sawmill parts can cause 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 the blade.			
	Poor sharpening techniques	Make sure the tips of teeth are sharpened properly.			
Blades break prematurely	Rubber belts on blade wheels worn to a point that blade contacts metal pulley - look for shiny spots on edges of wheels.	Replace the blade wheel belts.			
	Blade tension too tight	Tension blade to recommended specifications(<u>See "Tensioning</u> the Blade.").			
Blade does not track right on wheels	Blade wheel improperly adjusted	Readjust. (<u>See "Tracking the Blade."</u>)			
	Flat/worn blade wheel belts	Replace the belts.			
Drive Belts Wear Prematurely or Jump	Engine/motor and drive pulleys out of alignment	Align the pulleys.			
Boards thick or thin on ends or in the middle of board	Stress in log which causes log to not lay flat on 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.			
	Incorrect tooth set	Resharpen and reset blade.			
	Bed rails misaligned	Realign the bed.			

Height adjustment jumps or stutters when moving up	Lift cable improperly adjusted	Adjust the lift cable.				
or down	Vertical wear pads are too tight.	Adjust pads.				
	Lift cable too loose	Replace/adjust lift cable.				
Lumber is not square	Vertical side supports not square to bed	Adjust side supports.				
	Blade not parallel to bed rails	Adjust bed rails.				
	Sawdust or bark between log/cant and bed	Remove particles.				
	Tooth set problem	Resharpen and reset blade.				
Sawdust builds up on track	Excessive lubrication	Apply white lithium grease.				
	Worn wipers	Adjust wipers to firmer contact track or replace them.				
	Track is sticky	Clean track and apply silicone spray.				
Wavy cuts	Excessive feed	Reduce feed speed.				
	Improperly sharpened blade (This will be the problem 99% of the time!)	Resharpen blade.				
	Blade guides improperly adjusted	Adjust blade guides.				
	Sap buildup on blade.	Use Water Lube.				
	Tooth set problem	Resharpen and reset blade.				

SECTION 4 MAINTENANCE



WARNING! Before removing any cover or guard, always turn off the motor/engine and wait until all parts have stopped moving. Failure to do so may result in serious injury or death.

4.1 Maintenance Performed as Needed

Mast Track, Rollers and Wipers

Properly maintaining the mast track surfaces and the track rollers 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 forward/backward movement of the saw head.



CAUTION! Keep mast track surfaces free of rust. Formation of rust on the mast track surfaces can cause rapid deterioration of these surfaces.

Apply white lithium grease to the mast track surfaces. Oil lubrication will help protect these surfaces from corrosive elements such as acid rain and moisture. This lubrication is also essential for proper functioning and durability of the forward/backward feed system.

Make sure the track wipers touch the track surfaces and are free of sawdust buildup.

See Figure 4-1.

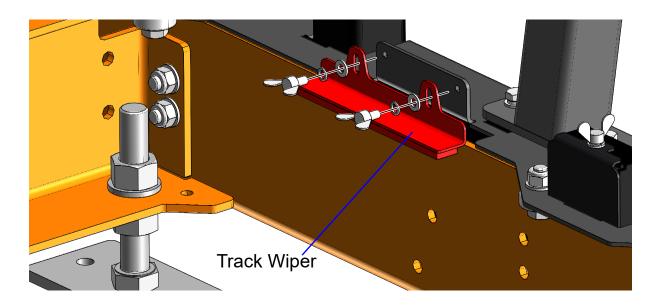


FIG. 4-1

After each use of the sawmill, remove sawdust from the track surfaces, bed rails and track rollers. Use a light-grade sandpaper or emery cloth to sand off any rust and other adhering particles from the mast track surfaces. See Figure 4-2.

See Figure 4-2.

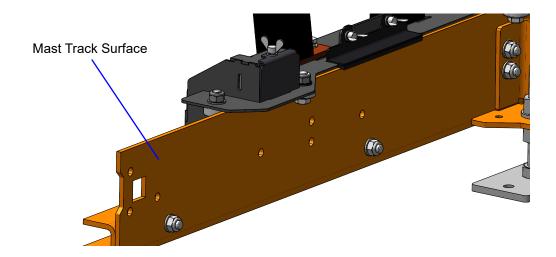


FIG. 4-2

4.2 General Maintenance

Every 8 Hours of Sawmill Operation

- Check the engine oil level. (See the Engine Manual.)
- Clean the track rollers, mast carriages and track wipers.
- After you have finished using the sawmill, lower the saw head all the way down so that the saw head rests on the stop bolts and the lift cables remain tensioned.
- Inspect the sawmill parts for damage.
- Open the blade housing cover and brush any sawdust buildup from the housing, cover and V-belts.

See Figure 4-3.

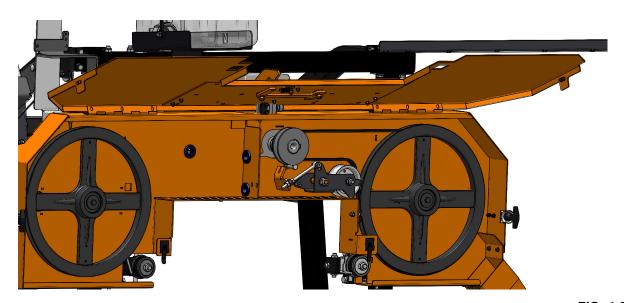


FIG. 4-3

Monthly (every 160 hours of sawmill operation)

Apply white lithium grease to the lift cables on both sides of the saw head.



CAUTION! Check if the lift cables are in good condition. If either lift cable is damaged, immediately replace it with a new one.

■ Be sure the up/down crank handle is lubricated. When applying the grease or oil, be careful not to spray it onto the friction pad.

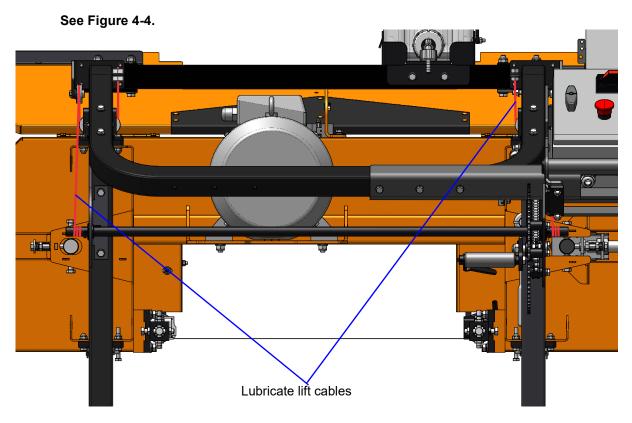


FIG. 4-4

4.3 Motor/Engine Maintenance

Refer to the motor/engine manufacturer's manual for maintenance intervals and procedures regarding the motor/engine.

WOOD-MIZER LX50/LT15WCSC/LX100/LX450 MAINTENANCE LOG (Check Engine And Option Manuals For Additional Maintenance Procedures)											
PROCEDURE	MANUAL REF- ERENCE	TOTAL HOURS OF OPERATION FILL IN THE DATE AND THE MACHINE HOURS AS YOU PERFORM EACH PROCEDURE. A SHADED BOX INDICATES MAINTENANCE IS NOT NEEDED AT THIS TIME.									
		50 HRS	100 HRS	150 HRS	200 HRS	250 HRS	300 HRS	350 HRS	400 HRS	450 HRS	500 HRS
Clean & lubricate mast	See Section 4.1										
Check blade wheel belts for wear.	See Section 4.2										
Lubricate blade tensioner screw.	See Section 4.2										

WOOD-MIZER LX50/LT15WCSC/LX100/LX450 MAINTENANCE LOG (Check Engine And Option Manuals For Additional Maintenance Procedures)											
PROCEDURE	MANUAL REF- ERENCE				AND THE MA	ACHINE HOU	OF OPERAT IRS AS YOU IANCE IS NO	PERFORM E			
		550 HRS	600 HRS	650 HRS	700 HRS	750 HRS	800 HRS	850 HRS	900 HRS	950 HRS	1000 HRS
Clean & lubricate mast	See Section 4.1										
Check blade wheel belts for wear.	See Section 4.2										
Lubricate blade tensioner screw.	See Section 4.2										

f:\manuals\forms\610 15doc032724

WOOD-MIZER LX50/LT15WCSC/LX100/LX450 MAINTENANCE LOG (Check Engine And Option Manuals For Additional Maintenance Procedures)											
PROCEDURE	MANUAL REF- ERENCE	TOTAL HOURS OF OPERATION FILL IN THE DATE AND THE MACHINE HOURS AS YOU PERFORM EACH PROCEDURE. A SHADED BOX INDICATES MAINTENANCE IS NOT NEEDED AT THIS TIME.									
		1050 HRS	1100 HRS	1150 HRS	1200 HRS	1250 HRS	1300 HRS	1350 HRS	1400 HRS	1450 HRS	1500 HRS
Clean & lubricate mast	See Section 4.1										
Check blade wheel belts for wear.	See Section 4.2										
Lubricate blade tensioner screw.	See Section 4.2										

WOOD-MIZER LX50/LT15WCSC/LX100/LX450 MAINTENANCE LOG (Check Engine And Option Manuals For Additional Maintenance Procedures)											
PROCEDURE	MANUAL REF- ERENCE				AND THE MA	CHINE HOU	OF OPERATI RS AS YOU I IANCE IS NO	PERFORM E			
		1550 HRS	1600 HRS	1650 HRS	1700 HRS	1750 HRS	1800 HRS	1850 HRS	1900 HRS	1950 HRS	2000 HRS
Clean & lubricate mast	See Section 4.1										
Check blade wheel belts for wear.	See Section 4.2										
Lubricate blade tensioner screw.	See Section 4.2										

f:\manuals\forms\610 15doc032724

WOOD-MIZER LX50/LT15WCSC/LX100/LX450 MAINTENANCE LOG											
(Check Engine And Option Manuals For Additional Maintenance Procedures)											
PROCEDURE	MANUAL REF- ERENCE	TOTAL HOURS OF OPERATION FILL IN THE DATE AND THE MACHINE HOURS AS YOU PERFORM EACH PROCEDURE. A SHADED BOX INDICATES MAINTENANCE IS NOT NEEDED AT THIS TIME.									
		2050 HRS	2100 HRS	2150 HRS	2200 HRS	2250 HRS	2300 HRS	2350 HRS	2400 HRS	2450 HRS	2500 HRS
Clean & lubricate mast	See Section 4.1										
Check blade wheel belts for wear.	See Section 4.2										
Lubricate blade tensioner screw.	See Section 4.2										

WOOD-MIZER LX50/LT15WCSC/LX100/LX450 MAINTENANCE LOG											
(Check Engine And Option Manuals For Additional Maintenance Procedures)											
PROCEDURE	MANUAL REF- ERENCE				AND THE MA	ACHINE HOU		PERFORM E	ACH PROCE		
		2550 HRS	2600 HRS	2650 HRS	2700 HRS	2750 HRS	2800 HRS	2850 HRS	2900 HRS	2950 HRS	3000 HRS
Clean & lubricate mast	See Section 4.1										
Check blade wheel belts for wear.	See Section 4.2										
Lubricate blade tensioner screw.	See Section 4.2										

f:\manuals\forms\610 15doc032724



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

Manufacturer:

Wood-Mizer Industries Sp. z o. o. 114 Nagórna; 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 brought into no longer valid.

	2006/42/EC based on its design and type, as t machine, not agreed by us, this declaration is r
We, the undersigned herewith declare, th	at:
Designation of the machine:	Sawmill
Model:	LX50SA, LX50SC
Туре:	
Serial Number:	
ls in conformity with the following EC directives:	EC Machinery Directive 2006/42/CE EC Electromagnetic Compability Directive 2014/30/CE
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 – Krakowski Instytut Technologiczny ul. Zakopiańska 73 30-418 Kraków
Notification No:	1455
EC type - examination certyficate no:	1455-MD-065/22
Responsible for Technical Documentation:	Piotr Adamiec / Engineering Manager Wood-Mizer Industries Sp. z o.o. 62-600 Koło, 114 Nagórna Street, Poland Tel. +48 63 26 26 000
Place / Date / Authorized Signature:	Koło, 31.08.2022 Addm
Title:	Engineering Manager



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

Manufacturer:

Wood-Mizer Industries Sp. z o. o. 114 Nagórna; 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 no longer valid.

	machine, not agreed by us, this declaration is
We, the undersigned herewith declare, the	nat:
Designation of the machine:	Sawmill
Model:	LX50SA, LX50SC
Type:	
Serial Number:	
Is in conformity with the following EC directives:	EC Machinery Directive 2006/42/CE EC Electromagnetic Compability Directive 2014/30/CE
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 – Krakowski Instytut Technologiczny ul. Zakopiańska 73 30-418 Kraków
Notification No:	1455
EC type - examination certyficate no:	1455-MD-066/22
Responsible for Technical Documentation:	Piotr Adamiec / Engineering Manager Wood-Mizer Industries Sp. z o.o. 62-600 Koło, 114 Nagórna Street, Poland Tel. +48 63 26 26 000
Place / Date / Authorized Signature:	Koło, 31.08.2022 Addu
Title:	Engineering Manager