# LX25 Sawmill Safety, Operation, Maintenance, & Parts Manual

LX25

rev. A2.00

## Safety is our #1 concern!

May 2020

Form #2426

#### **POWER OPTIONS:**

G9 G7-LX



WARNING! Read and understand this manual before using this machine.

#### California

#### **Proposition 65 Warning**



**WARNING:** Breathing gas/diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Always start and operate the engine in a well-ventilated area. If in an enclosed area, vent the exhaust to the outside. Do not modify or tamper with the exhaust system. Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov.



**WARNING:** Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

For more information go to www.P65Warnings.ca.gov/wood.

#### Active Patents assigned to Wood-Mizer, LLC

Wood-Mizer, LLC has received patents that protect our inventions which are a result of a dedication to research, innovation, development, and design. Learn more at: <a href="woodmizer.com/patents">woodmizer.com/patents</a>

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#### SECTION 1 INTRODUCTION

#### 1.1 About This Manual

This manual replaces any previous information received on your Wood-Mizer® equipment.

The information and instructions in this manual do not amend or extend the limited warranties for the equipment given at the time of purchase.

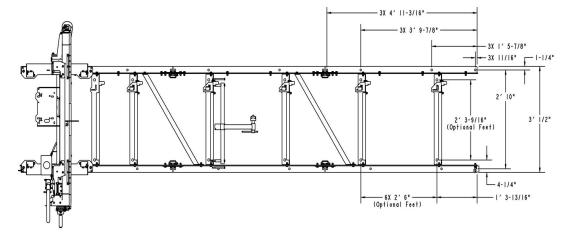
## 1.2 Getting Service

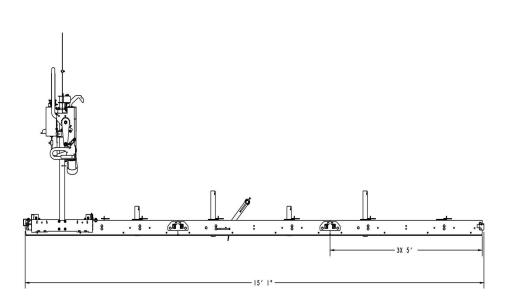
For contact information, sales, service, parts, and additional manuals, sign into your account on <a href="https://woodmizer.com">https://woodmizer.com</a>, or call inside the USA: 1-800-553-0182 or from outside the USA: 317-271-1542

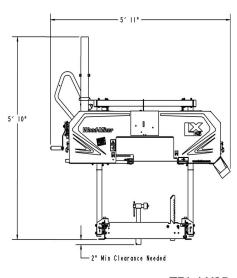
## 1.3 Specifications

Equipment specification are included in the Online Manuals, which are found at <a href="https://apps.woodmizer.com/Manuals/Manuals/Manuals/apps.woodmizer.com/Manuals/Manuals/Manuals/apps.woodmizer.com/Manuals/Manuals/apps.woodmizer.com/Manuals/Manuals/apps.woodmizer.com/Manuals/Manuals/apps.woodmizer.com/Manuals/Manuals/apps.woodmizer.com/Manuals/Manuals/apps.woodmizer.com/Manuals/Manuals/apps.woodmizer.com/Manuals/Manuals/apps.woodmizer.com/Manuals/Manuals/apps.woodmizer.com/Manuals/Manuals/apps.woodmizer.com/Manuals/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Manuals/apps.woodmizer.com/Apps.woodm

#### 1.4 Dimensions







TDL-LX25



#### SECTION 2 SAFETY

#### 2.1 Safety Symbols

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



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



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



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

**NOTICE** indicates vital information pertaining to equipment.

**NOTE:** contains useful information.

#### 2.2 Safety Instructions

#### **OWNER/OPERATOR'S RESPONSIBILITY**

The procedures listed in this manual may not include all ANSI, OSHA, or locally required safety procedures. It is the owner/operator's responsibility and not Wood-Mizer LLC to ensure all operators are properly trained and informed of all safety protocols. Owner/Operators are responsible for following all safety procedures when operating and performing maintenance to the equipment.

#### **Observe ALL Safety Instructions**

**NOTICE** Read the entire Operator's Manual before operating this equipment.

Note all safety warnings throughout this manual and those posted on the machine.

Be able to access this manual at all times while operating this equipment.

Read additional manufacturer's manuals and observe their applicable safety instructions.

Only persons who have read and understood the entire operator's manual should operate this equipment

This equipment is not intended for use by or around children.

It is the owner/operator's responsibility to comply with all applicable federal, state, and local laws, rules, and regulations regarding the ownership, operation, and transporting your equipment.

Operators should become thoroughly familiar with and comply with these applicable laws for operating and transporting equipment.



**WARNING!**Clean sawdust from all guards, vents, control boxes, or any area where sawdust may gather **after every shift**. Failure to do so may result in fire, causing death or serious injury.



#### Wear Safety Clothing (Personal Protection Equipment)



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

Secure all loose clothing, hair, and jewelry before operating the sawmill.



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.

Some woods require respiration protection when operating the sawmill. It is the sawyer's responsibility to know which woods require respiration protection.



#### Keep Work Area Clean



**WARNING!**Clean sawdust from all guards, vents, control boxes, or any area where sawdust may gather **after every shift**. Failure to do so may result in fire, causing death or serious injury

Maintain a clean and clear path for all necessary movement around the equipment and lumber stacks.

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

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

Inspect all safety decals to ensure they are clean and readable. Replace all damaged safety decals to prevent personal injury or damage to the equipment. Contact your local distributor, or call your Customer Service Representative to order more decals.

#### Fuel/Flammable Liquid Handling Safety



**DANGER!**Do not smoke, weld, grind, or otherwise create sparks near your engine or storage tanks, especially during times of fueling.

Do not allow fuel/flammable liquid to spill on a heat source, such as a hot engine.



**WARNING!**Store gasoline away from sawdust and other flammable materials.

Do not use flammable liquids (diesel fuel or kerosene) in the water lube accessories.



Clean fuel/flammable liquid spills immediately.

**NOTICE** Remove blades from equipment before cleaning them with fuel/flammable liquid.

Dispose of fuel/flammable liquids per local ordinances.



#### **Battery Safety**



**WARNING!**Batteries expel explosive gases; keep sparks, flames, burning cigarettes, or other ignition sources away at all times.

Wear safety goggles and a face shield when working near batteries.

Wash hands after handling batteries to remove possible lead, acid, or other contaminants.

Charge the battery in a well ventilated area.

Do not attempt to charge a frozen battery.

**NOTICE** When working with batteries, do not spill or splash electrolyte (dilute sulfuric acid) as it is a strong corrosive.

Overcharging may reduce the overall service life of the battery.

Ensure the battery is fully charged before transporting the sawmill. If the battery is not fully charged, excessive vibration could reduce the overall service life of the battery.

# EMERGENCY TREATMENT FOR CONTACT WITH BATTERY COMPONENTS (LEAD/SULFURIC ACID) per SDS (Safety Data Sheet):

EYE CONTACT	Sulfuric Acid and Lead: Flush eyes immediately with large amounts of water for at least 15 minutes while lifting lids. Seek immediate medical attention if eyes have been exposed directly to acid.
SKIN CONTACT	Sulfuric Acid: Flush affected area(s) with large amounts of water using deluge emergency shower, if available, shower for at least 15 minutes. Remove contaminated clothing, including shoes. If symptoms persist, seek medical attention. Wash contaminated clothing before reuse. Discard contaminated shoes.  Lead: Wash immediately with soap and water.
INGESTION	Sulfuric Acid: Administer large amounts of water. Do NOT induce vomiting or aspiration into the lungs may occur and can cause permanent injury or death; consult physician.
INHALATION	Sulfuric Acid: Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Consult a physician.  Lead: Remove from exposure, gargle, wash nose and lips; consult physician.

#### Sawmill Setup Safety



**WARNING!**Do not set up the mill on ground with more than a 10 degree incline. Setting up the mill on an incline could cause it to tip over.

If setup on an incline is necessary, put blocks under one side of the mill or dig out areas for the legs to keep mill level.

Use a lifting device (fork lift, crane, etc.) for parts over 100 lbs.

Use two persons for lifting parts over 50lbs.<sup>1</sup>

Keep all non-essential personnel out of the area while setting up the sawmill.



# 2.3 Safety Decals

	096317	Read Operator's Manual
100r		CAUTION! Thoroughly read the manual before operating the machine. Observe all safety instructions and rules when operating the mill.
	096319	Disconnect Power Supply Before Opening (Electric version only)
096321	096321	Blade Movement Direction
C)	099220	Sawmill Covers Caution  CAUTION! Close all guards and covers before starting the machine.
099222	099222	Warning Projectile Hazard Wear safety goggles.

 $<sup>1.</sup> For more information on lifting \ safety \ see \ \textit{NOISH Lifting Equation} \ at \ \underline{\text{https://www.cdc.gov/niosh/docs/94-110/2}}$ 

	I	
	099221	Keep Away Danger
<b>1</b>		CAUTION! Keep all persons a safe distance away from work area when operating the machine.
	527864	Blade Tension
527864		Align the disc in the notch for proper blade tension.
	501465	Use Safety Boots
		Wear protective boots at all times when operating the mill!
	S12004g	Use Eye Protection
		Wear safety goggles at all times when operating the mill!
	S12005g	Use Ear Protection
		Wear ear protection at all times when operating the mill!

## **SECTION 3 SETUP**

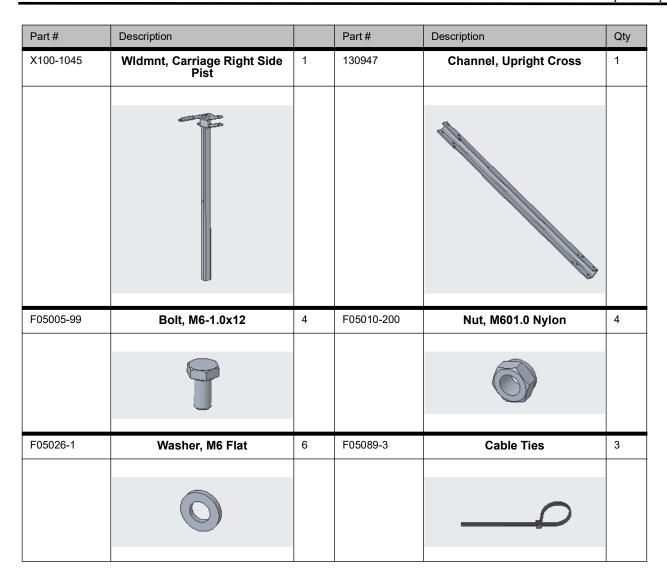
## 3.1 Remove and inspect the parts boxes

Part #	Description		Part#	Description	Qty
	Engine Manual	1	M2426	Manual Operator's/Parts	1
130360	Bag Kit, LX25 Fastener (See next table)	1	X100-1050	Rod Lift Cable	2
C209	Black Brushed Bill Hat	1	X100-1056	Cable, Lift Paddle	2
X100-1057	Wrench, 7/8 Ratcheting	1			
X100-1275	Plate, End Stop Lock	2	071015	Plate, 2012 LT10 Bed Rail Clamp	4
X100-934	Plate, T100 Bed Coupler	4	X200-1027	Bracket, Log Post Top	5
X200-1045	Post, Log Rest (SHORT)	2	X200-1026	Post, Log Rest (LONG)	2
				- Agaragaagaagaagaagaagaagaagaagaagaagaagaa	

Part #	Description		Part #	Description	Qty
014151	Pin, 3/8x2 1/4 SQ Wire Lock	1	X200-1082	Clamp Assembly, Log Metric (F05022-25 incl in bag kit)	1
X100-348	Bracket, Scale	1	046627	Handle, 33/64 ID x 1-1/4 OD x 4 PLASTIC (Sub 1)	1
X100-984	Block, Plastic Scale Timbery	2	F05011-123	Washer, 12mm Split Lock (Sub 1)	1
F05010-212	Nut, M12x1.75 Free Zinc	1	F05027-19	Nut, M12-1.75 Zinc Jam	1

Part #	Description		Part#	Description	Qty
F05023-6	Bolt, M12-1.75x120 SHC	1	035248	Shim, .0075 Blade	1
X100-378	Sweeper, Modular Track	2	X100-1042	Hexagon Lift Cable	2
X100-970	Water Tank Assembly	1	X100-1020	Hook, Cover	1
F05011-45	Washer, 8mm Split Lock, Zn	2	F05004-47	Bolt, M8-1.25x16 HH Zinc	2
				9	

Part #	Description		Part #	Description	Qty
X100-929	Plate, T100 Drive/Idle Side Rail	6	123031	Bracket, Center Bed Rail	6
X100-930	Plate, T100 Safety Catch Rail	3	X100-932	Plate, T100 Cross Brace	2
X100-202	Lower Carriage Member (w/ bearings installed)	2	X100-1044	Carriage Left Side Post	1



#### **BAG KIT**

130360	BAG KIT, LX25 FASTENER	QTY
F05022-25	Bolt, M10-1.5x120mm Hex Cl 8.8	2
F05022-3	Bolt, M10-1.5x30 Class 8 HH	70
F05022-17	Bolt, M10-1.5x70 Carriage	8
F05022-15	Bolt, M10-1.5x75 HH Class 8.8	4
F81003-125	Bolt, M10-1.5x85 Class 8 HH	4
F05020-7	Bolt, M6-1 x 14 Class 8 HH	3
F05020-6	Bolt, M6-1 x 20 Class 8 HH	4
F05020-8	Bolt, M6-1.0x30 Class8 HH	2
F05021-14	Bolt, M8-1.25x20 Carriage	2
F05021-29	Bolt, M8 x8mm SH Shoulder	2
F05027-47	Nut, M10-1.5 Flanged Nylon Lock	74
F05010-85	Nut, M10-1.5 Hex	8
F05004-270	Nut, M10-1.50 Hex Nyl Lock	4
F05010-162	Nut, M8-1.25 Free Zinc Plate	4
F05010-132	Nut, M8-1.25 Hex Nylock	4
F05026-4	Washer, M8 Flat	6
F05012-145	Pin, 1/4x2 1/2 Tab Lock	2
F05020-24	Screw, M6-1x8 SHSS	2
F05015-33	Screw,#10x3/4 SI Hex Washer Hd Sht Metal	2
F05011-134	Washer, M10 Flat SAE	82
F05026-1	Washer, M6 Flat Class 4	11
F05026-2	Washer, M6 Split Lock	3
F05010-200	Nut, M6-1.0 Nylon Lock	6

#### 3.2 Assemble the bed sections



**WARNING!**Assemble the bed on firm, level ground. Failure to do so may cause the sawhead to tip, causing serious injury or death.

- Assemble all of the bed sections using track rails and cross rails, and one cross member where each bed section joins together. See FIG. 3-1.
  - a. Attach two cross rails per bed section. Make sure to place the cross rails closer together, leaving room for the sawhead assembly, as shown.
  - **b.** Attach the track rails to the cross rail. Make sure all of the cross rails face the same direction.

Nut, M10-1.5 Flanged
Nylon Lock
Bolt, M10-1.5x30 HH
Class 8
Washer, M10 Flat

Cross Rails

Track Rails

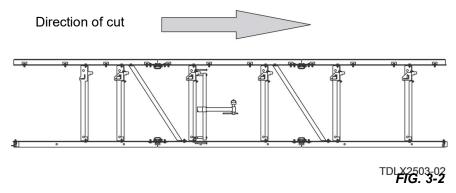
Track Rails

TDLX2503-03

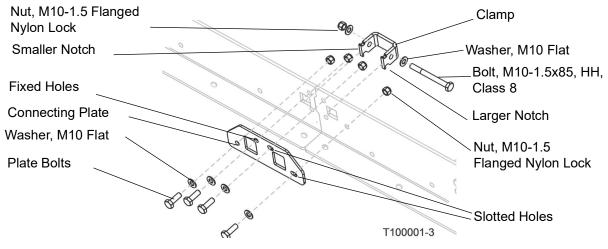
FIG. 3-1

NOTE: Do not attach the catch rails at this time!

2. Assemble the remaining track rails and cross rail in a similar fashion. See FIG. 3-2.



**3.** Connect the bed sections using a connecting plate, a clamp, and hardware.



- FIG. 3-3
- **a.** Attach the connecting plate (X100-934) to each bed section, joining them together.
- **b.** Tighten the side of the plate that has the fixed holes. Do not fully tighten the bolts (M10-1.5x30) on the side of the plate that has slotted holes.
- **c.** Set the clamp in place by inserting the larger notch first (on bottom) and then tilting the clamp in and upward to catch the smaller notch (on top). See FIG. 3-3.
- **d.** Tighten the bolts on the clamp (M10-1.5x85) to draw bed sections together.

**NOTE:** Be sure the track rails of each bed section are aligned before tightening the plate bolts.



**e.** Fully tighten the plate bolts in the slotted holes on connecting plate.

**NOTE:** Be sure the slotted holes on the connecting plate are connected to the same bed section on both sides of the bed frame.

- f. Repeat for the remaining 3 connections.
- g. Attach the cross member between the bed sections.

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

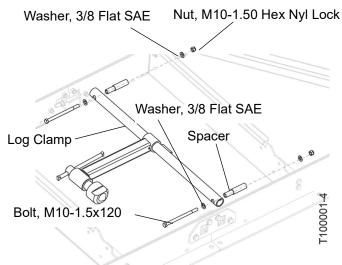


FIG. 3-4

4. Attach the log clamp in the middle of the bed. See FIG. 3-4.

**NOTE:** The log clamp is shipped with two sets of bolts and spacers. Use the shorter bolt and the long spacer only.

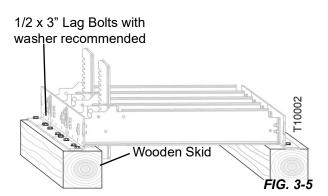
**5.** Attach the log rest brackets and posts. **Do not tighten** until the bed is leveled.

#### 3.3 Level the bed

**NOTE:** It is important that the bed be level for the sawhead to travel smoothly over the rails.

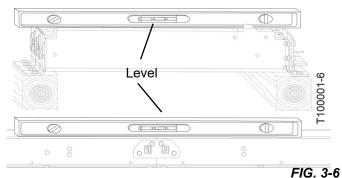
1. Mount the saw bed on wooden skids for leveling and increasing the ground clearance.

A straight 4x4 or 4x6 are an ideal size for the wooden skids. If the skids are not a solid one-piece section, make sure the seams of skids are offset from the seams of the bed frame. See FIG. 3-5.



- 2. Use a 4-foot level (or laser level) to level the bed in all dimensions. See FIG. 3-6.
- **3.** Adjust the bed for leveling by shimming under low spots.

**NOTE:** Failure to square the log rest posts can result in poor cut quality.



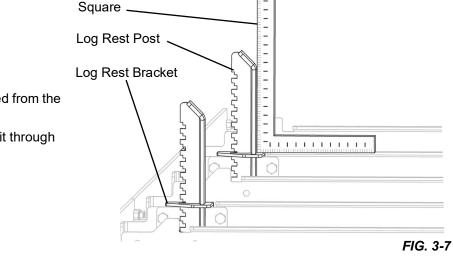
- When the bed is leveled, square up the log rest posts. Tighten the log rest bracket screws. See FIG. 3-7.
- Recheck saw bed for level!

#### 3.4 Install the mast

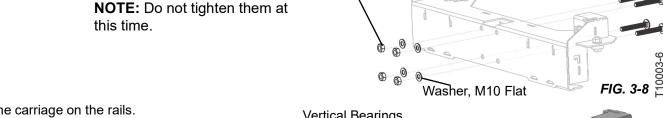
#### Prepare the mast carriages

The sawhead carriages come mostly assembled from the factory.

1. Place 4 carriage bolts from the hardware kit through the inner side of the carriage.



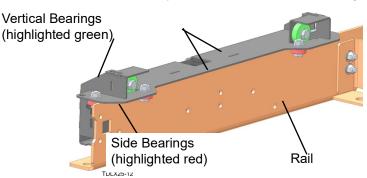
2. Place washers and nuts loosely on the M10-1.5x70 carriage bolts. See FIG. 1-8.



Nut, M10-1.5 Hex

3. Set the carriage on the rails.

NOTE: There is a bearing for each side of the rail, and the carriage rests on the vertical bearing. The side bearings are adjustable (slotted holes), and must be adjusted at this time. The vertical bearings are not adjustable.See FIG. 3-9.



Bolt, M10-1.5x70

Carriage

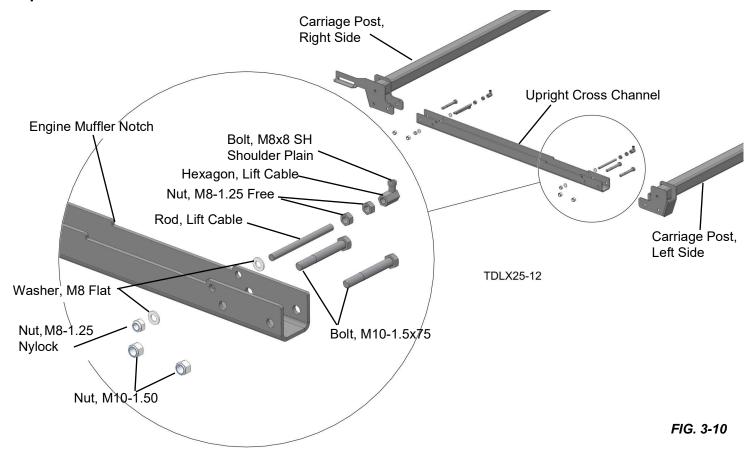
FIG. 3-9

- Adjust the bearings now so that the carriage glides smoothly back and forth with little effort.
- Repeat on the opposite side of the saw bed.
- Remove the carriages from the rails for further installation with the mast.

WM doc 7/17/243-9 Setup



#### Prepare mast



- 1. Insert the mast cross member into the upright pieces, as shown in FIG. 3-10.
- 2. Set the bolts in place as shown in FIG. 3-10.

#### NOTE: Do not tighten at this time.

#### Install the sawhead

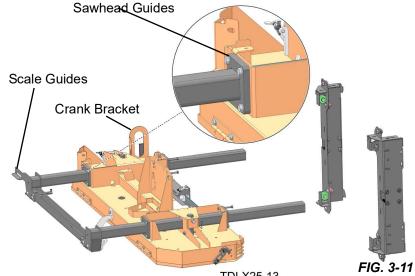
1. Lay the sawhead flat on a surface high enough to allow the carriages to extend downward (approximately 1ft (25cm)).

2. Slip the mast through the sawhead guides.

**NOTE:** Ensure that the scale guide is on the same side as the up/down crank bracket.

**3.** Slide the mast uprights all the way into the carriages.

NOTE: Make sure that it slides all the way to the bottom of the carriage and then tighten the M10-1.5x70 carriage bolts. See FIG. 3-11.



TDLX25-13

**4.** Install the two head-locking stop pins, locking the sawhead in the **down** position.

3-10

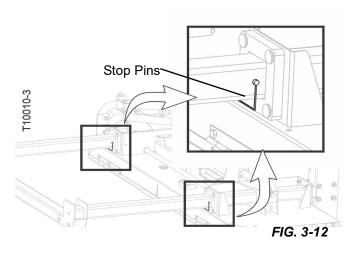
3

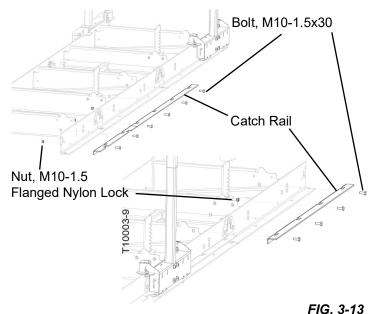
**NOTE:** This prevents the sawhead from sliding up the mast while mounting it. See FIG. 3-12.

- **5.** Raise the sawhead to the upright position.
- **6.** Install the entire head and mast assembly on the bed rails.

NOTE: Make sure that the main roller bearings are still riding smoothly on the rail. The bearing can be slightly re adjusted by loosening and re-tightening the bolts. See FIG. 3-9.

- 7. When the carriage and mast are properly aligned, tighten or re-tighten *all* bolts in the mast uprights and the carriages.
- With the sawhead at the head of the bed, (either end may be designated as the head) attach two lower segments of the catch rail. See FIG. 3-13.
- 9. Move the carriage toward the foot of the bed and install the last segment of the catch rail, using M10-1.5x30 bolts. See FIG. 3-13.





#### 1 10. 5-15

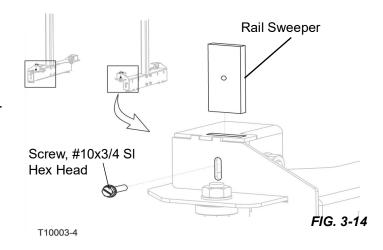
## 3.5 Install the sweepers and sawhead stops

 Install the sawdust rail sweepers on the front sides of both carriages. Make sure that the sweepers contact the rails. See FIG. 3-14.

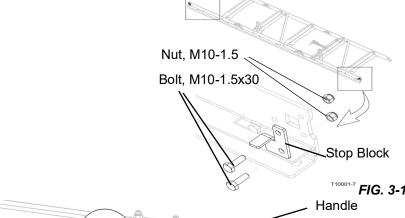
**NOTE:** Stop blocks **must** be attached at **both ends**, **head and foot**, of the track rail to prevent the sawhead from sliding off the rails.



WARNING!Failure to apply stop blocks to both ends of the track rail may result in serious injury or equipment damage.



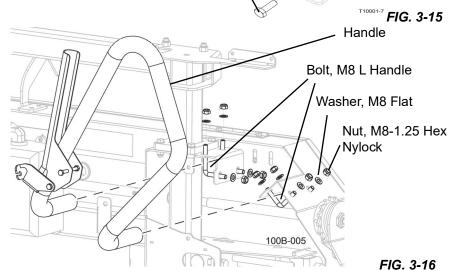
- 2. Attach the stop blocks (X100-1275) on the outside surface of the bed section at the head of the bed using M10-1.5x30 bolts. Tighten the nuts. See FIG. 3-15.
- 3. Repeat at the foot end of the rail.



#### 3.6 Install the operator's handle

- Remove the operator's handle from its shipping position by loosening the bolts enough to remove the handle and clipping the tie wrap holding on the throttle cable.
- 2. Invert the handle and replace it as shown. See FIG. 3-16.
- 3. Tighten all the handle bolts.

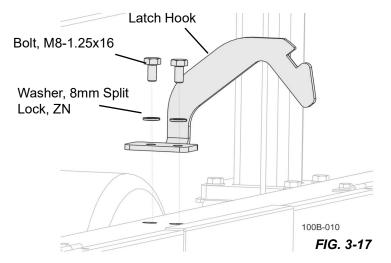
**NOTE:** Inserting the handle until it touches the sawhead will interfere with the crank handle motion. Only insert the handle just past the L-bolts.

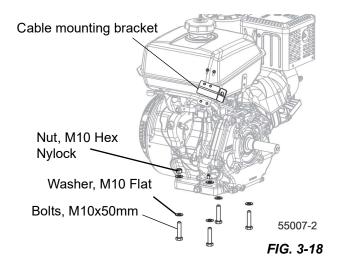


## 3.7 Install the Engine

- 1. Place the latch hook into the top center of the saw head with the fasteners provided. See FIG. 3-17.
- 2. Unpack the engine and its parts.
- Set the engine on the engine mounting platform and loosely secure with M10x50mm bolts. See Fig. 3-18.

**NOTE:** If the engine (G7-LX) is equipped with additional mounting plate, first install the plate.





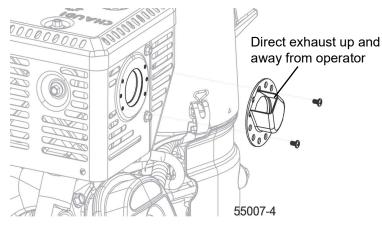


FIG. 3-19

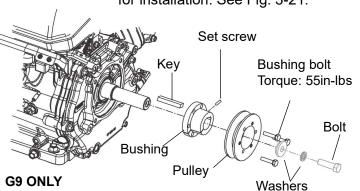
- 4. Install the exhaust deflector. See Fig. 3-19
- 5. Install the clutch idler pulley.

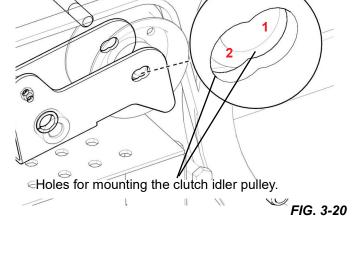
**NOTE:** For the 9HP engine mount the bolt in the hole number 1 and for the 7HP engine in the hole number 2. See Fig. 3-20.

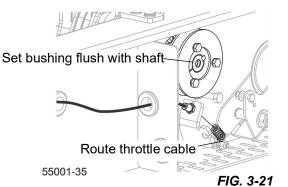
#### G9 ONLY:

- **6.** Insert the shaft key and the large bushing over the engine shaft. See Fig. 3-21.
- **7.** Ensure the bushing is flush to the end of the shaft. See Fig. 3-21.
- **8.** Tighten the bushing set screw with a 3mm hex wrench. See Fig. 3-21.
- 9. Set the sheave over the bushing.
- **10.** Secure the pulley with the bushing bolts.
- **11.** Install 7/16" ID 1" x 1-1/4" stepped washer, 7/16" split lock washer, and 7/16"-20x 1 1/2" HH bolt.

**NOTE:** Bushing bolts use through holes in Pulley and threaded holes in Bushing for installation. See Fig. 3-21.



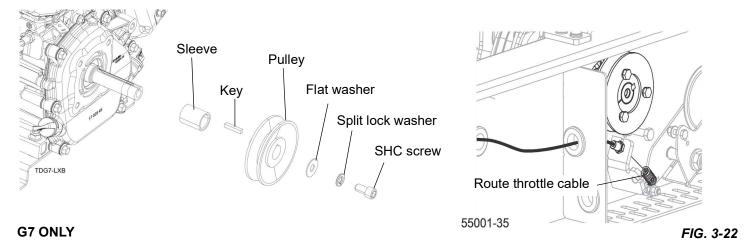






#### G7 ONLY:

- **12.** Install shaft sleeve over the engine shaft.
- 13. Insert the shaft key into the engine shaft keyway.
- **14.** Install drive pulley on engine shaft, aligned with key.
- 15. Install 3/8" flat washer, 3/8" split lock washer, and 3/8"-24 x 3/4" SHC screw. See Fig. 3-22



**16.** Install the belt on bandwheel and pulleys. See Fig. 3-23.

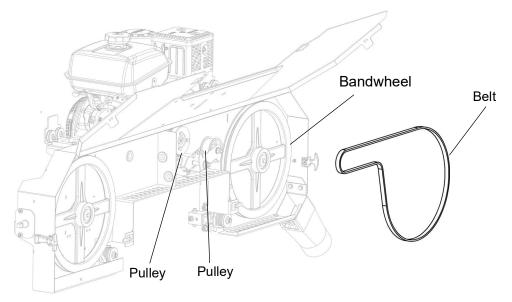


FIG. 3-23

#### 3.8 Install the throttle cable

- 1. Replace the existing cable bracket on the engine with the supplied cable bracket. See Fig. 3-24.
- 2. Loosely attach the throttle cable to the cable bracket. See Fig. 3-24.
- Insert the throttle fitting in the throttle lever bracket. See Fig. 3-24.

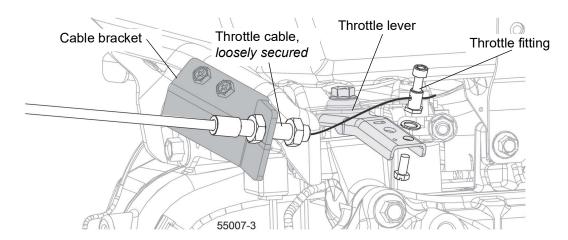


FIG. 3-24

- 4. Fasten step washer, lock washer, and bolt. See Fig. 3-24.
- **5.** Attach the throttle cable to the clutch. See Fig. 3-25.

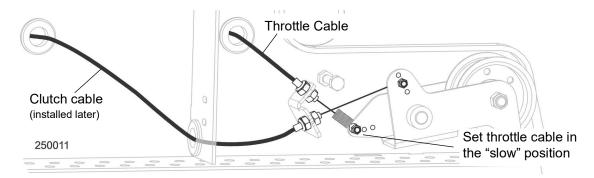


FIG. 3-25

Adjust and tighten the throttle cable at the throttle lever.

NOTE: Some engines are shipped with the throttle lever tight. If necessary, loosen the throttle lever by loosening the nut at the top.

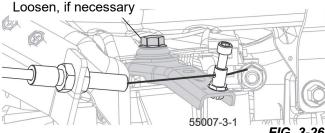


FIG. 3-26

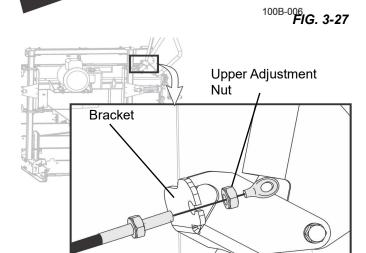
- Place the drive belt around the drive pulley.
- Tighten all mounting bolts.

WM doc 7/17/243-15 Setup

#### 3.9 Install the clutch cable

The clutch cable was attached to the operator's handle before shipping. The cable has an attaching eye and two adjustment nuts. See FIG. 1-25.

- 1. Thread the clutch cable though the bracket on the operator's handle by unthreading the upper adjustment nut and slipping the bare cable through the bracket.
- 2. Return the adjustment nut to the cable fitting. See FIG. 3-28.
- **3.** Remove the bolt and its two nuts on the throttle handle.
- 4. Thread the bolt through the cable eye.
- Return the inner set nut and tighten the outer nut on the throttle handle.



Attaching Eye -

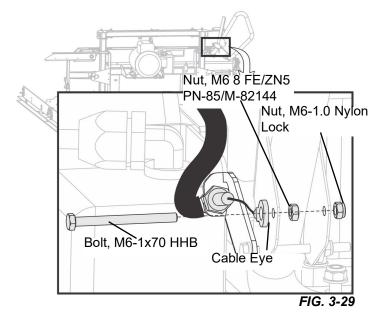
Adjustment Nuts

100B-007

FIG. 3-28

**6.** Tighten the clutch cable in the bracket with a wrench. See FIG. 3-29.

**NOTE:** The throttle should be adjusted **after** the LX25 is fully assembled and ready for use.



**NOTE:** The clutch cable can also be adjusted at the clutch or at the engine. See FIG. 3-30.

### 3.10 Assemble the up/down crank

1. Bolt on the crank handle.

NOTE: Make sure that the lock washer is in place between the flat washer and bolt head as shown. See FIG. 3-31.

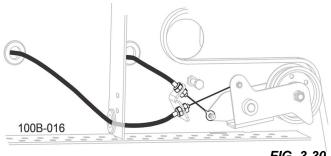


FIG. 3-30

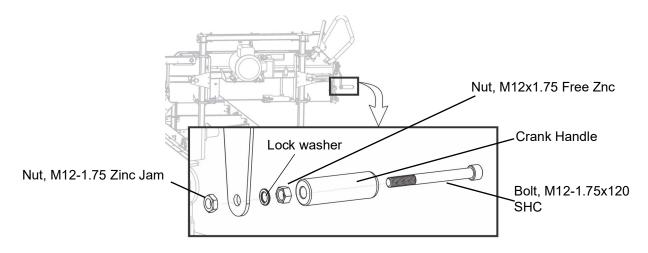


FIG. 3-31

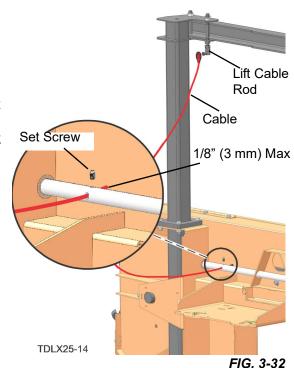
- 2. Attach the lift cables from the hardware kit on the lift cable rod (attached earlier to the upright cross channel on the mast). See FIG. 3-10. and FIG.3-32
- 3. Back out the set screw from the crank shaft with a 3mm hex wrench and thread the lift cable through the hole in the crank shaft. See FIG. 3-32.

**NOTE:** The cable should come through shaft about 1/8" (3mm). If too much of the cable is pulled through the shaft it will rub on the back of the saw head. Loctite<sup>TM</sup> or equivalent should be added to the set screw.

- 4. Return the set screw and tighten it. See FIG. 1-31.
- 5. Repeat this procedure on the left side of the sawhead.

Leave room for adjustment up or down.

NOTE: For ease of adjustment, set the left and right side lift cable rods in approximately the same places on the cross channel.



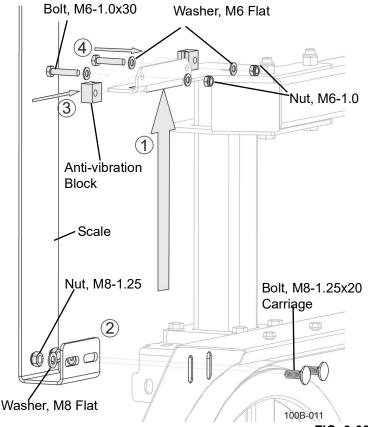
WM doc 7/17/243-17 Setup

#### 3.11 Install the scale

- 1. Slide the scale through the bracket on the mast with the scale facing the operator, as shown at 1 in FIG. 1-31.
- Open and latch the sawhead cover in the open positions.
- 3. Loosely secure the sawhead with M8-1.25x20 carriage bolts (inserted from the inside of the sawhead, as in the cut-away view, with washers and nuts on the exterior, as shown at k in FIG. 1-31.
- **4.** Slide the anti-vibration blocks onto both sides of the scale, as shown at  $\frac{1}{1}$  in FIG. 1-31.
- **5.** Fasten the anti-vibration blocks with the provided hardware, as shown at **11** FIG. 1-31.

The scale should slide freely through the blocks. See FIG. 3-33.

See <u>Section 4.1 Sawmill adjustments</u> to set the blade tension and level the scale.



#### FIG. 3-33

#### 3.12 Install the dust chute

Fasten the dust chute to the sawhead with the three M6-1 x 14 Class 8 bolts and nuts provided in the hardware kit. See FIG. 3-34.

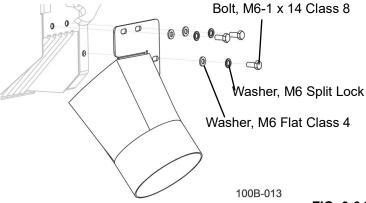


FIG. 3-34

#### 3.13 Install the Blade

DANGER! COILED BLADES ARE UNDER SPRING TENSION. KNOW PROPER BLADE HANDLING BEFORE UNPACKING YOUR BLADE. FAILURE TO FOLLOW THIS WILL RESULT IN SERIOUS INJURY.

READ THE PAMPHLET THAT CAME WITH YOUR MILL OR WATCH THE VIDEO ON SAWMILL BLADES BEFORE REMOVING THE BLADE FROM THE BOX.



**WARNING!**Wear gloves and eye protection when handling bandsaw blades. Failure to follow this may result in serious injury.

Keep all other persons away from area when coiling, carrying, or changing a blade. Changing blades is safest when done by one person. Failure to follow this may result in serious injury.

**NOTE:** Do not remove the blade from the shipping box at this time.

**1.** Go to:



HOW TO COIL, UNCOIL, AND INVERT A BLADE

https://www.youtube.com/watch?v=43TWwSqSOaQ

- 2. Open the blade housing cover.
- 3. Carefully remove and uncoil the blade from the shipping box.

4. Place the new blade around the blade wheels and through the blade guides. See FIG. 3-35...

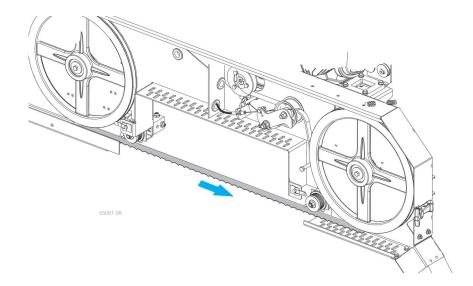


FIG. 3-35 FIG. 3-35

**NOTE:** When installing a blade, make sure the teeth are pointing t toward the dust chute. If necessary, invert the blade as shown in the video.

**5.** Position 1 1/4" wide blades on the wheels so the gullet is 1/8" (3.0 mm) out from the edge of the wheel. See FIG. 3-36...

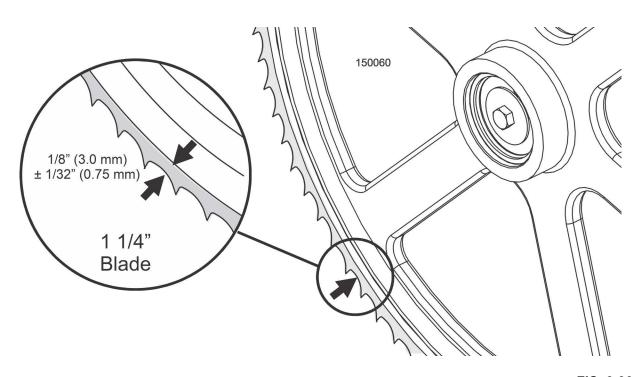


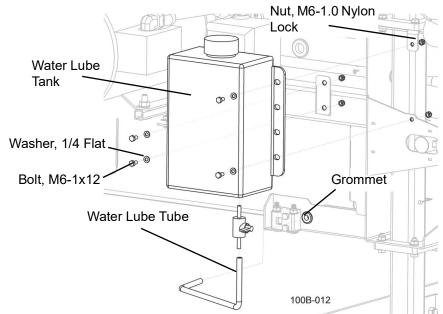
FIG. 3-36

Go directly to the Section 4, <u>Sawmill adjustments</u> to align it before installing the water tank. The tank is in the way of adjustments.

#### 3.14 Install the lube water tank

NOTE: Before installing the water tank, check for blade straightness. <u>See</u> "Blade straightness." In order to loosen the guide block, the water tank must be removed.

- Fasten the lube water tank to the sawhead with the four M6-1x12 bolts and nuts provided in the hardware kit.
- Thread the lube water tube through the grommet next to the right blade guide. . See FIG. 3-35.



#### SECTION 4 SAWMILL OPERATION



WARNING! If a blade or drive belt breaks during operation, wait until all moving parts stop completely.

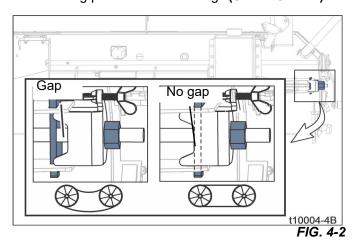
- Ensure ground is firm and level.
- Clear the area.
  - O Inspect the site for debris or uneven surfaces that may become a trip hazard.
  - Clear out all non-essential personnel before starting.
  - O Ensure that the operator is wearing personal protection equipment and proper work clothing.
- Check the engine oil level. (See the Engine Manual.)
- Optimal operating temperature range is 5°F (-15°C) to 105°F (40°C).
- Ensure all guards and covers are in place and secured/closed.
- Ensure all personal protection equipment is used.
- Gas mills
  - Do not operate in enclose areas.
  - Position operator upwind, away from sawdust and exhaust.

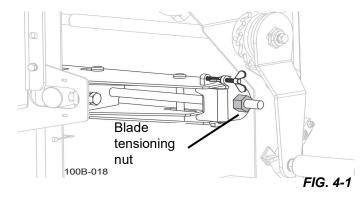
#### 4.1 Sawmill adjustments

#### Tension the blade

Use a ratcheting wrench for setting the wheels for proper tension. (See FIG. 4-1 .)

Turn the blade tensioning nut until there is no gap between the back of tensioning plate and the housing. (SEE FIG. 4-2.)





#### Blade tracking

When tensioned properly, check the tracking of the blade by spinning the wheel a few times by hand.

Ensure the back of the blade remains approximately flush to 1/8 inch of overhang at the rear edge of the wheels.

On the back of each side of the sawhead, adjustment bolts are available for tracking the blade. (See FIG. 4-3.)

Loosen the set nuts on the adjustment bolt and move the wheel until it is properly aligned. The blade should track straight without moving in or out from the final setting, and the blade remains flush to 1/8" overhang to the rear edge of the wheel. (See FIG. 4-4.)

When the blade tracks straight, tighten the rear set nuts.

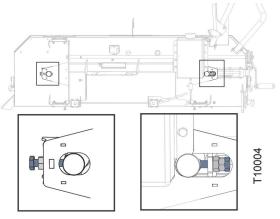


FIG. 4-3

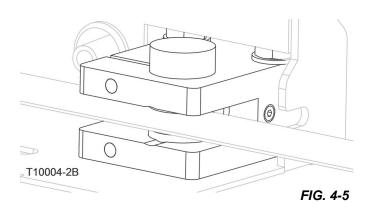
#### Blade guides

Check the ceramic blade guides for the proper setting.

The two round ceramic guides should hover **over and under** the blade between 0.0075-0.010 inches (0.2 - 0.25mm) -- use the provided 0.0075" shim (p/n 035248) as a gauge.

The adjustment bolts for the top and bottom guides face the foot of the sawmill. (See FIG. 4-5 and FIG. 4-6.)

**NOTE:** Before setting or adjusting the ceramic blade guides the blade must be at the correct tension and tracked on the band wheels.



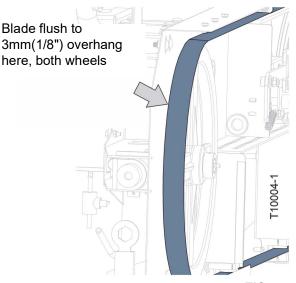


FIG. 4-4

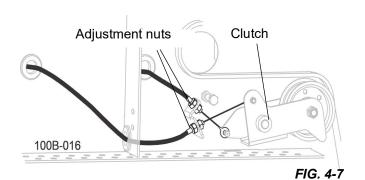
A square ceramic guide lies in the middle of the blade guide assembly. This guide should be positioned approximately 1/8 inch from blade back. Use the set screw on the side of the blade guide assembly to hold the position of the square guide. (See FIG. 4-6.)

Set both blade guide assemblies on each side of the blade in this manner.

## Drive belt adjustment

The idler pulley for the drive belt is adjustable by lengthening or shortening the clutch cable. This will also affect the engine throttle.

The ideal setting occurs when the throttle handle is completely depressed, the engine should run full out, and the blade drive wheel is fully engaged. Conversely, when the throttle handle is released, the engine should revert to idle, and the blade drive wheel stop turning. (See FIG. 4-7.)



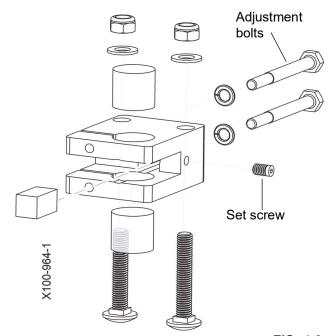


FIG. 4-6



#### Changing blades



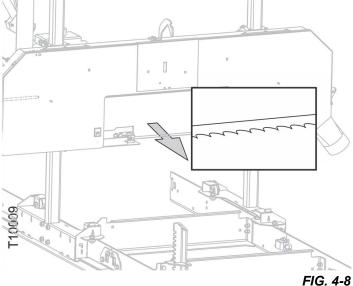
DANGER! Make sure that the engine is off before changing blades. Failure to do so will result in serious injury or death



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.

Turn the blade tension nut to release the blade tension until the blade is loose in the blade housing. Lift the blade out of the blade housing.







WARNING!Coiled blades are under tension. Use caution when uncoiling a blade. Failure to do so may result in serious injury.

NOTE: When installing a blade, make sure the teeth are pointing the direction of cut. (See FIG. 4-8.)

Install the blade loosely around the wheels. Perform the adjustments according to sections Tension the blade, Blade tracking, and Blade guides.

## Blade straightness

- 1. Ensure that the blade is parallel to the bed. This can be accomplished by measuring the blade at both ends of the sawhead.
- Measure the blade from a tooth pointing down on both sides of the sawhead. Pull the adjustable blade guide arm all the way out before measuring. (See FIG. 4-9.)
- If necessary, loosen the four guide blocks on the sawhead that the uprights travel through. (See FIG. 4-10.)
- Adjust the sawhead from the cable bolts of the sawhead up/down assembly. (See FIG. 4-10 .)
- If adjustments are necessary, raise the low side. This will ensure that the cable bolt does not run out of thread for the nuts.

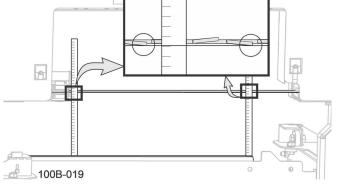
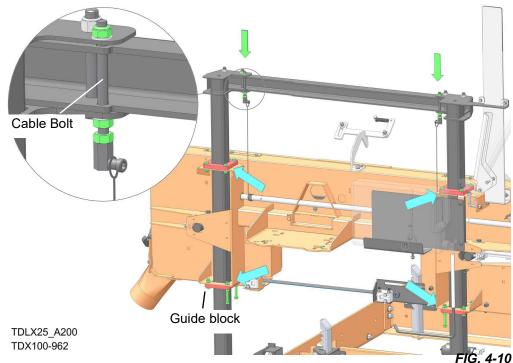


FIG. 4-9

6. Tighten the guide blocks.



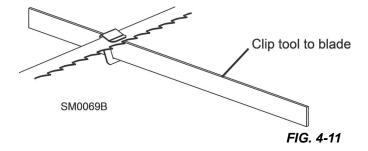
#### Blade Guide Vertical Tilt Alignment

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

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

- Open the adjustable blade guide arm 1/2" (13 mm) from fully open.
- 2. Clip the alignment tool on the blade.
- 3. Position the tool close to the outer blade guide assembly.

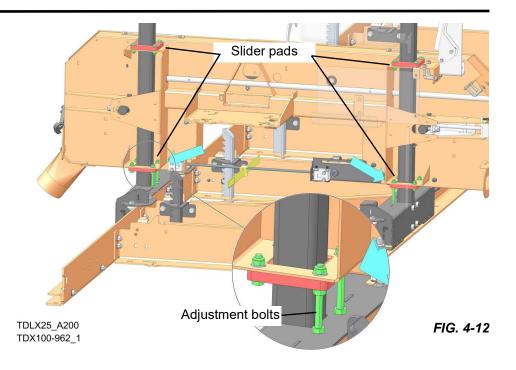
**NOTE:** Be sure the tool does not rest on a tooth or burr, and is lying flat against the bottom of the blade.



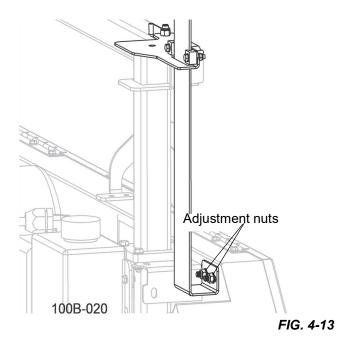
- **4.** Move the carriage so that the **front** end of the tool is positioned above the bed rail.
- **5.** Measure the distance from the bed rail to the bottom edge of the tool.
- 6. Move the carriage so that the back end of the tool is positioned above the bed rail.
- 7. Measure the distance from the bed rail to the bottom edge of the tool.

If the measurement from the tool to the bed rail is not equal within 1/32" (.75 mm), adjust the sawhead tilt to level the blade.

- **8.** Lower the head until the lower inside bolts are touching.
- **9.** Tilt sawhead to level blade guide alignment tool.
- **10.** Retighten mounting bolts.
- Loosen 16 bolts that lock in slider pads at the top and bottom of sawhead.
- **12.** Loosen or tighten longer (1 1/4") lower/inside bolts to adjust the pitch of the head front to back.
- **13.** Remeasure distances from tool to bed rail
- 14. Adjust 1 1/4" bolts until level.
- 15. Tighten slider pad bolts.



#### Blade height scale



- 1. Ensure that the blade is parallel to the bed. See "Blade straightness."
- 2. Measure the blade from a tooth pointing down to the mill bed surface. Raise or lower the sawhead as necessary to get an accurate measurement. Note that measurement.
- 3. Adjust the blade scale until it matches the blade-to-bed measurement. When the scale and the blade-to-bed measurements are the same, tighten the adjustment nuts of the scale. (See FIG. 4-13.)

## 4.2 Starting the Engine/Motor

See the engine/motor manual supplied with your machine for starting and operating instructions.

#### 4.3 Loading, Turning, and Clamping Logs

#### **LOADING A LOG**

1. Move the sawhead to the front end of the frame.

**NOTICE** Ensure the sawhead is far enough forward on the bed so the log does not hit it, resulting in machine damage.

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

**NOTICE** Ensure the clamp is far enough down so the log does not hit it, resulting in machine damage.

- 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.
- Roll the log onto the sawmill bed.

**NOTE:** Use log loading equipment or a ramp to load the log onto the sawmill bed.

Position the log against the side supports.

#### **TURNING A LOG**

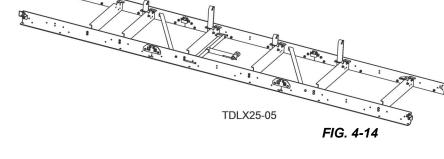
1. Use a cant hook to spin the log against the side supports until it is turned the way you want it for the first cut.

#### **CLAMPING A LOG**

- Position the log clamps against the log, far enough below your cuts.
- 2. Use the clamp handle to secure the log firmly against the side supports.

NOTE: 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.



#### 4.4 Level a Log

Shim one end of the log (e.g. using an optional leveling wedge 130005) until the heart of the log measures the same distance from the bed rails at each end of the log.

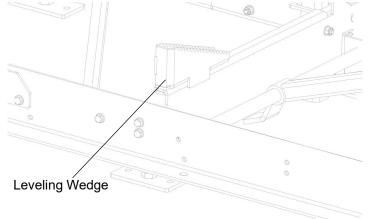


FIG. 4-15

#### 4.5 Lift Operation

- 1. Install a blade, if needed, and check for correct blade tension.
- 2. Use the crank handle to raise or lower the sawhead.

**NOTE:** One full turn of the crank handle moves the sawhead 1/2" (12.21 mm). If crank handle is rotated by one tooth on the disc, the sawhead will be raised/lowered 1/32" (0.18 mm).



**CAUTION!** Do not force the sawhead above the 20" (50cm) mark or below the 1" (25.4mm) mark. Damage to the lift system may result.

#### 4.6 Engine Operation

- 1. Clear any loose objects from the area of the blade, engine, and drive belt.
- Ensure the clamps and side supports are positioned low enough for the blade to pass over them.
- 3. Ensure the log is clamped securely.
- I. Open the fuel supply valve and turn on the ignition by moving the ignition/fuel lever to the "ON" position.
  - **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).
  - Warm engine: Disengage the tensioner handle (by moving it away from you). A warm engine usually does not require choke on.
- **5.** Pull the engine starter cord slowly until you feel resistance, then pull the cord quickly to start the engine.
  - **Cold engine:** When the engine starts, slowly open the choke all the way by moving the choke lever to the "OFF" position.
- Engage the clutch handle by pulling the lever toward the push handle tube shown in Fig.4-17

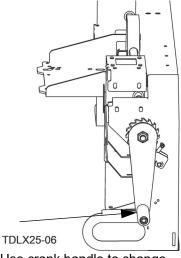
**NOTE:** Let the engine idle for about 1-3 minutes (depending on ambient temperature) to warm up before starting the sawing operation.

#### **ENGINE SHUTOFF**

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

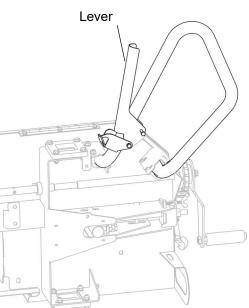


**CAUTION!**When stopping the engine, reduce the load slowly. Do not stop the engine suddenly as it may cause the temperature to raise abnormally.



Use crank handle to change sawhead height

FIG. 4-16



TDLX25-07

FIG. 4-17

### 4.7 Feed Operation

The feed operation is performed by pushing the sawhead manually at as steady a speed as manageable. Ensure the sawhead will not hit any bed components while in motion.

- 1. Feed the blade into the log at a slow speed to decrease the blade from flexing and dipping up or down.
- 2. Use a slow speed until the whole width of the blade has entered the cut.
- 3. Increase the feed rate: feed rates vary with width and hardness of the wood.

**NOTE:** Over-feeding results in blade and drive belt wear, and also produces a wavy cut.



**CAUTION!**Stop the blade when returning the sawhead to prevent the blade from being pulled off and to increase the life of the blade.

#### 4.8 Cutting The Log

- 1. Position the log and clamp firmly.
- Move the sawhead to position the blade close to the end of the log.
- 3. Use the blade height scale to determine where to make your first cut.
  - **a.** Set the blade to the desired height with the lift crank.
  - **b.** Ensure that the blade will clear all side supports and the clamps.
  - c. Adjust the outer blade guide to clear the widest section of the log by moving the blade guide arm knob.
- 4. Engage the clutch to start the blade spinning.
- **5.** Start the water lube if necessary to prevent sap buildup on the blade.
- Feed the blade into the log slowly.
- 7. When the teeth exit the end of the log, disengage the clutch and remove the cut slab.
- 8. Return the mast to the front of the mill.
- 9. Repeat until the first side of the log is cut as desired.
- 10. Set aside the usable flitches (boards with bark on one or both sides) to edge them later.
- 11. Remove the wedge if it was used.
- **12.** Remove the clamps and turn the log 90 or 180 degrees.
- 13. Ensure the flat on the log is placed flat against side supports (if turned 90 degrees) or it is flat on bed rails.

**NOTE:** If the log was turned 90 degrees and you are using the wedge to compensate for taper in the log, use the wedge again on the second side of the log until the heart is parallel with the bed.

**14.** Repeat the steps used to cut the first side of the log until the log is square. Cut boards from the remaining cant by adjusting the blade height for the thickness of boards that you want.

**NOTE:** The blade cuts a 1/16 - 1/8" (1.6-3.2 mm) wide kerf. If you want 1" (25.4 mm) thick boards, lower the mast 1 1/16 - 1 1/8" (27-28.6 mm) for each board.

#### 4.9 Edging

- 1. Raise the side supports to 1/2 the height of the flitches, or the boards that need to be edged.
- Stack the flitches on edge against the side supports.
- 3. Clamp the flitches against the side supports halfway up the flitch height.

Wider flitches should be placed to the clamp side. When they are edged, flip them over to edge the second side without disturbing the other flitches or without having to pull them from the middle of the stack.

- **4.** Adjust the blade height to edge a few of the widest boards.
- 5. Loosen the clamps and turn the edged boards over to edge the other side.
- 6. Repeat steps 2-4.

7. Loosen the clamps and remove the boards that have good clean edges on both sides. Clamp the remaining flitches and repeat steps 2-5.

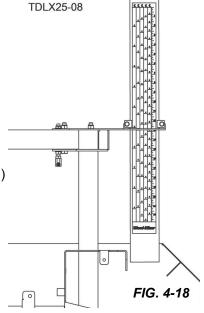
#### 4.10 Blade Height Scale

#### THE INCH SCALE

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

**Example:** You want to cut 1" (25 mm) random width boards from a log.

- a. Position the blade for the first cut.
- **b.** Move the mast to an even measurement on the inch scale.
- c. Make a trim cut. Return the mast for the second cut and lower it 1 1/8" (29 mm) below the original measurement. (The extra 1/8" (3 mm) allows for saw kerf and shrinkage of the lumber.)



#### THE QUARTER SCALE

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

To use the quarter scale, look at the blade height indicator.

Position the quarter scale over the inch scale. Align one of the quarter scale marks with the horizontal line on the indicator.

Make a trim cut. When you return the mast for a second cut, lower the mast to the next mark on the scale. This mark shows where the blade should be positioned to cut a certain thickness of lumber, without having to measure on the inch scale.

Standard Quarter Scale		
Scale	Actual Board Thickness	
3/4	3/4" (19 mm)	
4/4	1" (25 mm)	
5/4	1 1/4" (32 mm)	
6/4	1 1/2" (38 mm)	
8/4	2" (51 mm)	

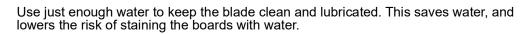
**TABLE 4-1** 

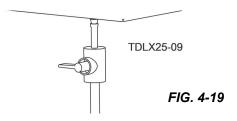
**Example:** You want to cut 1" (25 mm) (4/4) random width boards from a log.

- a. Position the blade for the first cut.
- **b.** Position the magnetic quarter scale so a 4/4 mark is aligned with the line on the indicator.
- c. Make a trim cut.
- **d.** Return the mast for the second cut.
- e. Lower the blade so the indicator is aligned with the next 4/4 mark on the quarter scale.
- f. Turn the log 90 degrees and repeat.

#### 4.11 Water Lube Operation

Water flows from a 1-gallon (3.79 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.





When changing blades, let the blade spin with water running on it for about 15 seconds before removing it. This will clean the blade of sap buildup. Dry the blade with a rag before storing or sharpening.

For lubrication benefits, add 12oz. (0.35L) of Lube Additive (part number **ADD-1**) to 5 gallons (18.9 liters) of water. Lube Additive enables timbers to be cut by significantly reducing resin buildup on the blade. It helps to reduce heat buildup, wavy cuts, and blade noise. This biodegradable and environmentally friendly pre-mix includes a water softener additive, so it works with hard water.



**WARNING!** Do not use flammable fuels or liquids such as diesel fuel. Failure to follow this can damage the equipment and may result in serious injury or death.

Use ONLY water and Lube Additive with the water lube accessory. If these types of liquids are necessary to clean the blade, remove it and clean with a rag.

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.

#### 4.12 Transporting the Sawmill



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

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

- 1. Move the sawhead 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.
- Slide the bed frame segments into the truck.
- 4. Use a forklift to load the sawhead with the mast and bed segment into the truck and secure it with transport straps.



#### SECTION 5 MAINTENANCE



**WARNING!**Shut down the sawmill and allow all moving parts to come to a complete stop before removing any guards and covers. Failure to do so may result in serious injury or death.

#### 5.1 Continuous maintenance

#### Rails, rollers, and sweepers

Proper maintenance of the sawmill carriage rollers and rails is critical for smooth operation of the sawmill. Prevent corrosion that causes pitting and scaling on the rail surfaces which results in rough cuts or jerky feed movement.



**CAUTION!** Keep track rails free of rust. Formation of rust on the track rail can cause rapid deterioration of the track rail's surface.

Lubricate the rails by wiping them with white lithium grease. Lubrication will help protect the rails from corrosive elements such as rain and/or moisture from nearby bodies of saltwater (if applicable). This lubrication is essential to maintaining the integrity of the rails and rollers and to achieve long service life.

Ensure that the sweepers are in contact with the rails, and that they are not clogged with sawdust. (See FIG. 5-1.)

Clean rails to remove any sawdust and sap buildup **after every use**. Use a light-grade sandpaper or emery cloth to sand off any rust or other adhering particles from the rails.

#### 5.2 General maintenance

#### **Daily** (8 hours of operation)

- Check engine/motor oil. (See engine/ motor manual.)
- Clean rails, carriages, and sweepers.
- Inspect the mill for any defective part.

# Rails Sweeper 100B-026

FIG. 5-1

#### Weekly (40 hours of operation)

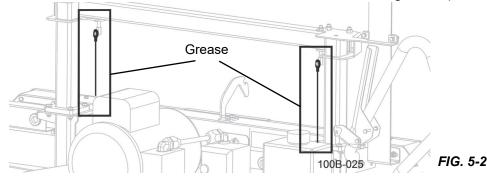
Remove sawdust from the track roller housings.

NOTE: Do not lubricate the rail sweepers. It may will cause sawdust to stick to the rails.

Open the blade wheel housing cover and brush any sawdust buildup from the housing.

#### Monthly (160 hours of operation)

■ Grease the lift cables on both sides of the sawhead with white lithium grease. (See FIG. 5-2.)

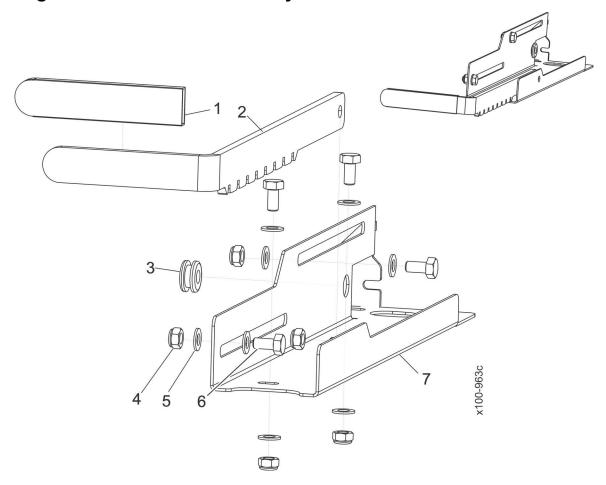


## 5.3 Engine maintenance

Refer to the manufacturer's engine manuals for maintenance.

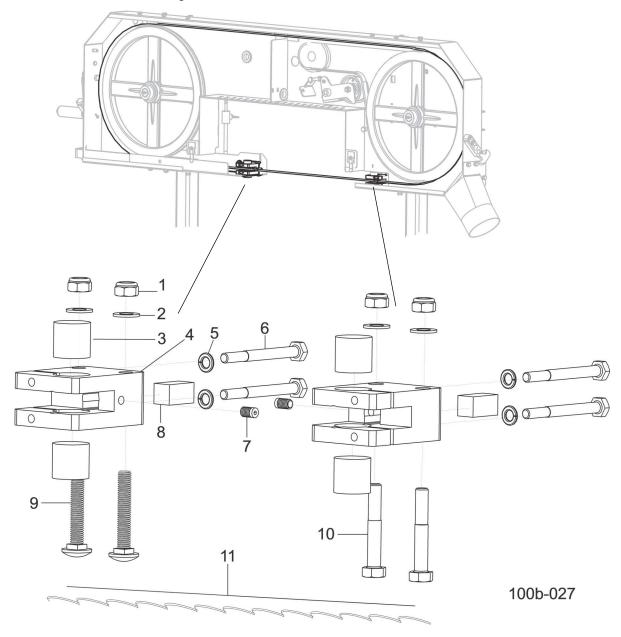
## **SECTION 6 SAWHEAD PARTS**

## 6.1 Sliding Blade Guide Arm Assembly



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-963	Assembly, Sliding Guide		1
1	086875	Sleeve, Vinly Guard		1
2	X100-336	Lever, Blade Guide		1
3	025248	Grommet, Rubber 3/8 Dia		1
4	F05010-132	Nut, M8-1.25 Hex Nylock		5
5	F05026-4	Washer, M8 Flat		8
6	F05004-47	Bolt, M8x1.25x16mm HH		4
7	X100-1066	Weldment, Sliding Guide T100		1

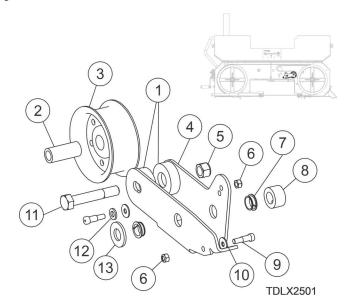
## 6.2 Blade Guide Assembly



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-964	Assembly, Blade Guide Idle Side		1
1	F05010-132	Nut, M8-1.25 Hex Nylock		2
2	F05026-4	Washer, M8 Flat		2
3	X200-433	Ceramic, 7/8 Dia x .825 Long		2
4	X100-977	Block, Blade Guide T100		1
5	F05026-2	Washer, M6 Split Lock		2
6	F05020-32	Bolt, M6-1.0 x 65 HH Class 8.8		2
7	F05020-24	Screw, M6-1x8 SHSS		1
8	X200-434	Ceramic, .49 Sq x .88 Long		1
9	F05021-13	Bolt, M8-1.25x50 Carriage		2

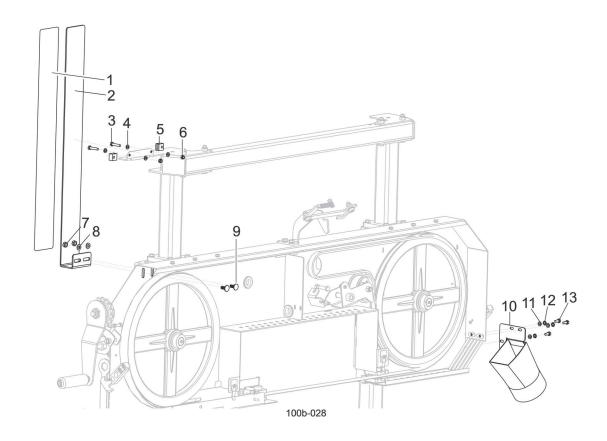
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-1040	Assembly, Blade Guide Drive Side		1
1	F05010-132	Nut, M8-1.25 Hex Nylock		2
2	F05026-4	Washer, M8 Flat		2
3	X200-433	Ceramic, 7/8 Dia x .825 Long		2
4	X100-977	Block, Blade Guide T100		1
5	F05026-2	Washer, M6 Split Lock		2
6	F05020-32	Bolt, M6-1.0 x 65 HH Class 8.8		2
7	F05020-24	Screw, M6-1x8 SHSS		1
8	X200-434	Ceramic, .49 Sq x .88 Long		1
9	F81002-10	Bolt, M8x50MM Gr.5 HH		2
10	UTW31-132-10	Blade, 042 x 1¼ x 132; 10°		1
	035248	Shim, .0075 Blade	Not shown	1

# 6.3 Clutch Assembly



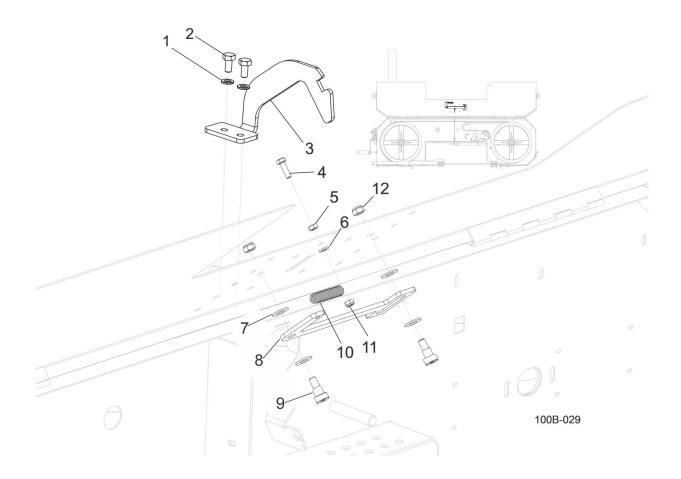
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-960	Assembly, Clutch T100		1
1	X200-1165	Spacer, Clutch		2
2	X100-390	Bushing, Clutch Idler		1
3	X200-906	Pulley, Idler 5/8x2 3/4		1
4	X100-340	Arm, Clutch		1
5	F05004-270	Nut, M10-1.50 Hex Nyl Lock		1
6	F05027-3	Nut, M58 Class 8 Hex Nylock		1
7	X100-917	Bearing, Clip, 1/2		2
8	014820	Collar, Lock 1/2IDx7/8OD		1
9	F05020-39	Bolt, M6-1x10mm SH Shoulder		1
10	F05011-18	Washer, #10 SAE Flat		1
11	F05022-16	Bolt,M10-1.5x60 HHC		1
12	F05026-1	Washer, M6 Flat Class 4		1
13	F05011-2	Washer, 1/2 SAE Flat		1

## 6.4 Scale and Sawdust Chute



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	130301	Assembly, Scale LX25		1
1	123059	Decal, Wood-Mizer Inch Scale		1
2	X100-348	Bracket, Scale		1
3	F05020-8	Bolt, M6-1.0x30 Class8 HH		2
4	F05026-1	Washer, M6 Flat Class 4		4
5	X100-984	Block, Plastic Scale		2
6	F05010-200	Nut, M6-1.0 Nylon Lock		2
7	F05010-132	Nut, M8-1.25 Hex Nylock		2
8	F05026-4	Washer, M8 Flat		2
9	F05021-14	Bolt, M8-1.25x20 Carriage		2
	X100-988	Assembly, Sawdust Chute Round		1
10	X100-985	Weldment, Round Sawdust Chute		1
11	F05026-1	Washer, M6 Flat Class 4		3
12	F05026-2	Washer, M6 Split Lock		3
13	F05020-7	Bolt, M6-1 x 14 Class 8 HH		3

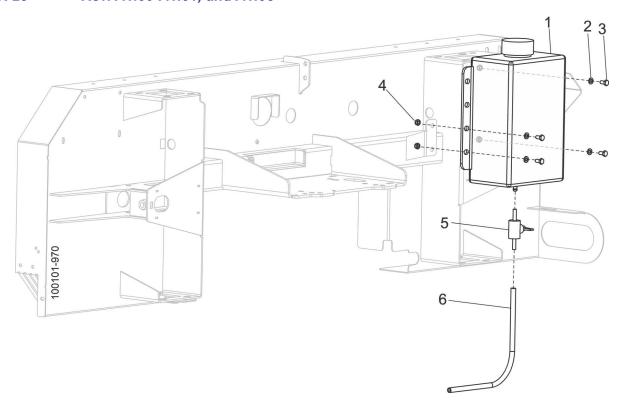
# 6.5 Cover Hold-up Latch



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-981	Assembly, Cover Latch		1
1	F05011-45	Washer, M8 Split Lock		1
2	F05004-47	Bolt, M8x1.25x16mm HH		1
3	X100-1020	Hook, Cover		1
4	F05020-6	Bolt, M6-1 x 20 Class 8 HH		1
5	F81031-1	Nut, M6-1.0 Free Nut Zinc		1
6	F05026-1	Washer, M6 Flat Class 4		1
7	F05011-134	Washer, M10 Flat SAE		1
8	X100-920	Latch, Cover		1
9	F05022-9	Bolt, M10x10 SH Shoulder Plain		1
10	X200-997	Spring, 7/16ODx2x.041 Wire Ext		1
11	F05010-200	Nut, M6-1.0 Nylon Lock		1
12	F05010-132	Nut, M8-1.25 Hex Nylock		1

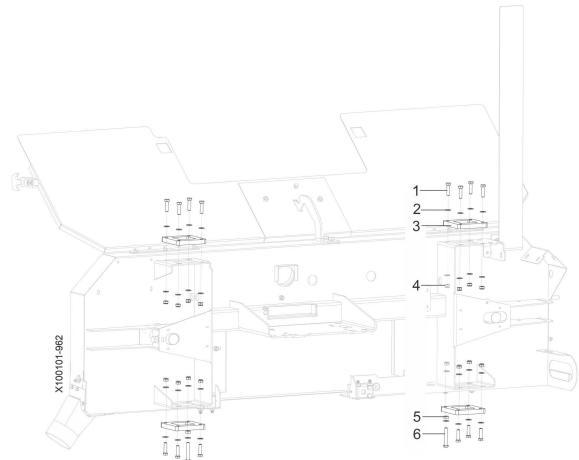
## 6.6 Water Tank

#### LX 25 Rev. A1.00-A1.01, and A1.03+



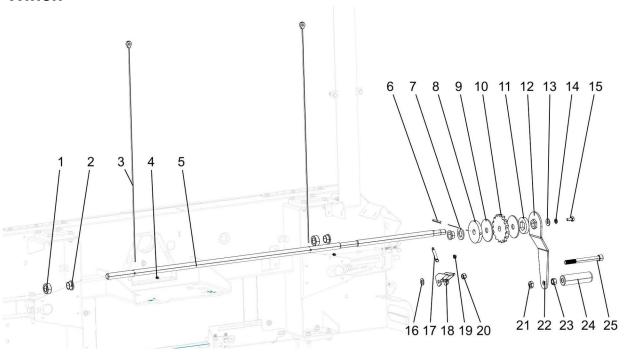
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-970	Assembly, Water Tank		1
1	X100-904	Tank, Water, 4 qt		1
2	F05011-11	Washer, 1/4 SAE Flat		4
3	F05005-99	Screw, M6-1x12 HHC FT GR8-8 Din 933		4
4	F05010-200	Nut, M6-1.0 Nylon Lock		4
5	X200-983	Valve, 1/4 Water Shutoff		1
6	X100-982	Tubing, Vinyl, 1/4x3/8x12		1

# 6.7 Up/down Slides



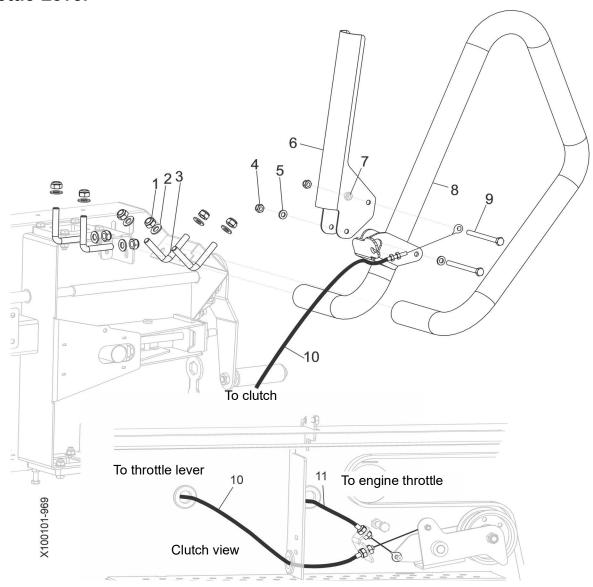
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-962	Assembly, Up/Down Slide		1
1	F05021-11	Screw, M8-1.25x30 HHC		14
2	F05026-4	Washer, M8 Flat		32
3	X100-327	Block, Vertical Slide Guide		4
4	F05010-132	Nut, M8-1.25 Hex Nylock		16
5	F05010-162	Nut, M8-1.25 Free Zinc Plate		2
6	F81002-19	Bolt, M8x50 8.8 HH FT Zinc		2

## 6.8 Winch



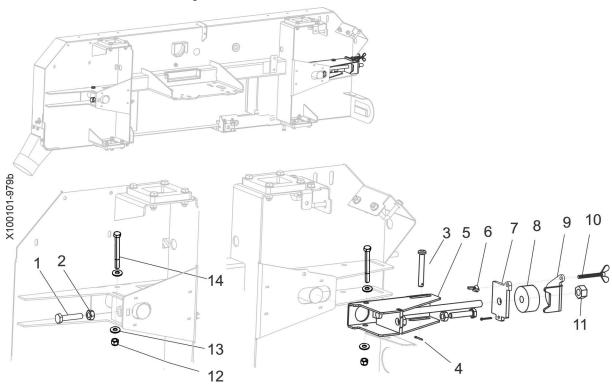
REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	P04146	Collar, 3/4 ID x 1 1/4OD x 1/2 Lg		2
2	X100-1073	Bushing, Bronze 3/4IDx7/8ODx1/2L		3
3	X100-1056	Cable, Lift Paddle 27.25"		1
4	F05020-24	Screw, M6-1x8 SHSS		2
5	X100-314	Shaft, Winch		1
6	F05029-8	Pin, 6MM x 50MM Roll		1
7	F05011-62	Washer, 3/4 SAE Flat		1
8	X100-1041	Washer, Clutch		1
9	X200-373	Pad, Winch Friction		2
10	X200-1230	Sprocket, Up/Dn Ratcheting		1
11	X200-1231	Washer, Internal Hex Winch		1
12	X100-203-W	Crank Wldmt, Lift		1
13	F05011-16	Washer, 5/16 Standard Flat		1
14	F05011-13	Washer, 5/16 Split Lock		1
15	F05004-47	Bolt, M8-1.25x16 HH Zinc		1
16	F05011-134	Washer, M10 Flat		1
17	X200-992	Spring, B66		1
18	X100-385	Pawl, Winch		1
19	F05010-200	Nut, M6-1.0 Nylon Lock		1
20	F05004-270	Nut, M10-1.50 Hex Nyl Lock		1
21	F05027-19	Nut, M12-1.75 Zinc Jam		1
22	F05011-123	Washer, 12MM Split Lock		1
23	F05010-212	Nut, M12x1.75 Free Znc		1
24	046647	Handle, 33/64IDx1 1/4ODx4 Plastic		1
25	F05023-6	Bolt, M12-1.75x120 SHC		1

## 6.9 Throttle Lever



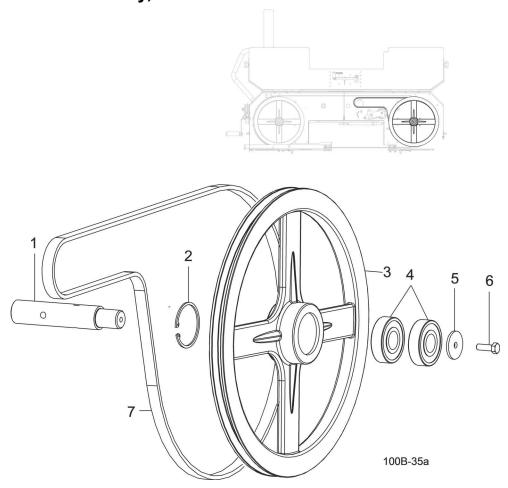
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-969	Assembly, Throttle Lever		1
	X100-975	Assembly, "L" Handle		4
1	X100-386	Bolt, M8 L Handle		1
2	F05026-4	Washer, M8 Flat		2
3	F05010-132	Nut, M8-1.25 Hex Nylock		2
4	F05010-200	Nut, M6-1.0 Nylon Lock		2
5	F05026-1	Washer, M6 Flat Class 4		2
6	X100-369	Lever, Throttle		1
7	F81031-1	Nut, M6-1.0 Free Nut Zinc		1
8	X100-210	Handle Weldment, Push		1
9	F05020-32	Bolt, M6-1.0 x 65 HH Class 8.8		2
10	X100-392	Cable, Clutch		1

## 6.10 Blade Tension Assembly



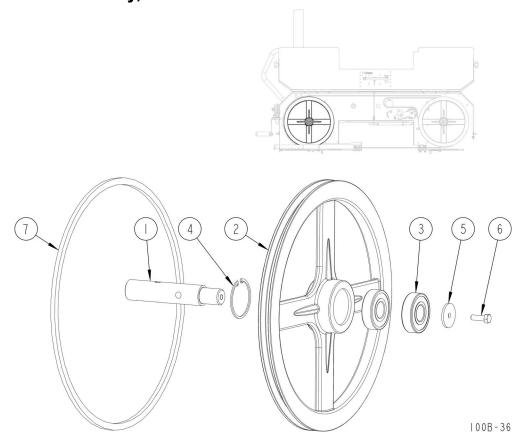
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-979	Assembly, Blade Tension		1
1	F05004-269	Bolt, M10-1.50x50mm HHFT 8.8		2
2	F05010-85	Nut, M10-1.5 Hex		2
3	F05012-138	Pin, 3/8x 2 5/8 Clevis, Zinc		1
4	F05012-9	Pin, 3/32x3/4 Cotter		1
5	X100-205	Slide Weldment, Blade Tension		1
6	X100-330	Plate, Tension Spring Back		1
7	X100-907	Spring, Urethane, 1/2x1 3/4x1		1
8	X100-331	Washer, Tension Spring		1
9	F05020-44	Screw, M6-1.0 Wing		1
10	F05027-27	Nut, Wing M6x1 Zinc		1
11	F05010-227	Nut, 1/2-10 Acme		1
12	F05010-10	Nut, 3/8-16 Hex Nyloc		2
13	F05011-16	Washer, 5/16 Standard Flat		4
14	F05007-6	Bolt, 3/8-16x3 1/2 Gr8 YZC		2
	X100-1057	Wrench, 7/8 Ratcheting	Not shown	1

# 6.11 Band Wheel Assembly, Driver Side.



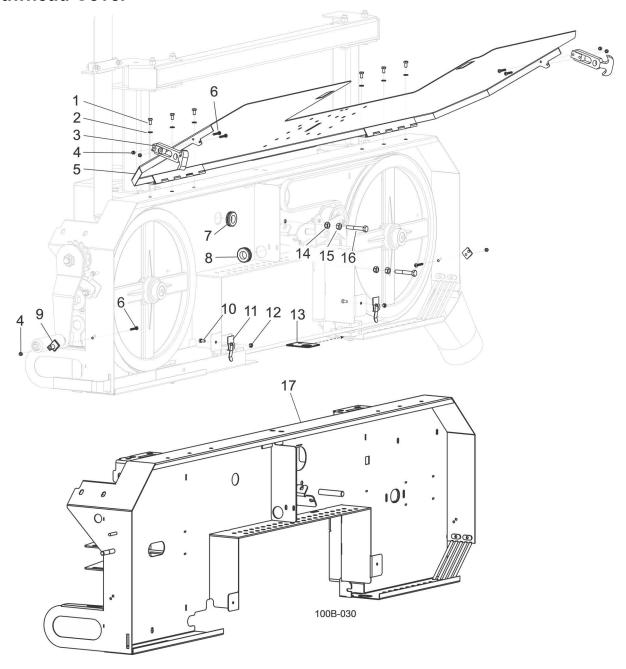
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-961	Assembly, Bandwheel Shaft		1
1	X100-301	Spindle, Blade Wheel		1
2	F04254-21	Ring, 2 7/16 IR N 5002-244 Beveled Snap		1
3	X100-303	Sheave, Bandwheel, 15 3/8 OD		1
4	P08066	Bearing, 6305 62 OD x 25 ID x 17 W		2
5	S08220	Washer, .313x1.5x.125 Retaining		1
6	F05004-40	Bolt, M8x1.25x25mm C/S 8.8 Din 933 HH		1
7	X100-905	Belt, B69 Carlisle Super II (Drive side)		1

# 6.12 Band Wheel Assembly, Idle Side.



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-961	Assembly, Bandwheel Shaft		1
1	X100-301	Spindle, Blade Wheel		1
2	X100-303	Sheave, Bandwheel, 15 3/8 OD		1
3	P08066	Bearing, 6305 62 OD x 25 ID x 17 W		2
4	F04254-21	Ring, 2 7/16 IR N 5002-244 Beveled Snap		1
5	S08220	Washer, .313x1.5x.125 Retaining		1
6	F05004-40	Bolt, M8x1.25x25mm C/S 8.8 Din 933 HH		1
7	X100-900	Belt, B47.4 (Idle side)		1

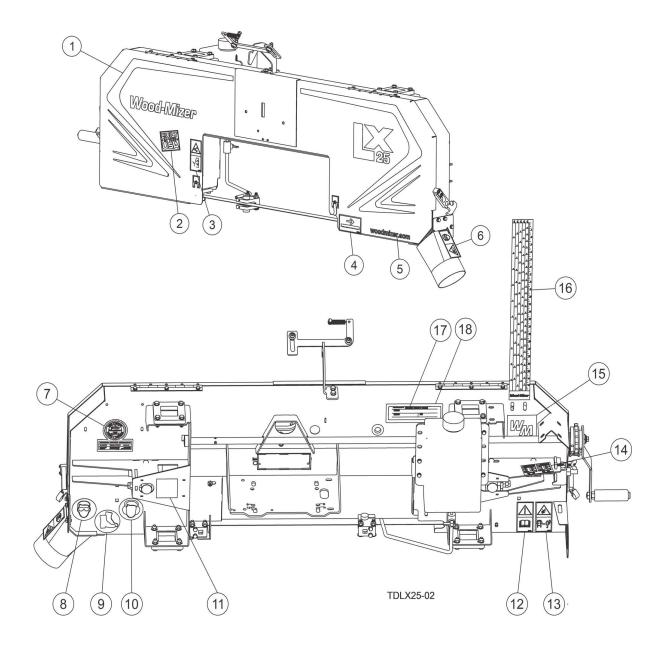
## 6.13 Sawhead Cover



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-967-W	Assembly, Cover T100		1
1	F05005-99	Screw, M6-1x12 HHC FT GR8-8 Din 933		6
2	F05026-1	Washer, M6 Flat Class 4		6
3	X200-913	Bracket, Latch		2
4	F05027-3	Nut, M58 Class 8 Hex Nylock		6
5	X100-922-W	Weldment, Cover		1
6	F05020-38	Screw, M58x25mm SHBC		6
7	074199	Grommet, 3/4 ID 16 Gauge Thickness		1
8	074198	Grommet, 3/4 ID 11 Gauge Thickness		1

REF	PART #	DESCRIPTION	COMMENTS	QTY.
9	X200-1150	Latch Nut		2
10	F05020-13	Bolt, M58 x 10 Class 8 HH		2
11	X100-999	Latch, Vibration Cover		2
12	F05027-3	Nut, M58 Class 8 Hex Nylock		2
13	X100-1019	Shim, Blade Guide		1
14	F05010-132	Nut, M8-1.25 Hex Nylock		2
15	F05010-162	Nut, M8-1.25 Free Zinc Plate		2
16	F81002-10	Bolt, M8x50MM Gr.5 HH		2
17	X100-201-W	Sawhead Weldment		1

## 6.14 Decals

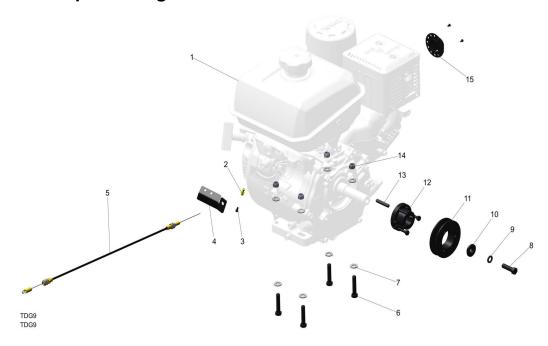


REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	128388	Decal, LX25		1
2	074008	Decal, Built In The USA		1
3	099220	Decal, Close Guards Before Operating		1
4	096321	Decal, Blade Movement Direction		1
5	003325	Decal, Wood-Mizer Website Logo		1
6	099222	Decal, Saw Dust Protection-Pictogram		1
7	079278	Decal, Wood-Mizer Quality & Information		1
8	S12004G	Decal, Eye Warning		1
9	501465	Decal, Wear Safety Boots		1
10	S14005G	Decal, Ear Warning		1
11	X100-1451	Decal, Blade Alignment		1

REF	PART #	DESCRIPTION	COMMENTS	QTY.
12	096317	Decal, Read Manual Before Operating		1
13	099921	Decal, Keep a Safe Distance		1
14	515084	Decal, Timbery Blade Tension		1
15	107171	Decal, White WM		1
16	123059	Decal, Wood-Mizer Inch Scale		1
17	015820	Decal, LT15 ID		1
18	P09971	Decal, VIN Overlament		1

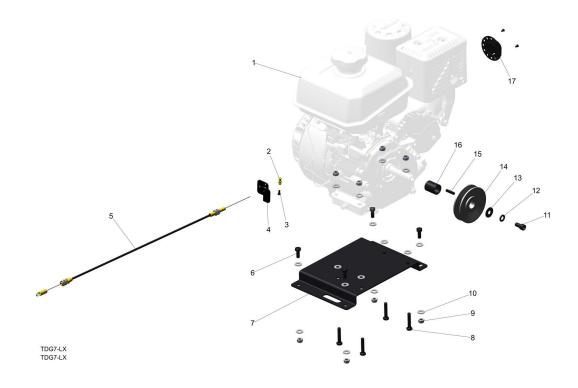
## **SECTION 7 ENGINE PARTS**

## 7.1 Kohler 9hp Gas Engine



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	G9	Engine Assy, 9hp Kohler		1
1	X100-1091	Engine, 9-1/2hp Kohler		1
2	048904	Throttle Fitting, Swivel		1
	F05004-85	Screw, 8-32x3/8 SHC	The vendor-supplied throttle swivel screw is replaced with the F05004-85. Order this screw if ordering a throttle cable.	1
3	F05004-326	Screw, #8-32 x 1/4 Slot, Hex Hd		1
4	X200-1203	Plate, Kohler Throttle Cable Mounting		1
5	X100-1092	Cable, Throttle 20x28 SpringxCable		1
6	F05022-14	Bolt, M10-1.5x50 Class 8 HH		4
7	F05011-134	Washer, M10 Flat		8
8	F05007-156	Bolt, 7/16-20x1 1/2 HH Gr5		1
9	F05011-48	Washer, Split Lock 7/16 Zinc		1
10	X100-1094	Washer, 7/16" ID 1" x 1-1/4" Stepped		1
11	X100-1062	Sheave, 1B34-SH		1
12	039202	Bushing, SHx1		1
13	S04124	Key, 1/4 x 1 11/16		1
14	F05004-270	Nut, M10-1.50 Hex Nyl Lock		4
15	110187	Deflector, Kohler 14HP Exhaust		1

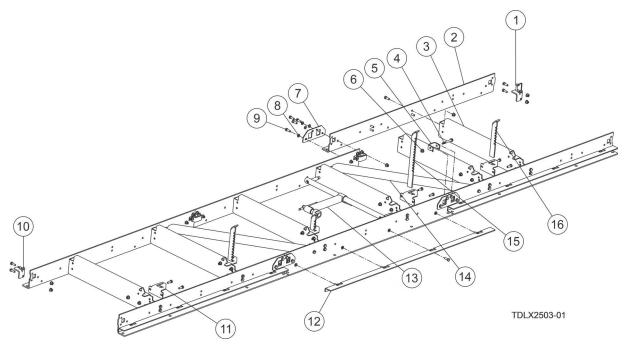
# 7.2 Kohler 7hp Gas Engine (G7-LX)



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	G7-LX	Engine Kit, LX Mill G7 Kohler		1
1	X100-1083	Engine, 7hp Kohler		1
2	048904	Throttle Fitting, Swivel		1
	F05004-85	Screw, 8-32x3/8 SHC	The vendor-supplied throttle swivel screw is replaced with the F05004-85. Order this screw if ordering a throttle cable.	1
3	F05004-326	Screw, #8-32 x 1/4 Slot, Hex Hd		1
4	X100-1085	Plate, Kohler G7 Throttle Mounting		1
5	X100-1092	Cable, Throttle 20x28 SpringxCable		1
6	F05021-2	Bolt, M8-1.25x20 Class 8 HH		4
7	X100-1084-W	Plate, Kohler 7HP Engine Mounting		1
8	F81002-15	Bolt, M8-1,25x40 HH FT Class 8.8		4
9	F05010-132	Nut, M8-1.25 Hex Nylock		8
10	F05011-17	Washer, 5/16 SAE Flat		16
11	F05007-154	Screw, 3/8-24x3/4 SHC B/O		1
12	F05011-4	Washer, 3/8 Split Lock		1
13	F05011-126	Washer, 3/8 Standard Flat		1
14	X100-1081	Sheave, BK34 x 3/4 Bore		1
15	S31027	Key, 3/16 Sqx1		1
16	130992	Sleeve, LX25G7 Motor		1
17	110187	Deflector, Kohler 14HP Exhaust		1

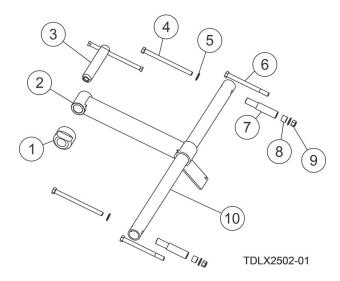
## **SECTION 8 BED AND CARRIAGE ASSEMBLY**

#### 8.1 **Bed**



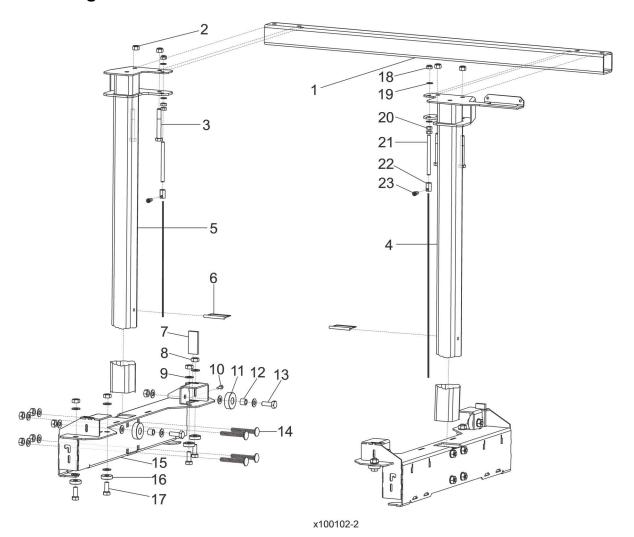
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	128353	BED ASSEMBLY, LX25		1
1	014151	Pin, 3/8x2 1/4 Sq Wire Lock		1
2	X100-929-W	Plate, T100 Drive/Idle Side Rail		6
3	123031-W	Bracket, Center Bed Rail		6
4	F81003-125	Bolt, M10-1.5x85 Class 8 HH		4
5	071015	Plate, 2012 LT10 Bed Rail Clamp		4
6	F05027-47	Nut, M10-1.5 Flanged Nylon Lock		74
7	X100-934	Plate, T100 Bed Coupler		4
8	F05011-134	Washer, M10 Flat SAE		74
9	F05022-3	Bolt, M10-1.5x30 Class 8 HH		70
10	X100-1275	Plate, End Stop Lock		2
11	X200-1027	Bracket, Log Post Top		5
12	X100-930-W	Plate, T100 Safety Catch Rail		3
13	X200-1082	Clamp Assembly, Log Metric		1
14	X100-932-W	Plate, T100 Cross Brace		2
15	X200-1026	Post, Log Rest		2
16	X200-1045	Post, Log Rest		2

# 8.2 Log Clamp



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X200-1082	CLAMP ASSEMBLY, LOG METRIC		1
1	075295	Block, Clamp Point		1
2	071343	Weldment, Clamp Post Tube		1
3	071350	Assembly, Clamp Screw		1
4	F05022-21	Bolt, M10-1.5x140 HH FT	Not used on LX25	2
5	F05011-3	Washer, 3/8 Flat SAE		4
6	F05022-25	Bolt, M10-1.5x120mm Hex Cl 8.8		2
7	071034	Spacer, 2012 Clamp Mount		2
8	X200-1041	Spacer, .379IDx.625ODx.480Long	Not used on LX25	2
9	F05004-270	Nut, M10-1.50 Hex Nyl Lock		2
10	071026	Tube, 2012 Clamp Main		1

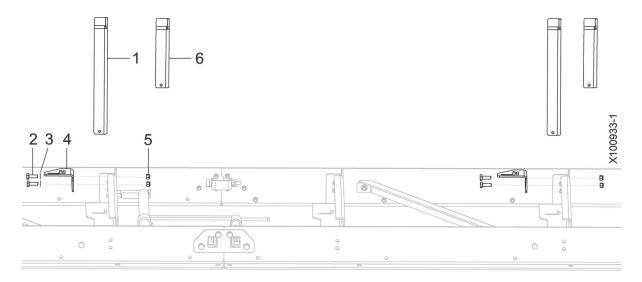
# 8.3 Carriage



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	X100-1043	ASSEMBLY, CARRIAGE		1
1	X100-1049	Tube, Carriage Horizontal		1
2	F05004-270	Nut, M10-1.50 Hex Nyl Lock		4
3	F05022-15	Bolt, M10-1.5x75 HH Class 8.8		4
4	X100-1045	Weldment, Carriage Right Side Post		1
5	X100-1044	Weldment, Carriage Left Side Post		1
6	F05012-145	Pin, 1/4x2 1/2 Tab Lock		2
7	X100-378	Sweeper, Modular Track		2
8	F05010-85	Nut, M10-1.5 Hex		20
9	F05011-134	Washer, M10 Flat SAE		36
10	F05015-33	Screw,#10x3/4 SI Hex Washer Hd Sht Metal		2
11	X200-957	Bearing, LLU 6302		4
12	X200-348	Bushing, Carriage Wheel		4
13	F05022-3	Bolt, M10-1.5x30 Class 8 HH		4

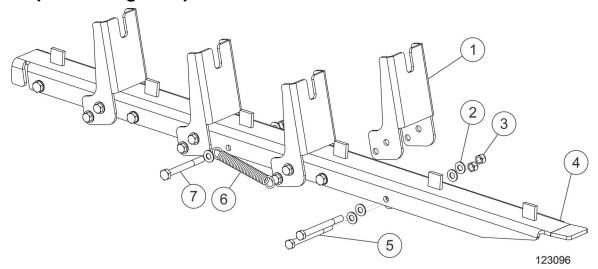
REF	PART #	DESCRIPTION	COMMENTS	QTY.
14	F05022-17	Bolt, M10-1.5x70 Carriage		8
15	X100-202	Weldment, Lower Carriage Member		2
16	X200-903	Bearing, LLU 6200		8
17	F81003-11	Bolt, M10-1.5x25mm HH Gr8.8		8
18	F05010-132	Nut, M8-1.25 Hex Nylock		2
19	F05026-4	Washer, M8 Flat		4
20	F05010-162	Nut, M8-1.25 Free Zinc Plate		4
21	X100-1050	Rod, Lift Cable		2
22	X100-1042	Hexagon, Lift Cable		2
23	F05021-29	Bolt, M8x8mm SH Shoulder		2

# 8.4 Log Rest



REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	X200-1026	Post, Log Rest		2
2	F05022-3	Bolt, M10-1.5x30 Class 8 Hex Head		10
3	F05011-134	Washer, M10 Flat SAE		10
4	X200-1027	Bracket, Log Rest		5
5	F05027-47	Nut, M10-1.5 Flanged Nylon Lock		10
6	X200-1045	Post, Log Rest, Short		2

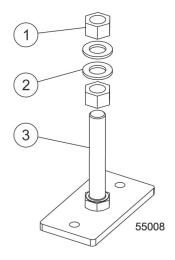
# 8.5 Optional Log Ramps



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	123252	ASSEMBLY, 2 LOG RAMPS LX55/25		1
	123096	Assembly, Log Ramp LX55/25		2
1	123098	Bracket, Log Stop LX55/25		8
2	F05011-134	Washer, M10 Flat SAE		48
3	F05004-270	Nut, M10-1.50 Hex Nyl Lock		24
4	123099	Weldment, Log Ramp LX55/25		2
5	f05022-13	Bolt, M10-1.5x110 Class 8 HH		16
6	P04060	Spring, Old Style PWR/Feed &T110 Counter		8
7	F05022-20	Bolt, M10-1.5x100 HH Class 8.8		8

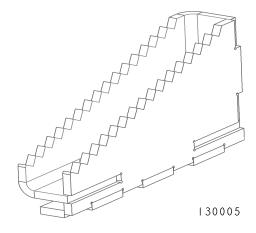
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# 8.6 Optional Adjustable Feet



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	128127	ASSEMBLY, SAWMILL BED FEET (QTY 12 FOR FULL BED)		
	130829	Kit, Sawmill Feet Fastener		1
1	F05026-16	Washer, M20 Flat Zinc		24
2	F05027-26	Nut, M20-2.5 Free		24
	514997_US	Assembly, Bed Level		12
3	514996-1_US	Weldment, Bed Level		1
	130833	KIT, SAWMILL FEET (FOR OPTIONAL BED SEGMENTS)		
1	F05027-26	Nut, M20-2.5 Free		8
2	F05026-16	Washer, M20 Flat Zinc		8
3	514996-1_US	Weldment, Bed Level		4

# 8.7 Optional Log Taper Wedge



	REF	PART #	DESCRIPTION	COMMENTS	QTY.
ᆘ		130005	WLDMNT, LOG TAPER WEDGE		1