

# **G38 Engine for LX250**

**Safety, Operation, Maintenance  
& Parts Manual**

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**011415 Engine Assembly  
used with LX250**

**Rev. G.0  
rev. A2.04**

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***Safety is our #1 concern!***

*Form #2377*

**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](http://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](http://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: [woodmizer.com/patents](http://woodmizer.com/patents)

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## SECTION 1 ABOUT THIS MANUAL

This manual is provided as a supplement to the equipment manufacturer's manuals. This manual provides information specific to the use of this equipment on the Wood-Mizer® sawmill. Refer to the sawmill operator's manual and manufacturer's manual before attempting to operate this equipment.

**NOTICE** Read the sawmill operator's manual and engine manufacturer's manual for instructions and safety precautions before operating this equipment.

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

## SECTION 2 OPERATION

### 2.1 Starting The Engine

#### MOTOR CONTROL LIGHTS (SEE FIG. 8-1.)



*Alternator Charge Indicator:* Lights if the alternator is not charging the battery.



*Key Switch Indicator:* Lights when the key is in either the ON or ACCESSORY (1 or 3) position.

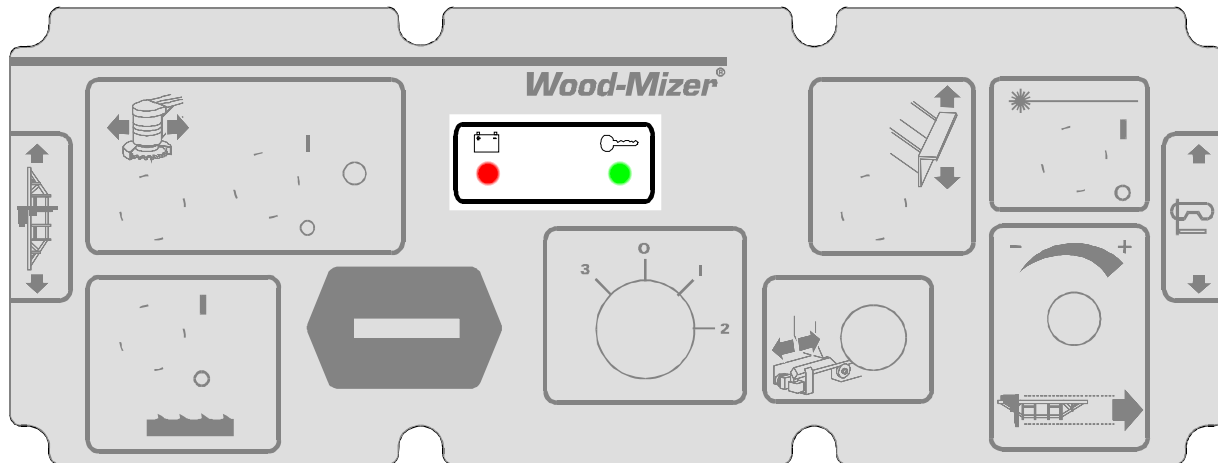


FIG. 2-1

#### MOTOR START



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

Ensure the power feed switch is in the neutral position before turning the key switch to the ON (1) or ACCESSORY (3) position. This prevents accidental carriage movement.

Turn the key switch to the START (2) position and release.

For more information, see the engine manufacturer's operation manual.

#### MOTOR SHUTOFF

Turn the key switch to the OFF (0) position.

## SECTION 3 MAINTENANCE

### 3.1 Maintenance Section Safety

Use caution when performing maintenance or service to the engine. Engine components can become very hot during operation. Avoid contact with any part of a hot engine. The exhaust components of your engine are especially hot during and following operation.



**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.



**WARNING!** Keep a safe distance from rotating members and ensure that loose clothing or long hair does not engage rotating members. Failure to follow this may result in serious injury or death.

Remove the blade before performing any engine service. Failure to follow this may result in serious injury or death.

Do not touch or perform service functions on a hot engine; allow the engine to cool sufficiently before beginning any service function. Failure to follow this may result in serious injury.

Wear proper and necessary safety equipment when performing service functions. Failure to follow this may result in serious injury.

**NOTICE** Refer to the manufacturer's manual for maintenance intervals and procedures unless otherwise instructed in this manual.

Follow the manufacturer's recommendations for service while operating in dusty conditions.

This manual only provides information about additional procedures or procedures to be performed at different time intervals than found in the manufacturer's manuals. Refer to the manufacturer's manual for complete maintenance instructions.

### 3.2 Cooling System

#### EVERY 50 HOURS OF OPERATION:

Wash the engine or brush off sawdust and debris.

Clean the debris screen, cooling fins, and external surfaces.

Remove any dust, dirt, or oil.

See engine manual for further instructions.

### 3.3 Fuel Filter

Replace the fuel filter every **100 HOURS OF OPERATION** or as required for engine performance.

### 3.4 Air Cleaner

Replace the outer air cleaner cartridge if engine performance indicates a new cartridge is necessary.

Replace the outer air cleaner cartridge and check the inner cartridge every **250 HOURS OF NORMAL OPERATION** or (more often if operating the sawmill in dirty conditions).



**CAUTION!** Do not clean elements with water or compressed air. Do not handle the inner element unless it is to be changed. Handle new elements carefully. Contact with the element could cause damage and prevent the filter from operating properly.

Replace the inner air cleaner cartridge every **1200 HOURS OF NORMAL OPERATION** (more often if operating the sawmill in dirty conditions).

### **3.5 Fuel Filter**

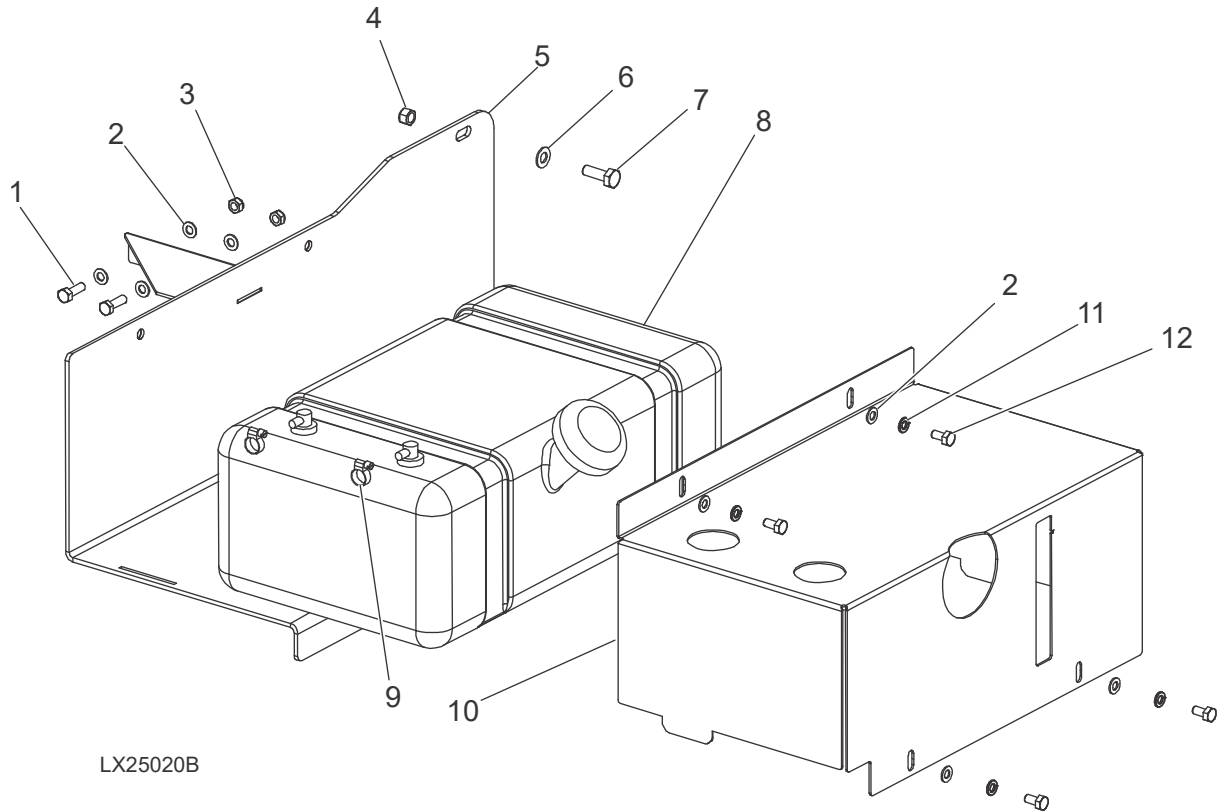
Replace the fuel filter every **100 HOURS OF OPERATION** or as required for engine performance.

### **3.6 Miscellaneous Maintenance**

Clean and inspect the spark arrester every **50 HOURS OF OPERATION**. Replace if damaged.

## SECTION 4 REPLACEMENT PARTS

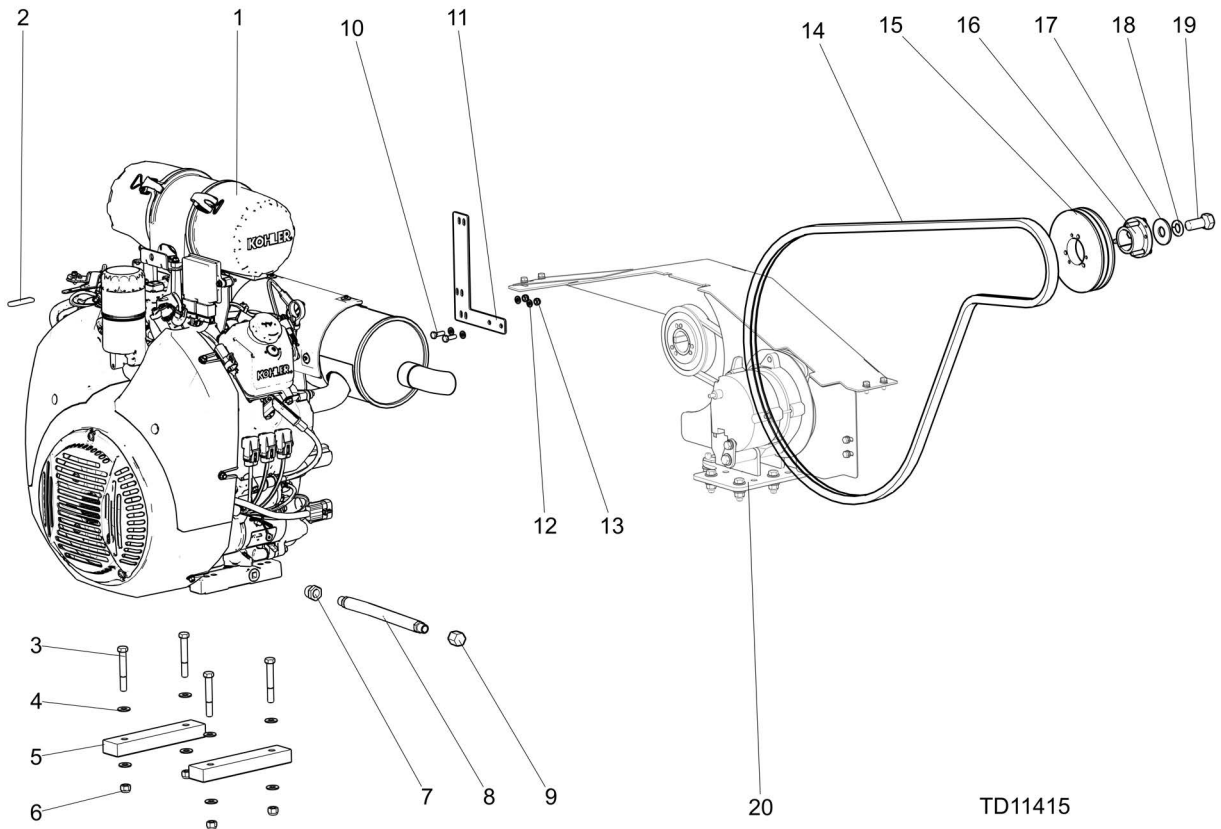
### 4.1 Fuel Tank Assembly



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	117091	<b>TRAY ASSY, FUEL TANK</b>		1
1	F05004-40	Bolt, M8x1.25x25mm C/S 8.8 Din 933 HH		2
2	F05026-4	Washer, M8 Flat		8
3	F05010-132	Nut, M8-1.25 Hex Nylock		2
4	F05004-270	Nut, M10-1.50 Hex Nyl Lock		2
5	011480	Tray Wldmt, Fuel Tank		1
6	F05011-134	Washer, M10 Flat SAE		2
7	F05022-3	Bolt, M10-1.5x30 Class 8 HH		2
8	103878	Tank, 5 Gallon Low Pro EPA Fuel		1
9	P649	HOSE CLAMP, 7/32IN-5/8IN		2
10	103867	Cover, Fuel Tank		1
11	F05011-45	Washer, M8 Split Lock		4
12	F05004-47	Bolt, M8x1.25x16mm HH		4
	R02423-1	Hose, Fuel 3/16" EPA 15G CARB		10 ft
	R02423-2	Hose, Fuel 1/4" EPA 15G CARB		10 ft



## 4.2 Engine Assembly



TD11415

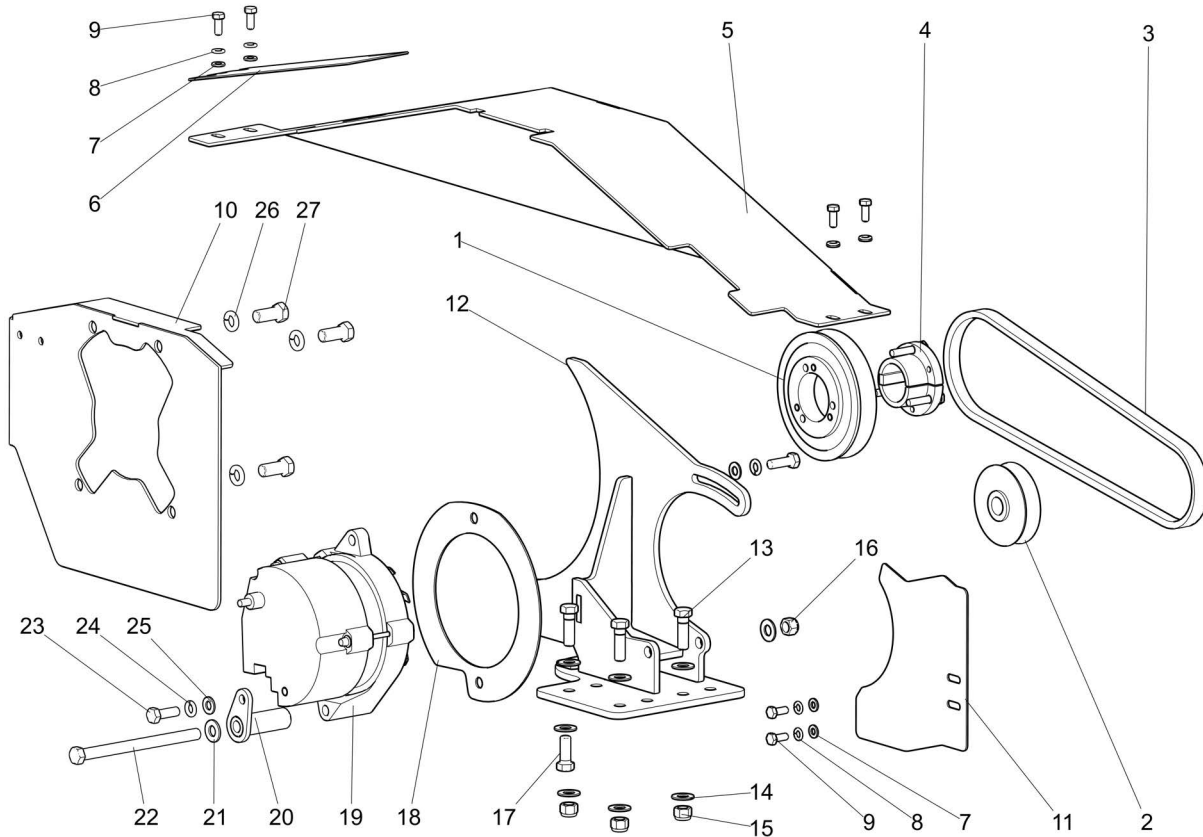
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	011415	<b>Engine Assy, G38 Kohler</b>		
1	079384	Engine, 38HP Kohler EFI Gas		1
	N/A	Air Cleaner, Kohler 38HP		1
	046553	Filter, Kohler Primary Air #25-083-01-S		1
	046554	Filter, Kohler Secondary Air #25-083-04-S		1
	014717	Filter, Kohler Oil #52-050-02-S		1
	061003	Plug, Kohler G38 Spark #62-132-04-S		2
	P12758	Filter, Kohler Fuel #24-050-13		1
	061156	Pump, Fuel #62-559-01S	Low Pressure Mechanical Pump	1
	061231	Pump Electric, Fuel G26 25 755 73-s	High Pressure ELectrical Pump	1
	110658	Muffler		1
2	003229	Grip. 1/16x3/8x2 Black Vinyl		1
3	F05007-206	BOLT, 3/8-16X2 3/4 HH Gr5		4
4	F05011-3	Washer, 3/8 Flat SAE		8
5	011460	Spacer, G38 Engine		2
6	F05010-10	Nut, 3/8-16 Hex Nyl Lock		4
7	003227	Bushing, 1/2 MPTx3/8 FPT Brass		1
8	P10082	Hose, 3/8NPTx9 5/8 Rubber		1
9	P04332	Cap, 3/8 Pipe Galvanize		1
10	F05020-6	Bolt, M6-1x20 HH Class 8		2

# 4 Replacement Parts

Engine Assembly

REF	PART #	DESCRIPTION	COMMENTS	QTY.
11	128034	Guide, LX250 Clutch Cable		1
12	F05026-1	Washer, M6 Flat Class 4		4
13	F05010-200	Nut, M6-1.0 Nylon Lock		2
14	047751	Belt, 2/3VFL900 Drive		1
15	047742	Sheave, 3V5.6x2-SH		1
16	016535	Bushing, SHx1 7/16		1
17	F05011-40	Washer, 5/8 Standard Zinc Flat		1
18	F05011-27	Washer, 5/8 Split Zinc Lock		1
19	F05009-19	Bolt, 5/8-18x1 1/2 HH FT		1
20		Assembly, Alternator ( <a href="#">See Section 4.3</a> )		1
	X100-391	Cable, Throttle		1
	003222	Bracket, 1/8 G38 Throttle		1
	061076	Parts Pak L250G38		1

### 4.3 Alternator Assembly



TD11415\_1

REF	PART #	DESCRIPTION	COMMENTS	QTY.
	133137	Kit, LX250G38 Alternator Drive	For complete replacement	1
1	062551	Sheave, 1B44-SH	Replaced 106567 after 5/2/2022 per ECN 38517.	1
2	P03806	Sheave, Alternator	Replaced 046402 after 5/2/2022 per ECN 38517.	1
3	P12740	BELT, 25 HP KOHLER ALTERNATOR	Replaced 107116 after 5/2/2022 per ECN 38517.	1
4	016535	Bushing, SHx1 7/16	Added after 5/2/2022 per ECN 38517.	2
	128035	Collar, 2-1/4OD x 1-7/16ID x 9/16 *OBS*	128035 and 128067 deleted after 5/2/2022 per ECN 38517.	1
	128067	Key, 3/8x3/8x1 7/8 LX250 *OBS*		1
	130007	Assy, LX250G38 Top Belt Cover		1
5	011411	Wldmnt, Top Belt Cover		1
6	074546	Plate, Belt Guard Cover		1
7	F05026-1	Washer, M6 Flat Class 4		12
8	F05026-2	Washer, M6 Split Lock		8
9	F05004-219	Screw, M6x1.0x16mm 8.8 HH		8
10	110943	Wldmnt, Engine Guard		1
11	128147	Plate, LX250 Alt Cover	Replaced 011510 after 5/2/2022 per ECN 38517.	1
12	128394	Wldmnt, LX250 Alt Mount	Replaced 011455 after 5/2/2022 per ECN 38517.	1
13	F05007-123	Bolt, 3/8-16x 1 1/4 HH Gr5		3

## 4 Replacement Parts

Alternator Assembly

REF	PART #	DESCRIPTION	COMMENTS	QTY.
14	F05011-3	Washer, 3/8 Flat SAE		17
15	F05010-10	Nut, 3/8-16 Hex Nyl Lock		8
16	F05004-270	Nut, M10-1.50 Hex Nyl Lock		1
17	F05007-87	Bolt, 3/8-16x1 Gr5 HH		1
18	133127	Plate, Alternator Ring	Added after 5/2/2022 per ECN 38517.	1
19	050287-1	Alternator, 105A 12V CS130	Replaced 050287 after 4/2021, per ECN 37893.	1
20	W12761	Brace Wdmt, Alternator		1
21	F05011-134	Washer, M10 Flat		2
22	F05022-21	BOLT, M10-1.5x140 HHBFT		1
23	F05004-40	Bolt, M8x1.25x25 HH FT		2
24	F05011-130	Washer, M8 Spring Lock Zinc		2
25	F05026-4	Washer, M8 Flat		2
26	F05011-48	Washer, Split Lock 7/16 Zinc		1
27	F05007-145	Bolt, 7/16-14x1 HH Gr5		1