G15 Engine

Safety, Operation, Maintenance & Parts Manual

LT25 rev. C2.00 - D4.01 LT25L rev. C2.00 - D4.01



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

February 1998

Form #770

able of C	ontents	Section-Page
SECTION	N 1 OPERATION	1-1
1.1	Starting The Engine	1-1
SECTION	N 2 MAINTENANCE	2-1
2.1	Safety	2-1
2.2	Cooling System	
2.3	Air Filter & Pre-Cleaner	
2.4	Fuel Filter	2-4
2.5	RPM Adjustments	2-5
2.6	Miscellaneous Maintenance	2-7
SECTION	N 3 REPLACEMENT PARTS	3-1
3.1	Engine Assembly	3-1
3.2	Engine Pulley Guards	3-4
INDEX		1-I

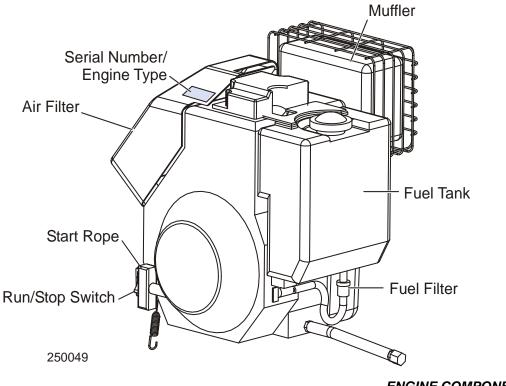
ABOUT THIS MANUAL

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.



IMPORTANT! 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.



ENGINE COMPONENTS

SECTION 1 OPERATION

1.1 Starting The Engine

Engine Start



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 will result in serious injury.

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

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

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

1. Turn the run/stop switch to the RUN position.

See Figure 1-1.

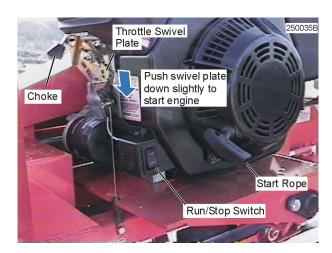


FIG. 1-1

- 2. Close the engine choke by moving the choke lever to the start position.
- **3.** Pull the start rope slowly until you feel resistance, then pull the cord quickly to start the engine. Repeat with the choke opened slightly if necessary.
- **4.** When the engine starts, slowly open the choke all the way by moving the choke lever to the off position.

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

Engine Shutoff

- 1. Disengage the clutch handle to stop the blade if necessary.
- 2. Let the engine run for 15 seconds with no load, then push the run/stop switch to STOP.

SECTION 2 MAINTENANCE

Refer to the manufacturer's manual for maintenance intervals and procedures unless otherwise instructed in this manual. Follow the manufacturer's recommendations for dusty conditions.



IMPORTANT! 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.

2.1 Safety

Use caution when performing maintenance or service to the engine.



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! 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. 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.



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.



This symbol identifies the interval (hours of operation) at which each maintenance procedure should be performed. "AR" signifies maintenance procedures which should be performed as required.

2.2 Cooling System

Wash the engine or brush off sawdust and debris every 50 hours of operation. Clean the grass screen, cooling fins, and external surfaces. Remove any dust, dirt or oil. See engine manual for further instructions.

2.3 Air Filter & Pre-Cleaner



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.

- Service the pre-cleaner every four hours of operation. Service by gently shaking excess sawdust and debris from the foam piece.
- Clean the air filter (air cleaner element) and pre-cleaner (element wrapper) every eight hours of operation. See the engine manual for further instructions.
- Replace the air filter (cleaner) every 200 hours of operation.
- Replace the pre-cleaner (element wrapper) every 2000 hours of operation.

2.4 Fuel Filter

Replace the fuel filter every 100 hours of operation or as required for engine performance.

RPM Adjustments 2.5



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



Check the RPM with a tachometer after the first 20 hours of operation and every 200 ²⁰⁰ hours thereafter.

See Table 2-1.

Engine	High End RPM	Low End RPM
G15	3750	1800

TABLE 2-1

Before checking the RPM, make sure belt and brake strap tensions are correct (See Sawmill Maintenance). Also check oil, fuel, and coolant levels.

Make sure the throttle cable does not affect the engine RPM when the clutch handle is disengaged. Make sure the cable is not bent or kinked.

- 1. Start the engine to measure the low-end RPM.
- 2. Refer to the engine manual to adjust the low-end RPM.
- 3. Engage the clutch handle to throttle the engine and measure the high-end RPM. The high-end RPM is factory-set at 3750. Readjust the throttle cable if necessary to increase or reduce the high-end engine speed.

The engine should start to throttle as soon as you start moving the clutch handle down. If the engine dies instead, restart the engine and adjust the throttle linkage as far as possible without affecting low-end RPM. With the engine idling and the clutch disengaged, loosen the cable bolt and pull the throttle cable up to a point just below where it affects the low-end RPM. Retighten the cable bolt. **NOTE**: A properly adjusted throttle will extend the cable spring 1/4" to 3/8" (6.4 - 9.5 mm) when running and have a slight amount of slack in the cable when idling.

See Figure 2-1.

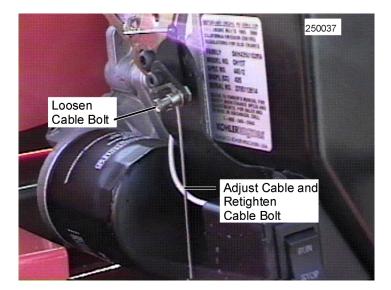


FIG. 2-1

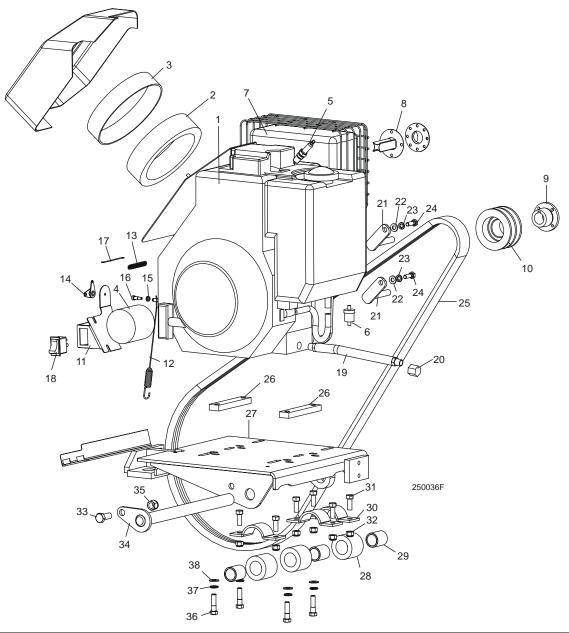
2.6 **Miscellaneous Maintenance**



Inspect the spark plugs every 100 hours of operation. Remove any deposits and adjust gap if necessary. See engine manual for further information.

SECTION 3 REPLACEMENT PARTS

3.1 Engine Assembly



REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART#	QTY.	
	ENGINE ASSEMBLY, 15HP KOHLER	015439	1	
1	Engine, 15HP Kohler #PA44501	015440	1	•



2	Filter, Kohler Air #47-083-01	014718		
3	Pre-Cleaner, Kohler Air #47-063-01	014719	1	
4	Filter, Kohler Oil #52-050-02	014717	1	
5	Plug, Kohler Spark #12-132-02 (Champion #RC12YC)	P12757	1	
6	Filter, Kohler In-Line Fuel #25-050-02	014720	1	
_ -	Muffler Kit, G15 Kohler Manual Start	014720	1	-
7	Muffler, Kohler #12-068-38		1	•
	Gasket, Kohler Muffler #12-041-03	016494	1	*
8	Arrestor, Kohler Spark #12-189-02	016495	1	
9	Bushing, 1" Split Taper	P09552 ¹	1	
10	Pulley, 2BK36H Engine		1	
10		015973 1		
	Key, 1/4 x 1/4 x 1 11/16"	S04124 ²	1	
11	Bracket Weldment, Throttle Mount/Switch Mount	015441	1	
12	Cable Assembly, G15 Throttle	015445	1	
13	Spring, G15 Throttle	015449	1	
14	Bracket Weldment, G15 Throttle Link Pivot	015435	1	
15	Nut, 10-24 Self Locking	F05010-14	1	
16	Screw, 1/4" x 3/8" (10-24 Thread) Socket Shoulder	F05004-57	1	
17	Bracket, G15 Throttle Link Wire	015446	1	
18	Switch, Engine Stop/Run	015444	1	
19	Hose, Oil Drain	P10082	1	
20	Cap, 3/8" NPT Pipe	P04332	1	
	BRACKET ASSEMBLY, DRIVE BELT SUPPORT SINGLE-PRONG	A12243	1	
21	Bracket Weldment, Drive Belt Support Painted	015963 ³	2	
22	Washer, 3/8" SAE Flat	F05011-3	2	
23	Washer, 3/8" Split Lock	F05011-4	2	
	Instruction Sheet, Drive Belt Support Single-Prong	A12243-420	1	
24	BOLT, 3/8-24 X 1" HEX HEAD	F05007-46	2	
25	BELT, 2BX72 DRIVE	P09555-2	1	
26	PLATE, G15 ENGINE SPACER	015345	2	
	MOUNT KIT, KOHLER ENGINE	016319 ⁴	1	
27	Mount Weldment, Kohler Engine	014514	1	•
	BUSHING ASSEMBLY, MOTOR MOUNT	016380 ⁵	3	
28	Bushing, 2" OD x 2"	016378	1	•
29	Bearing, 1" x 1 1/4" x 2"	016379	1	•
30	PLATE, MOTOR MOUNT PIVOT BUSHING	014031	3	
31	BOLT, 3/8-16 X 1" HEX HEAD	F05007-7	6	
32	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	6	
33	BOLT, 1/2-13 X 1 1/4" HEX HEAD GRADE 5	F05008-37	1	
34	PIN WELDMENT, ENGINE MOUNT PIVOT	014154	1	
35	NUT, 1/2-13 NYLON LOCK	F05010-8	1	
36	BOLT, 3/8-16 X 1 1/2" HEX HEAD	F05007-3	4	

37		WASHER, 3/8" SPLIT LOCK	F05011-4	4	
38	8	WASHER, 3/8" SAE FLAT	F05011-3	4	

Pulley and bushing (P09552 and 015973) replaces 2BK36 x 1" Bore Motor Drive Pulley 015447 and Key S04124 (Rev. C5.01).

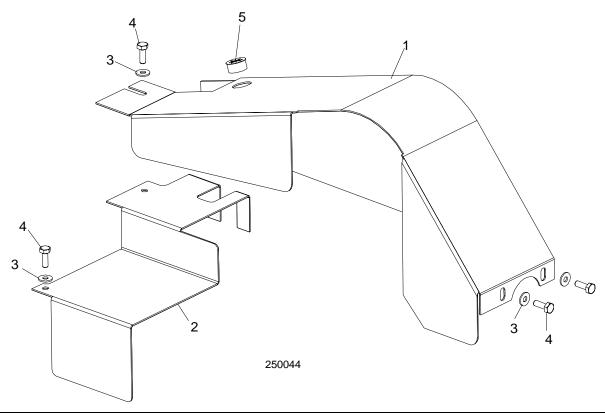
² 1-11/16" key replaces 1-1/4" or 2" key originally supplied. Key not required if pulley replaced with pulley/bushing.

³ Drive Belt Support Bracket 015963 replaces support bracket W12237 originally supplied Rev. C5.00 - C5.01; bracket weldment provides improved belt support. Also replaces support rods S12749 originally supplied before Rev. C5.00.

⁴ Mount Kit 016319 includes new rubber clutch handle mount bushings and hardware standard on Rev. D2.00+ (See Clutch Mount parts in Sawmill Parts Manual).

New assembly 016380 replaces original rubber pivot bushing P12164 and bronze bushing P05041 supplied prior to LT25 Rev. D3.00.
 NOTE: When replacing original components with new assembly, it is best to replace all three assemblies at the same time.

3.2 Engine Pulley Guards



REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART#	QTY.	
1	GUARD WELDMENT, G15 ENGINE PULLEY	015343	1	
2	GUARD, G15 SIDE ENGINE PULLEY	016236 ¹	1	
	GUARD, G15 SIDE ENGINE PULLEY	015342 ¹	1	
3	WASHER, 1/4" SAE FLAT	F05011-11	4	
4	BOLT, 1/4-20 X 3/4" HEX HEAD FULL THREAD	F05005-1	4	
5	GROMMET, 5/8" WIRE	P04137	1	

¹ Use new Side Guard 016236 for LT25 Rev. D1.01 and later. New Kohler engine oil filter orientation requires new guard. Use 015342 Side Guard to service LT25 prior to Rev. D1.01.

INDEX

```
maintenance 2-1
air cooling system 2-2
fuel filter 2-4
miscellaneous 2-7
RPM adjustments 2-5

P
parts list
engine assembly 3-1
pulley guards 3-4

S
starting 1-1
```