LT28 D17 Engine

Safety, Operation, Maintenance & Parts Manual

007333 D17 Kohler/Lombardini

rev. D

Safety is our #1 concern!

October 2009

Form #1633

Used with

LT28D17 rev. A6.07 - A6.17 LT28D18 rev. A6.00 - A6.06

Designation changed from D18 to D17 per ECN 19807 on 11/122013 to more accurately describe the power.



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: woodmizer.com/patents

©2023 Wood-Mizer LLC

Printed in the United States of America, all rights reserved. No part of this manual may be reproduced in any form by any photographic, electronic, mechanical or other means or used in any information storage and retrieval system without written permission from

Wood-Mizer, LLC 8180 West 10th Street Indianapolis, Indiana 46214 Table of Contents Section-Page

SECTION	N 1 OPERATION AND MAINTENANCE	
1.1	Starting The Engine	1-1
1.2	Safety	
1.3	Battery	1-2
1.4	Fuel Filter	
SECTION SECTION	N 3 REPLACEMENT PARTS	
2.1	Fuel Tank Rev. A6.13+	
2.2	Fuel Tank Rev. A6.06 - A6.12	
3.3	Engine Assembly	3-1
3.4	Throttle/Clutch Assembly	

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 1 OPERATION AND MAINTENANCE

1.1 Starting The Engine



DANGER! Always be sure the blade is disengaged and clear the path of the blade before starting the engine. Failure to do so will result in serious injury or death.

DANGER! Operate your engine/machine only in well ventilated areas. Exhaust gases 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.



CAUTION! EPA Compliant Gas Tanks Only: Always relieve all fuel pressure inside the tank prior to filling or connecting fuel fittings. Failure to do so may result in fuel spillage.

CAUTION! EPA Compliant Gas Tanks Only: Disconnect the fuel tank when not in use, or engine flooding or fuel spillage may result

- 1. See the engine manufacturer's manual for lubricating oil recommendations for specific temperature ranges.
- 2. Use #2 or better quality diesel fuel for above freezing starting. Use a #1 quality diesel fuel for below freezing starting.
- **3.** Turn the key switch to the on (#1) position.
- **4.** Turn the key switch to the start (#2) position and release.

ENGINE SHUTOFF

- **1.** Disengage the clutch handle to stop the blade if necessary.
- **2.** Turn the key switch to the off (#0) position.

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.

NOTICE 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.

1.2 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.

Never touch or perform service functions on a hot engine.



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

Wear proper (eye, breathing, hand, and foot) safety equipment when performing service functions

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.



1.3 Battery

Check the battery electrolyte level every 50 hours of operation. See manufacturer's manual for instructions.



DANGER! Batteries expel explosive gases.

Keep sparks, flames, burning cigarettes, or other ignition sources away at all times.

Wear a face shield when working on batteries.



WARNING! Battery posts, terminals and related accessories contain lead and lead compounds. Wash hands after handling.

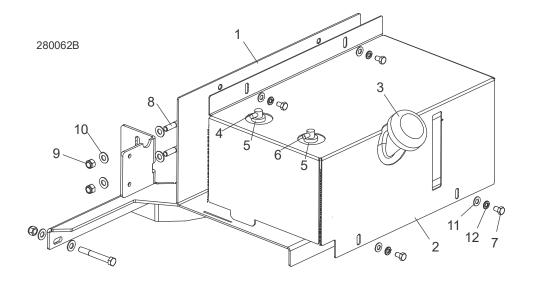
1.4 Fuel Filter

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

SECTION 1

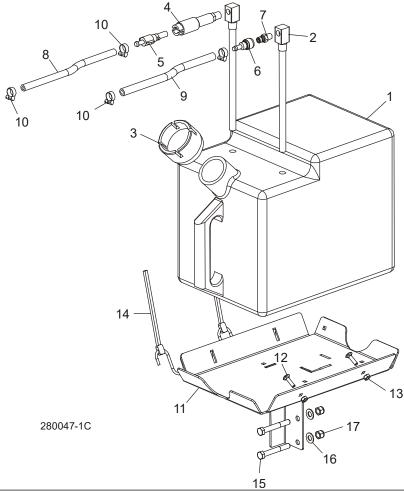
SECTION 2 REPLACEMENT PARTS

2.1 Fuel Tank Rev. A6.13+



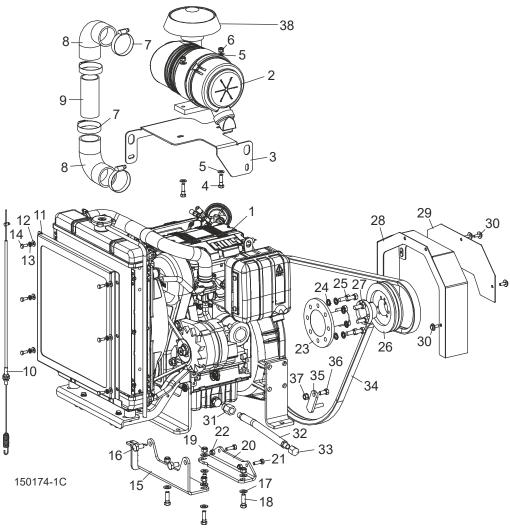
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	074829	TRAY ASSEMBLY, LT28/35 FUEL TANK		1
1	103810	Weldment, Fuel Tank Tray		1
2	103867	Cover, Fuel Tank		1
	103928	Tank, 5 Gallon Low Pro Diesel		1
3	061257	Cap, Fuel Tank Diesel 080185BE		1
4	061255	Fitting, Pick-Up/Tube Diesel 468871A		1
5	061250	Grommet, Shut Off 046881		2
6	061256	Fitting, Return/tube Diesel 468489		1
7	F05006-15	Bolt, 5/16-18 x 1/2" Hex Head Grade 5		4
8	F05007-73	Bolt, 3/8-16 x 3" Hex Head Grade 5		3
9	F05010-10	Nut, 3/8-16 Hex Nyloc		3
10	F05011-3	Washer, 3/8" Flat SAE		6
11	F05011-13	Washer, 5/16 Split Lock		4
12	F05011-17	Washer, 5/16 SAE Flat		4
	R02423-1	Hose, Fuel 3/16" EPA 15G CARB	R02423-1 replaced R02423-3 after 2/1/2021 per ECN 37794.	6 Ft
	R02423-3	Hose, Fuel 5/16" EPA 15G CARB		6 Ft
	R02423-2	Hose, Fuel 1/4" EPA 15G CARB		6 Ft

2.2 Fuel Tank Rev. A6.06 - A6.12



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	038580	TRAY ASSEMBLY, LT28 DIESEL CAN	Rev. A6.06 - A6.12 only	1
	A12132	Tank Assembly, 5-Gallon Diesel Fuel		1
1	P12166	Tank, 5-Gallon Diesel Fuel	Available in assemblies only.	1
2	P12172	Pickup, 9" Fuel		2
3	P09683	Cap, 3 or 5-Gallon Fuel Tank		1
4	P12175	Fitting, 1/4" NPT Plastic Female Disconnect		1
5	P12176	Fitting, 1/4" NPT Plastic Male Disconnect		1
6	015582	Fitting, Female Quick Disconnect Barb		1
7	015583	Fitting, 1/4" NPT Male Quick Disconnect		1
8	P642	Hose, 1/4" ID Fuel		5.5 Ft
9	016338	Hose, 5/16" Fuel Line		8 Ft
10	P649	Clamp, 7/32 - 1/2 Hose		4
11	048600	Tray Weldment, LT28 Fuel		1
12	F05005-34	Bolt, 1/4-20 X 1" Carriage		2
13	F05010-21	Nut, 1/4-20 Swaged		2
14	P11258	Strap, 24 Rubber W/Hooks		2
15	F05007-29	Bolt, 3/8-16 x 2 3/4" Hex Head		2
16	F05011-3	Washer, 3/8" SAE Flat		2
17	F05010-10	Nut, 3/8-16 Hex Nylon Lock		2

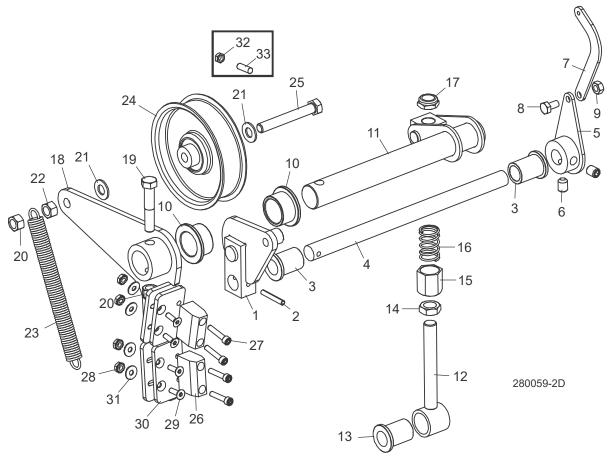
3.3 Engine Assembly



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	007333	ENGINE ASSEMBLY, LT15 17HP DIESEL		1
1	007332	Engine, 17HP Kohler Diesel Model KDW702	Available in assemblies only.	1
2	007401	Filter Assembly, Kohler #ED0037004550-S		1
	007613	Filter, Kohler Secondary Air #ED0021751250-S		1
	007408	Filter, Kohler Primary Air #ED0021751240-S		1
	007614	Motor, Kohler Starter #ED0058402240-S		1
	065408	Alternator, Kohler 65A #ED0011572700-S		1
	065409	Belt, Kohler Fan #ED0024403160-S		1
	061187	Filter, Kohler/Lombardini Oil #ED0021752830-S		1
	061188	Filter, Kohler/Lombardini Fuel #ED0021752880-S		1
	014557	Switch Kit, Oil Pressure w/Gasket		1
	014279	Switch, Diesel Fuel Shut-Off		1
	014289	Pump, Diesel Fuel		1

REF	PART #	DESCRIPTION	COMMENTS	QTY.
	014278	Plug, Diesel Glow		2
3	062308	Bracket, Air Filter Mount		1
4	F05006-18	Bolt, 5/16-18 x 1 1/4" Hex Head Full Thread		2
5	F05011-17	Washer, 5/16" SAE Flat		4
6	F05010-20	Nut, 5/16-18 Self-Locking Hex		2
7	P09895	Clamp, 2 1/2" Hose		4
8	007394	Elbow, 90° x 2" ID Rubber		2
9	007395	Tube, 1 3/4" ID x 2" OD x 4"		1
10	007392	Cable, LT15 D18		1
11	007465	Guard Weldment, D18 Radiator		1
12	F05011-11	Washer, 1/4" SAE Flat		6
13	F05011-14	Washer, 1/4" Split Lock		6
14	F05004-219	Bolt, M6 x 1.0 x 16mm Hex Head		6
15	007427	Bracket Weldment, Rear D18 Mount		1
16	F05004-251	Bolt, M12 x 1.75 x 20mm Hex Head Full Thread		2
17	F05011-3	Washer, 3/8" SAE Flat		8
18	F05007-123	Bolt, 3/8-16 x 1 1/4" Hex Head Grade 5		4
19	F05010-10	Nut, 3/8-16 Hex Nylon Lock		4
20	007426	Bracket, D18 Front Mount		1
21	F05006-27	Bolt, 5/16-18 x 1" Hex Head Grade 5		2
22	F05010-58	Nut, 5/16-18 Hex Nylon Lock		2
23	014024	Shaft, Diesel Engine Drive		1
24	F05011-88	Washer, 10mm Split Lock		8
25	F81003-11	Bolt, M10-1.5 x 24mm Hex Head Grade 8.8		8
26	047742	Sheave, 3V5.6 x 2-SH		1
27	007338	Bushing, SH - 1 9/16"		1
28	007336	Guard Weldment, Motor Pulley		1
29	007344	Cover, Engine Pulley Guard		1
30	F05005-134	Bolt, 1/4-20 x 3/4" Hex w/Conical Washer Head		4
31	065163	Fitting, M18 x 3/8" NPT Adaptor		1
32	P10082	Hose, 3/8" NPT x 9 5/8" Rubber		1
33	P04332	Fitting, 3/8" Galvonized Pipe Cap		1
34	047751	BELT, 2/3VFL900 DRIVE		1
35	048237	SUPPORT WELDMENT, DRIVE BELT		1
36	F05007-118	BOLT, 3/8-16 X 3/4" HEX HEAD GRADE 5		1
37	F05010-19	NUT, 3/8-16 SELF-LOCKING HEX		1
38	007402	RAIN CAP D17		1
	074947	PANEL, FRONT D17 YANMAR		1

3.4 Throttle/Clutch Assembly



REF	PART#	DESCRIPTION	COMMENTS	QTY.
1	065574	BLOCK WELDMENT, LINKAGE CLUTCH/BRAKE		1
2	F05012-16	PIN, 3/16" X 1 1/4" ROLL		1
3	016486	BUSHING, 5/8" ID X 7/8" OD X 1 1/4" LONG FL BRONZE		2
4	049340	SHAFT, LT28 THROTTLE		1
5	034815	ACTUATOR WELDMENT, THROTTLE LT15D&G		1
6	F05007-68	SCREW, 3/8-16 X 3/8" SOCKET HEAD CUP PT SET		2
7	034818	LINKAGE, THROTTLE LT15D&G		1
8	F05005-15	BOLT, 1/4-20 X 1/2" HEX HEAD		1
9	F05010-21	NUT, 1/4-20 SWAGED		1
10	P737	BUSHING, 1" X 1 1/4" X 3/4" FLANGED BRONZE		2
11	034608	PIVOT WELDMENT, CLUTCH/BRAKE		1
	034605	LINKAGE ASSEMBLY, W/BEARING		1
12	034604	Boss Weldment, Clutch/Brake Linkage		1
13	016486	Bushing, 5/8" ID x 7/8" OD x 1 1/4" Long Flanged Bronze		1
	038778	NUT ASSEMBLY, 1/2-13 SPRING LOCKING		1
14	F05010-31	Nut, 1/2-13 Hex Jam		1
15	038777	Nut, 1/2-13 Spring Lock		1
16	046975	Spring, .72" OD x .576" ID x 1.25L Compression		1
17	F05010-127	Nut, 1/2-13 Half Nylon Lock		1

REF	PART #	DESCRIPTION	COMMENTS	QTY.
	065874	BRAKE/CLUTCH ASSEMBLY		1
18	065873	Arm Weldment, Clutch/Brake		1
19	F05007-124	Bolt, 3/8-16 x 2 Hex Head Grade 5		1
20	F05010-10	Nut, 3/8-16 Hex Nyl Lock		2
21	F05011-3	Washer, 3/8" Flat SAE		3
22	F05010-25	Nut, 3/8-16 Swaged		1
23	034810	Spring, Idler Arm LT15/D/E/G		1
24	034602	Idler, 4" O.D. x 3/8" Bore		1
25	F05007-125	Bolt, 3/8-16 x 2-1/2" Hex Head Grade 5		1
26	016488	Block, LT15 Brake		2
27	F05004-2	Bolt, #10-24 x 1" Socket Head Cup		4
28	F05010-14	Nut, #10-24 Keps		8
29	F05004-282	Screw, 10-24 x 5/8" FSHC		4
30	065872	Plate, Brake Adjustment		2
31	F05011-18	Washer, #10 SAE Flat		4
32	F05010-29	NUT, 3/8-16 JAM		1
33	F05007-18	SCREW, 3/8-16 X 1 1/4 SHOP SET		1