LubeMizer Option

Safety, Installation, Operation, & Parts Manuals

LMS (Installed Non-Remote) rev. A.01
LMS-A (Boxed Non-Remote) rev. A.01

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

Form #885

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SECTION 1 LUBEMIZER INSTALLATION

1.1 Control Box Installation

1. Raise the saw head to access the battery box. Turn the key to the OFF (#0) position and remove the key.

2. Remove the two wing nuts and flat washers holding the battery box lid to the battery box.

3. Lift and remove the battery box lid. Remove the negtaive (-) battery post terminal clamp.

4. Remove the rear panel assembly from the control box.

5. Remove the left control box side panel from the sawmill control box. Remove the two solenoids from the panel assembly and install them to the provided lube control assembly. Check to ensure that wires are not kinked or pinched. After wiring, the lube control assembly will be secured in place.

   See Figure 1-1.

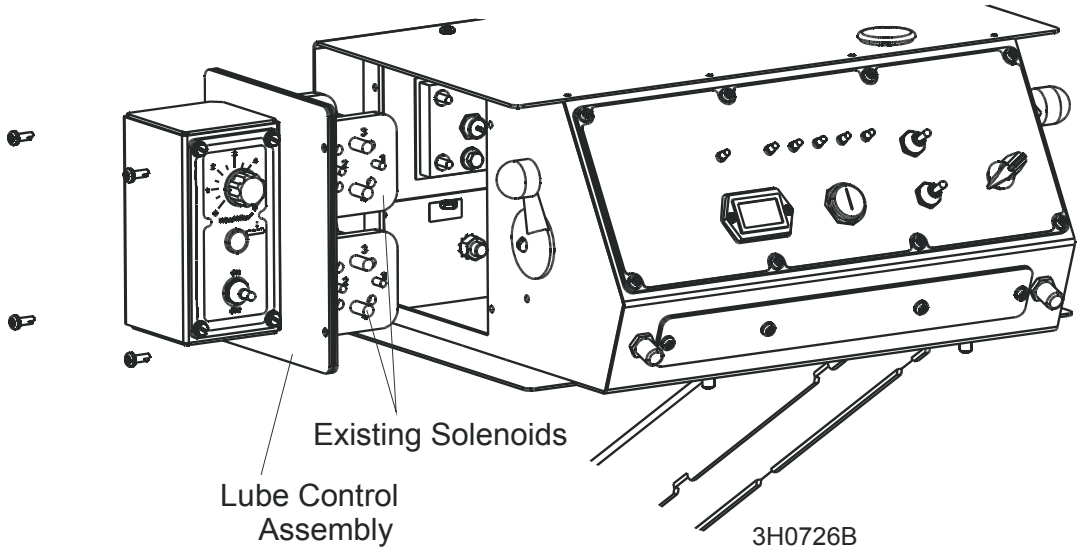


FIG. 1-1

6. The next step is wiring installation.

1.2 Control Box Wiring

LT30 Super	***Rev. C5.00+***
LT40 Super	***Rev. C5.00+***
LT30HD/40HD Super	***Rev. C5.00+***

DANGER! The key switch should still be off, the key removed and the negative battery cable disconnected as stated at the beginning of this section. The incoming power supply of electric-powered sawmills should be disconnected and locked out. Failure to do so will result in serious injury of death.

IMPORTANT! Avoid pinch and pivot points, unnecessary wire bending and open spaces where the wire could get caught by a log, etc. If you have any questions, call Wood-Mizer customer service.

Refer to the appropriate wiring diagram while performing the wiring steps below.

- Locate red wire #19 inside the sawmill control box. Disconnect wire #19 from the red jumper wire connected to the #2 drum switch terminal.
- Connect red lube wire #251 to red wire #19. Connect red lube wire #250 to the red jumper wire.
- Locate black wire #20 inside the sawmill control box. Disconnect wire #20 from the black jumper wire connected to the ground stud at the back of the control box.
- Connect blue lube wire #257 to black wire #20. Connect black lube wire #259 to the black ground jumper wire.

7. Using the existing mounting bolts, install the lube control assembly to the sawmill control box.

STOP

STOP! You have completed Control Box Wiring. Proceed to Section 1.3 Pump Installation And Wiring.

1.3 Control Box Wiring

LT30 Super ***Rev. C1.00 - C4.00***
LT40 Super ***Rev. C1.00 - C4.00***
LT30HD/40HD Super ***Rev. C1.00 - C4.00***

DANGER! The key switch should still be off, the key removed and the negative battery cable disconnected as stated at the beginning of this section. The incoming power supply of electric-powered sawmills should be disconnected and locked out. Failure to do so will result in serious injury of death.

IMPORTANT! Avoid pinch and pivot points, unnecessary wire bending and open spaces where the wire could get caught by a log, etc. If you have any questions, call Wood-Mizer customer service.

Refer to the appropriate wiring diagram while performing the wiring steps below.

- Locate red wire #19 connected to terminal #2 of the power feed drum switch. Cut wire #19 approximately 5" from terminal #2.
- Install a female terminal to the end of the 5" length of wire #19 that remains connected to terminal #2. Install a male terminal to the end of the remaining length of wire #19.

See Figure 1-2.

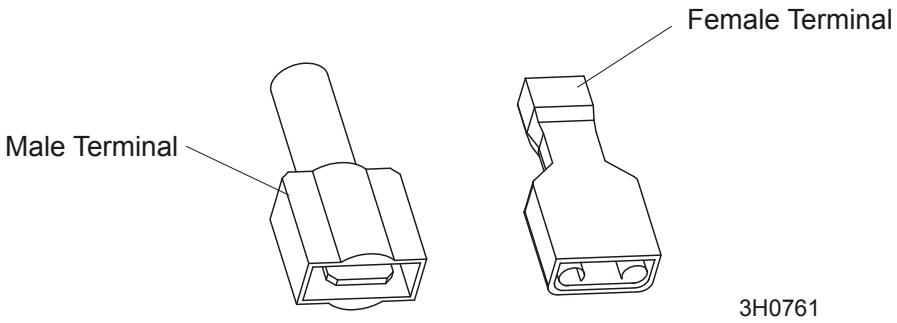


FIG. 1-2

- Connect red lube wire #250 to the female terminal on the 5" length of wire #19. Connect red lube wire #251 to the male terminal on the remaining length of wire #19.
- Locate black wire #20 connected to the ground stud at the rear of the sawmill control box. Cut wire #20 approximately 5" from the ground stud.

- Install a female terminal to the end of the 5" length of wire #20 that remains connected to the ground stud. Install a male terminal to the end of the remaining length of wire #20.
- Connect black lube wire #259 to the female terminal to the female terminal on the 5" length of wire #20. Connect blue lube wire #257 to the male terminal on the remaining length of wire #20.
- Using the existing mounting bolts, install the lube control assembly to the sawmill control box.

STOP! You have completed Control Box Wiring. Proceed to Section 1.3 Pump Installation And Wiring.

1.4 Control Box Wiring

LT30	***Rev. C4.00+***
LT40	***Rev. C4.00+***
LT30HD/40HD	***Rev. C5.00+***

DANGER! The key switch should still be off, the key removed and the negative battery cable disconnected as stated at the beginning of this section. The incoming power supply of electric-powered sawmills should be disconnected and locked out. Failure to do so will result in serious injury of death.

IMPORTANT! Avoid pinch and pivot points, unnecessary wire bending and open spaces where the wire could get caught by a log, etc. If you have any questions, call Wood-Mizer customer service.

Refer to the appropriate wiring diagram while performing the wiring steps below.

- Locate red wire #19 lying loose in the sawmill control box. (NOTE: Install a male connector to the end of wire #19 if one is not already supplied.) Connect red lube wire #251 to red wire #19.

  NOTE: If you have installed a water lube solenoid kit (#016141) there will be a fuse-holder assembly between wire #19 and the #2 drum switch terminal. Unplug the fuse holder assembly from wire #19 and plug red lube wire #251 in its place. Leave the assembly wire connected to the #2 drum switch terminal, but cut the wire 5" from the terminal. Install a female terminal to the end and connect red lube wire #250 to the female terminal.

- Locate the larger 10-gauge red wire connected to the #2 power feed drum switch terminal inside the control box. Crimp the supplied yellow T-tap terminal around the wire. Plug red lube wire #250 into the T-tap terminal.

See Figure 1-3.

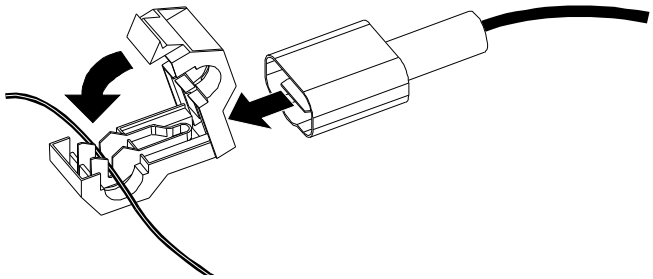


FIG. 1-3

- Locate black wire #20 connected to the ground stud in the rear of the sawmill control. Cut the wire in two approximately 5" from the ground stud.

- Install a female terminal to the end of the 5" length of wire #20 that remains connected to the ground stud. Install a male terminal to the end of the remaining length of wire #20.

See Figure 1-4.

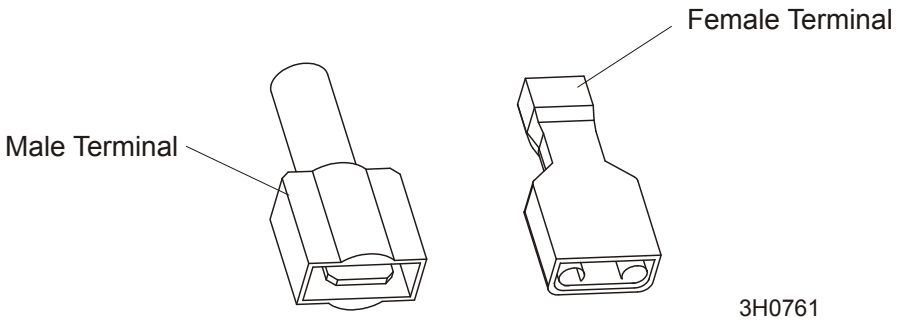


FIG. 1-4

- Connect black lube wire #259 to the female terminal on the 5" length of wire #20. Connect blue lube wire #257 to the male terminal on the remaining length of wire #20.

8. Using the existing mounting bolts, install the lube control assembly to the sawmill control box.

1.5 Pump Installation And Wiring

1. Remove the drive pulley guard from the sawmill as shown.

   See Figure 1-5.

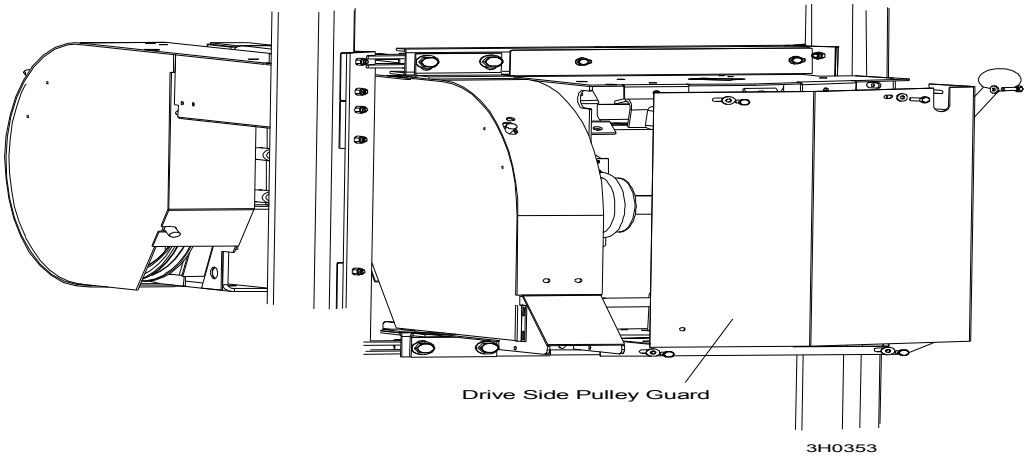


FIG. 1-5

2. Remove the left pan cover from the sawmill as shown.

   See Figure 1-6.

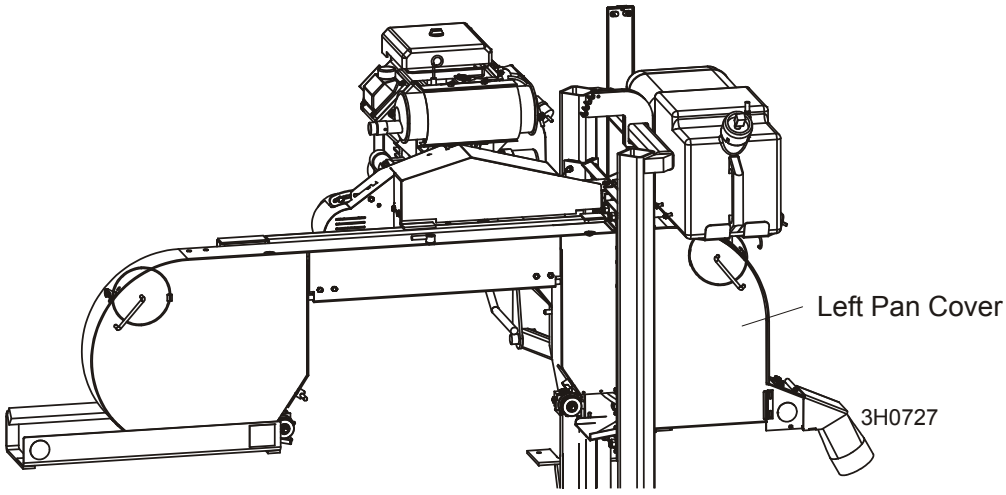


FIG. 1-6

3. Remove all 3/8" water lube hose from the mill.

4. Remove the water bottle and fuel tank from the mill and set aside.

5. ***For Super Mills Only,*** disconnect the red and black sawmill harness wires from the existing water solenoid valve. Remove the valve from the mill. ***NOTE:*** *This step also applies to Standard mill owners who have installed Water Solenoid Valve Kit 016141.*

6. Install the lube pump assembly to the mill as shown using the existing fuel/water mounting plate bolts and nuts.

   See Figure 1-7.

   NOTE: On older revision mills, the front bolt will be shorter. Replace this shorter bolt with the supplied longer, 1/4-20 x 3/4" bolt.

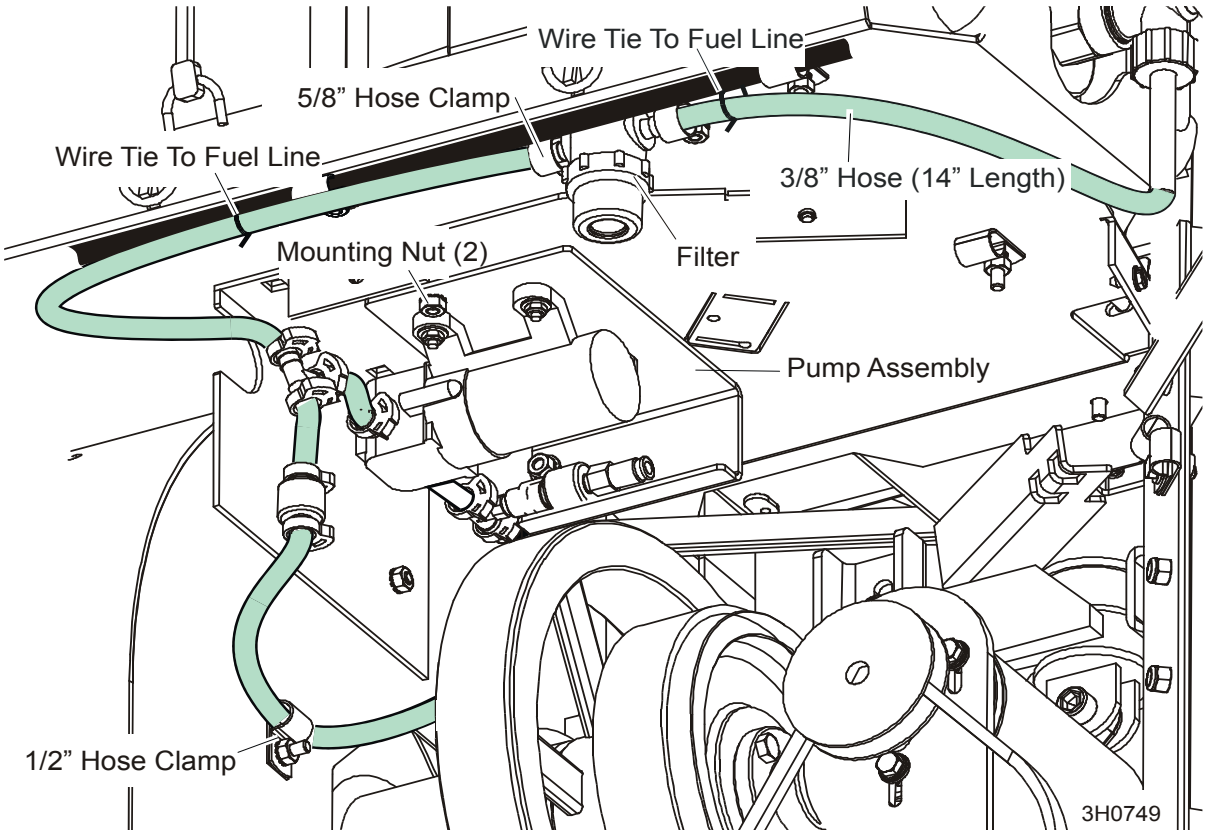


FIG. 1-7

7. Use the provided 1/4-20 x 3/4" hex head bolt and 1/4-20 self locking nut to secure the 1/2" hose clamp to the back of the blade housing as shown.

NOTE: Older revision mills do not have a hole in this location. Locate and drill one 9/32" hole as shown below. Be sure to unbolt the main fuel line hose clamps *shown in Figure 1-7* and move the fuel line hose out of the way before drilling.

See Figure 1-8.

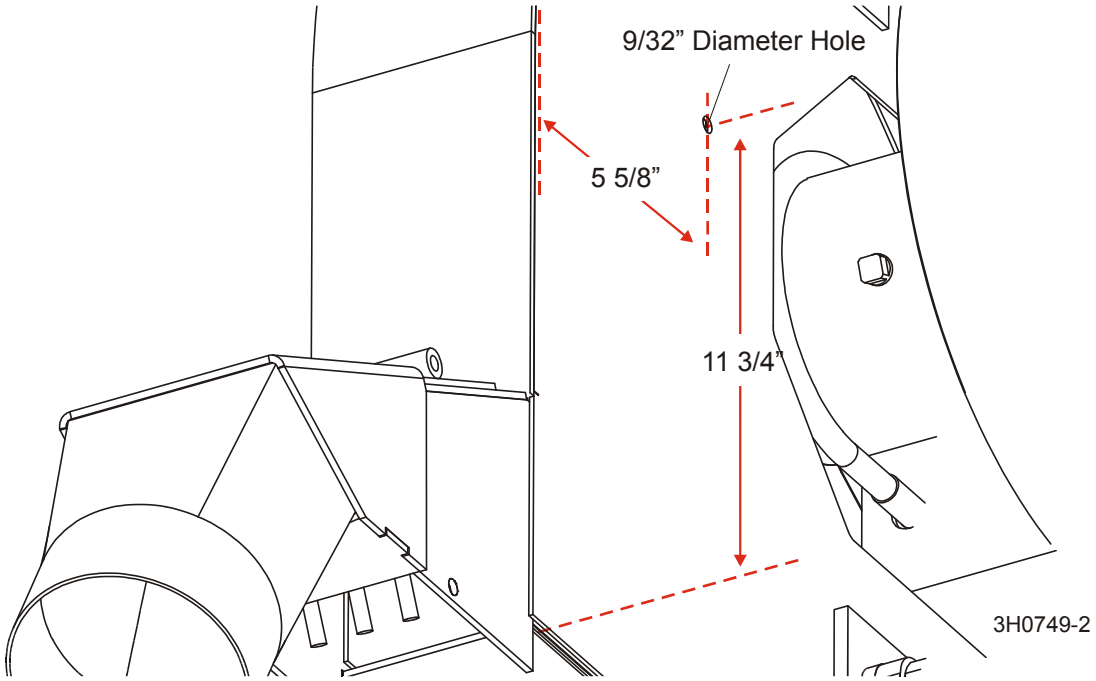


FIG. 1-8

8. Install the provided 14" length of 3/8" lube hose and the provided 5/8" hose clamp to the filter. Using the provided 1/4-20 carriage bolts and 1/4-20 locking nuts, secure the 5/8" hose clamps on either side of the filter in place. Be sure to install the carriage bolts from the top.

NOTE: Older revision mills do not have holes in this location. Locate and drill two 3/8" diameter holes as shown in the following graphic.

See Figure 1-9.

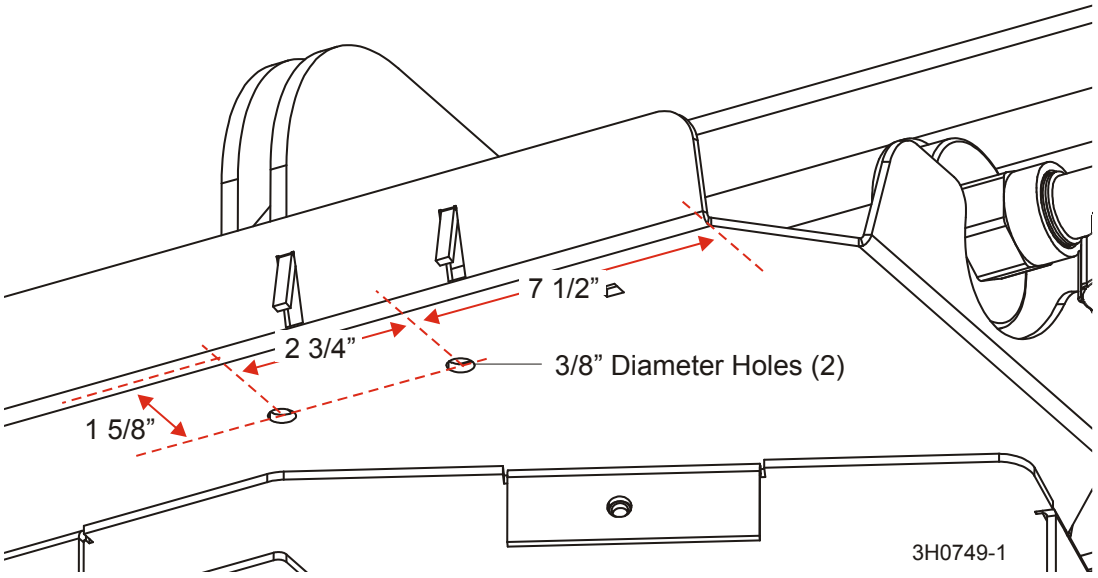


FIG. 1-9

9. Connect the remaining end of the 3/8" lube hose to the water bottle. Use wire ties as necessary to secure the lube hose out of the way of moving sawmill components.

DANGER! The key switch should still be off, the key removed and the negative battery cable disconnected as stated at the beginning of this section. The incoming power supply of electric-powered sawmills should be disconnected and locked out. Failure to do so will result in serious injury of death.

IMPORTANT! Avoid pinch and pivot points, unnecessary wire bending and open spaces where the wire could get caught by a log, etc. If you have any questions, call Wood-Mizer customer service.

10. Connect black sawmill harness wire #20 to the black lube harness wire. Connect red sawmill harness wire #19 to the red lube harness wire.

11. After making all wire connections, use the provided wire ties to secure the wires out of the way.

1.6 Water Lube Bottle Conversion and Hose Line Installation

1. Reinstall the bottle to the mill.

2. Reinstall the fuel bottle. If nescessary, resecure the fuel line hose clamps.

3. Remove the entire blade guide roller and block assembly from the sawmill.

4. Remove the roller from the block and install it to the provided lube blade guide block assembly.

   Wrap the threads of the provided fittings, nozzles and plug with teflon tape (pipe tape) and install the components to the blade guide block as shown in the following graphic. **NOTE:** An extra nozzle is provided for service replacement.

5. Install the lube block assembly to the mill. Orient the nozzles so that oil flow is directed on the blade.

6. Locate the provided 1/4" hose. Insert one end to the pump valve as shown. Route the hose through 1/2" hose clamp. Continue routing through the grommet in the motor mount and connect the remaining end to the fitting on the block assembly. Use wire ties to secure in place as necessary.

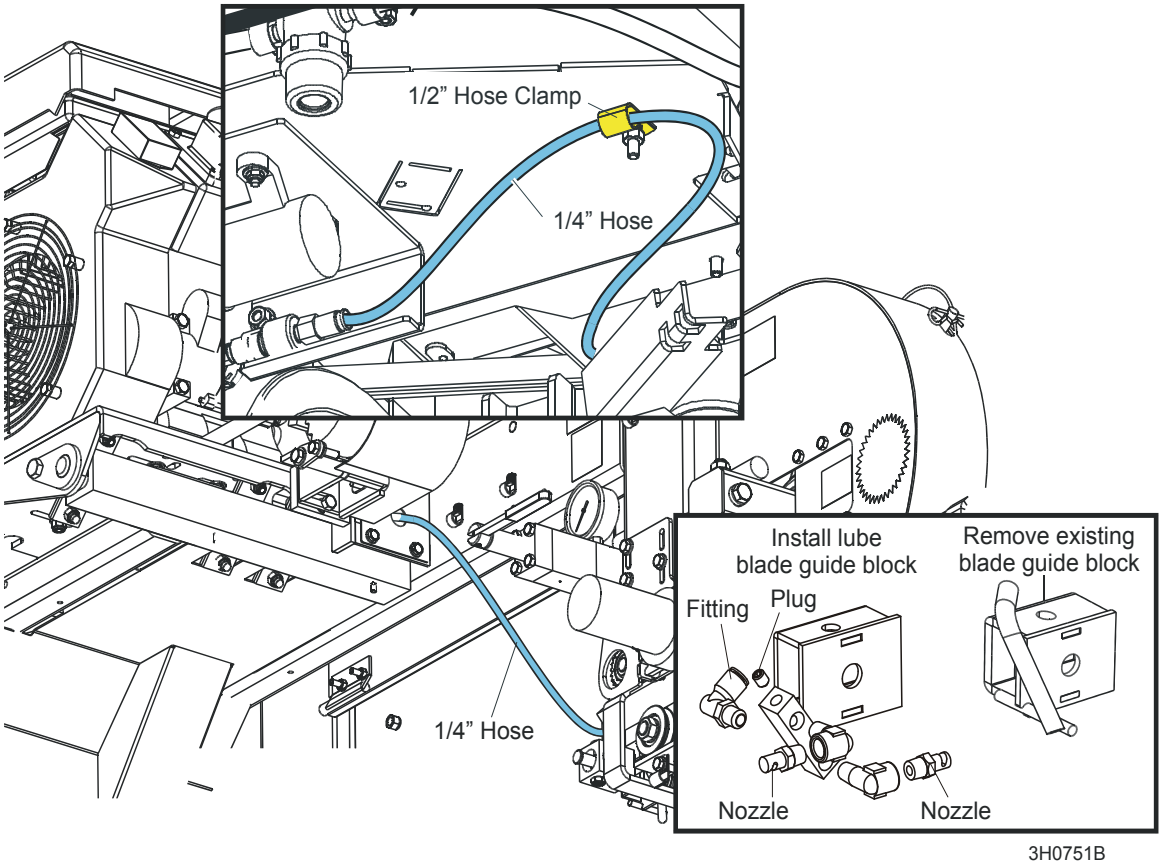

1/2” Hose Clamp
1/4” Hose
1/4” Hose
Install lube blade guide block
Remove existing blade guide block
Fitting
Plug
Nozzle
Nozzle
3H0751B

FIG. 1-9

1.7 Finishing Steps

1. Reinstall the drive side blade housing cover and left pan cover.

DANGER! Make sure all guards and covers are in place and secured before operating or towing the sawmill. Failure to do so may result in serious injury. Be sure the blade housing and pulley covers are in place and secure. Use the safety retainer pin and cable to fasten blade housing covers.

2. Reconnect the negative battery terminal cable and replace the battery box cover.

3. Align the inner blade guide assembly as instructed in the alignment section of your Wood-Mizer Operator's Manual. After blade guide alignment, be sure to check the scale indicator to make sure it is adjusted properly (procedure also found in the alignment section of your Wood-Mizer Operator's Manual).

SECTION 2 OPERATION

2.1 LubeMizer System

This option is used in place of the standard Water Lube system to lubricate the blade during sawing. The LubeMizer option applies lubricant to both sides of the blade as you are sawing to reduce resin buildup on the blade. The system utilizes an automatic valve which activates the lubricant flow only when the saw carriage is moving forward. The LubeMizer control box allows you to adjust the volume of lubricant for various wood types. The LubeMizer option uses less volume than the standard Water Lube, helping to reduce lubricant/sawdust mess and waste, and to prevent stained boards.

Usual flow will be between .07 and 2.5 gallons (2.6 - 9.5 liters) per hour.

1. To start the self-priming system,
   - Open the water lube bottle valve all the way.
   - Turn the sawmill control box key to the ACC or ON position.
   - Turn the lube control switch to PULSE [1] and set the lube dial to the desired flow rate. Use the lowest setting that successfully eliminates pitch buildup.

     NOTE: Softwood applications will usually require more lubricant than hardwood applications.
2. Cut the log as normal.
3. To shut of the lube,
   - Turn the lube control switch to OFF.
   - Close the lube bottle valve all the way.

See Figure 2-1. The lube control panel is shown in the following graphic.

[1] Pulse is suitable for most cutting applications. CONTINUOUS delivers a steady stream of lubricant and should be used only for heavy pitch buildup or occasional blade cleaning.

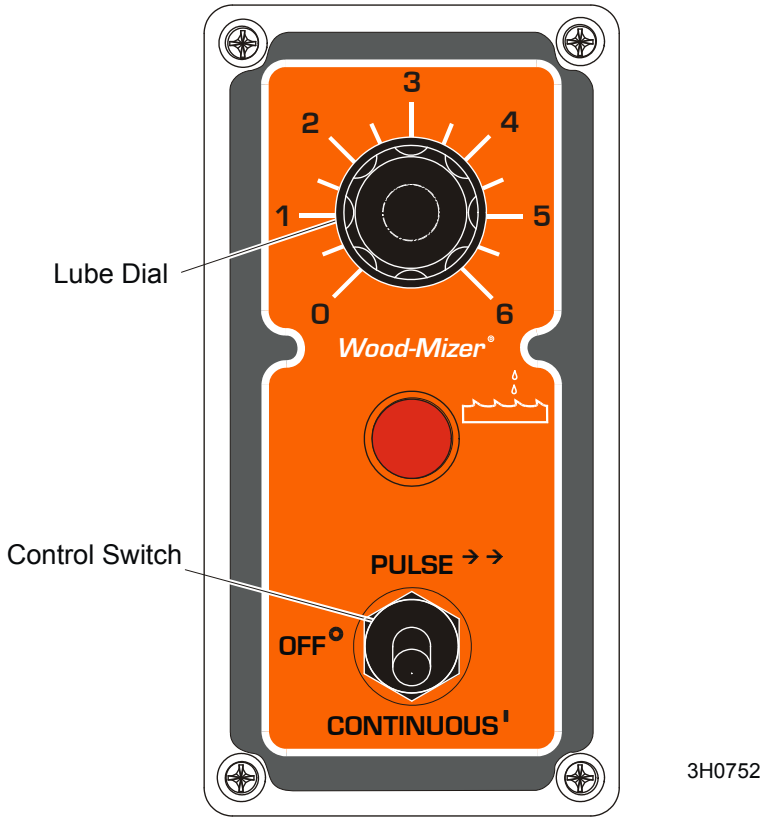


FIG. 2-1

4. If you are sawing or storing the sawmill in freezing temperatures, use windshield washer fluid to help prevent the water from freezing (*See Section 2.2*).

CAUTION! Add windshield washer fluid to the water tank and prime as recommended when sawing or storing the sawmill in below-freezing temperatures. Use windshield washer fluid with a freezing point of at least -20°F (-29°C). Failure to do so will cause damage to the LubeMizer system may result.

2.2 Lube Additives

For further benefits, add one 12oz. bottle of Wood-Mizer Lube Additive to a 5 gallon jug of water. Wood-Mizer Lube Additive enables some previously impossible 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! Use ONLY water, Wood-Mizer Lube Additive or windshield washer fluid with the water lube accessory. Never use flammable fuels or liquids such as diesel fuel. If these types of liquids are necessary to clean the blade, remove it and clean with a rag. Failure to do so can damage the equipment and may result in serious injury or death.

See Table 2-1. Use windshield washer fluid as an antifreeze to prevent the water from freezing and damaging the LubeMizer system. See the chart below for recommended mixture levels depending on the temperature where you are sawing or storing the sawmill.

Run the LubeMizer system on the “Continuous” setting for 30 seconds after adding the windshield washer fluid to the system. This will insure the water throughout the system will not freeze and damage the check valves.

CAUTION! Add windshield washer fluid to the water tank and prime as recommended when sawing or storing the sawmill in below-freezing temperatures. Use windshield washer fluid with a freezing point of at least -20°F (-29°C). Failure to do so may cause damage to the LubeMizer system.

Ratio WWF [1]:Water to fill 5 Gal. tank	Freezing Point Of Solution	
	(°F)	(°C)
5:0	-22	-30
4:1	-3	-19
3:2	7	-14
2.5:2.5	13	-10
1:4	24	-4
0:5	32	0

TABLE 2-1

[1] WWF = Windshield Washer Fluid with -20°F (-29°C) freezing point.

SECTION 3 MAINTENANCE

DANGER! On electric mills, hazardous voltage inside the disconnect box, starter box, and at the electric motor can cause shock, burns, or death. Disconnect and lock out power supply before performing service! Follow all applicable electrical codes.

DANGER! Make sure all electrical installation, service and/or maintenance work is performed by a qualified electrician and is in accordance with applicable electrical codes. Failure to do so will result in serious injury or death.

DANGER! Before performing any service to this equipment, turn the key to the OFF position, remove the key, and disconnect the battery ground terminal. Failure to do so will result in serious injury or death.

1. Clean the lube filter as needed.

   See Figure 3-1. To clean,

   - Make sure the lube control is in the OFF position and the lube bottle valve is closed all the way.
   - Unscrew the filter reservoir and flush with water.
   - Remove the cylindrical mesh filter and gently flush with water.

- Replace the filter and reservoir.

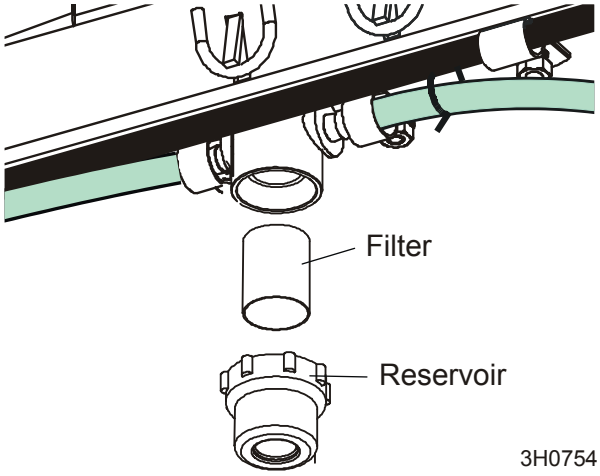


FIG. 3-1

2. Periodically check lube hoses and lines for buildup. Remove and flush with water as needed.

3. Periodically check the blade guide bracket nozzles for buildup. Remove and flush with water as needed.

   See Figure 3-2.

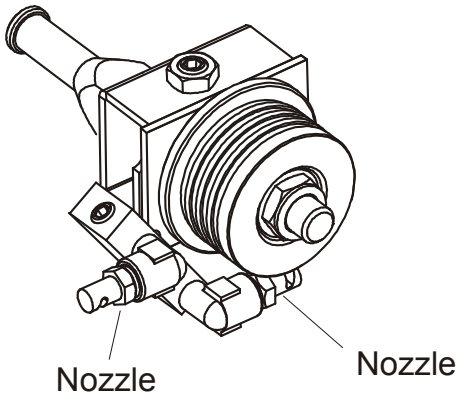
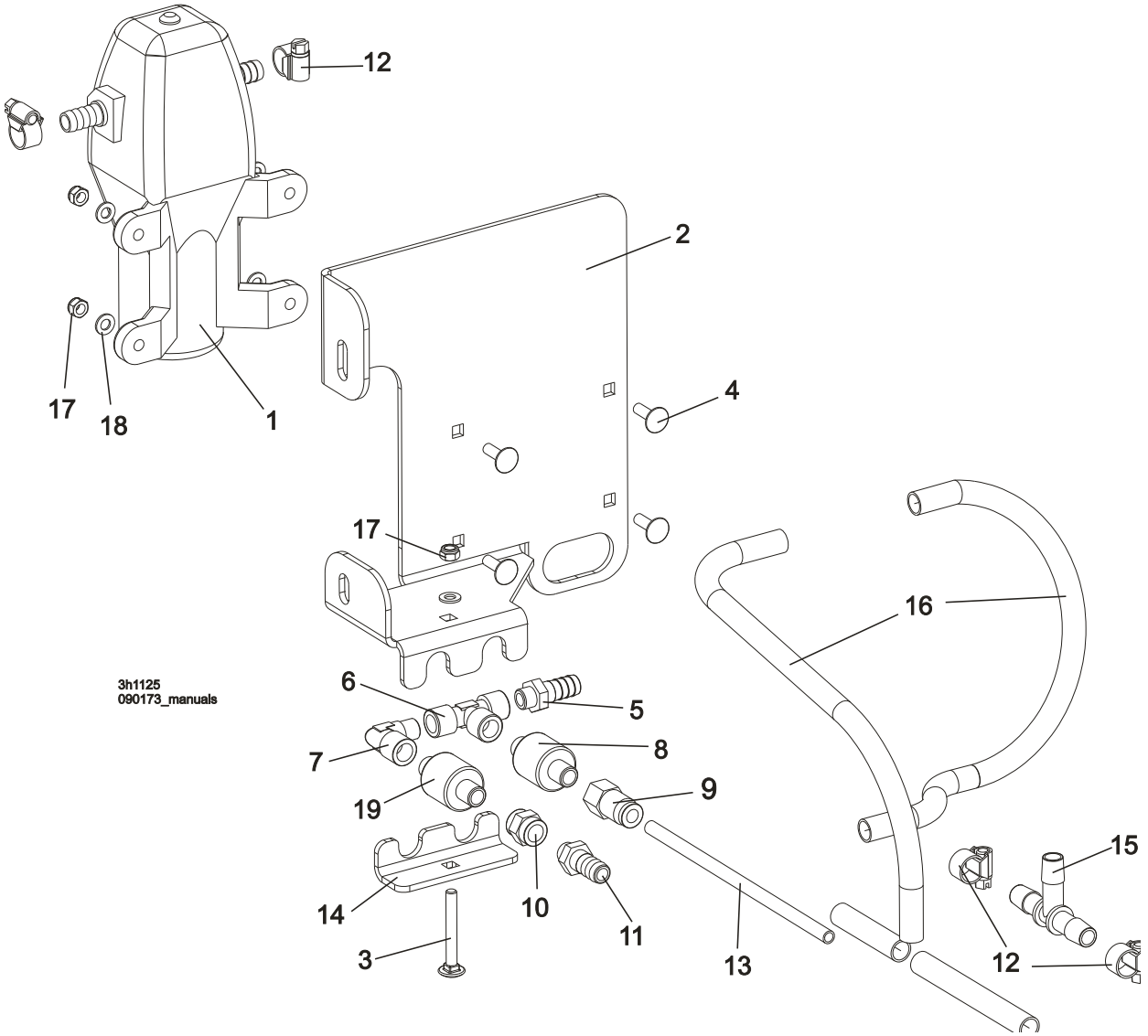


FIG. 3-2

SECTION 4 REPLACEMENT PARTS

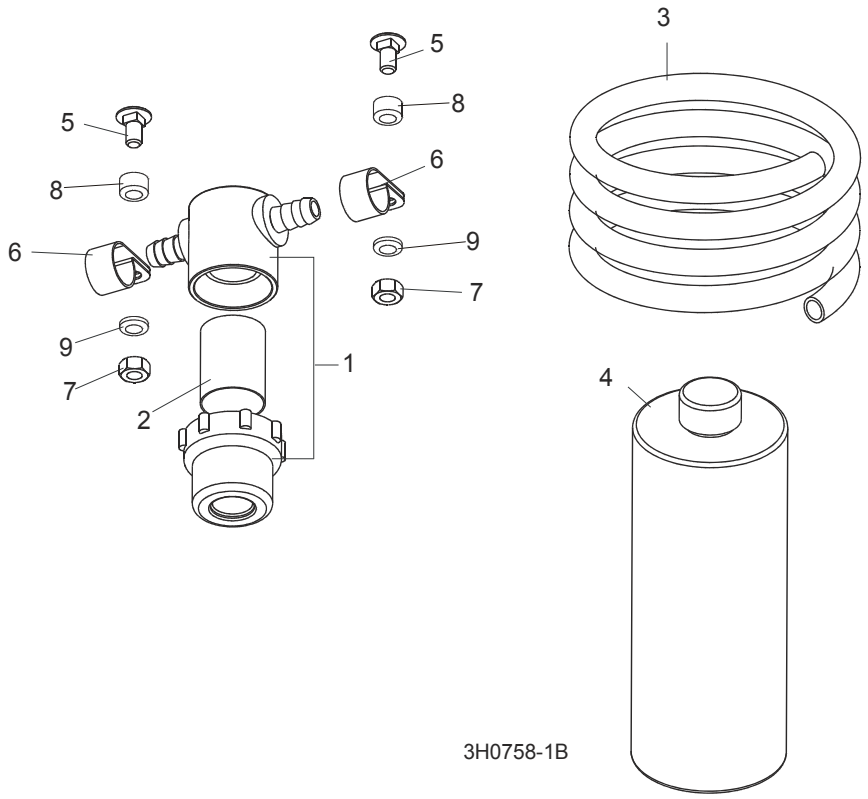
4.1 Pump Assembly



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	PUMP, LFP12V S/V 2C SW 35 NBP	512766	1	
2	PLATE, LMS PUMP MOUNT	513248-1	1	
3	BOLT, M5X40 DIN 603 CARRIAGE	F81000-76	1	
4	BOLT, M5X16 DIN 603 CARRIAGE	F81000-75	4	
5	FITTING, G1/8 THREADED (FOR 10MM HOSE)	512715	1	
6	FITTING, T WWW G1/8 THREADED TEE	512716	1	

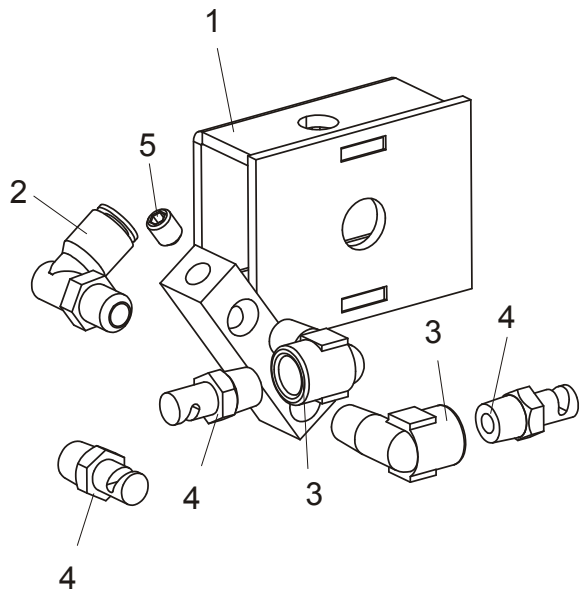
7	**ELBOW, WZ G1/8 THREADED**	512717	1	
8	**VALVE, 1/8'NPT 3PSI CHECK**	033449	1	
9	**FITTING, 1/4TBX1/8FPT, STRAIGHT AIR**	033450	1	
10	**NIPPLE, G1/8 FEMALE THREAD**	512718	1	
11	**FITTING, G1/8 THREADED (FOR 10MM HOSE)**	512715	1	
12	**CLAMP, 8-12 MM HOSE**	F81080-1	4	
13	**TUBING, 1/2" AIR LINE**	R01869-2		
14	**PLATE, 3 MM THICK ST3S**	512668-1	1	
15	**FITTING, 3/8 BARB TEE CONNECTOR**	033451	1	
16	**TUBING, WATER LUBE**	R01885		
17	**NUT, M5-8-Fe/Zn5 DIN985**	F81030-2	5	
18	**WASHER, 5.3 FLAT ZINC**	F81052-1	5	
19	**VALVE, 1/8'NPT 6PSI CHECK**	512790	1	
	CABLE, 1 SQ MM, RED	R80583-2	1,3m	
	CABLE H05V-K 1x1mm2 BK BLACK	R80583-21	1,5m	

4.2 Filter Assembly



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	**FILTER, PRESSURE LUBE**	033447	1	
2	Screen Kit, Mesh Filter	033441	1	
3	**TUBING, WATER LUBE**	R01885	1	
4	**ADDITIVE, BLADE LUBRICANT CASE**	ADD-2	1l	
5	**SCREW M6x25-8.8-Fe/Zn5 PN/M-82406**	F81001-20	2	
6	**CLAMP, 5/8" EMT COATED**	010748	2	
7	**NUT, M6-8-B HEX NYLON ZINC LOCK**	F81031-2	2	
8	**SPACER, WATER FILTER**	088728	2	
9	**WASHER, 6.5 FLAT ZINC SPECIAL**	F81053-11	2	

4.3 Blade Guide Block Assembly



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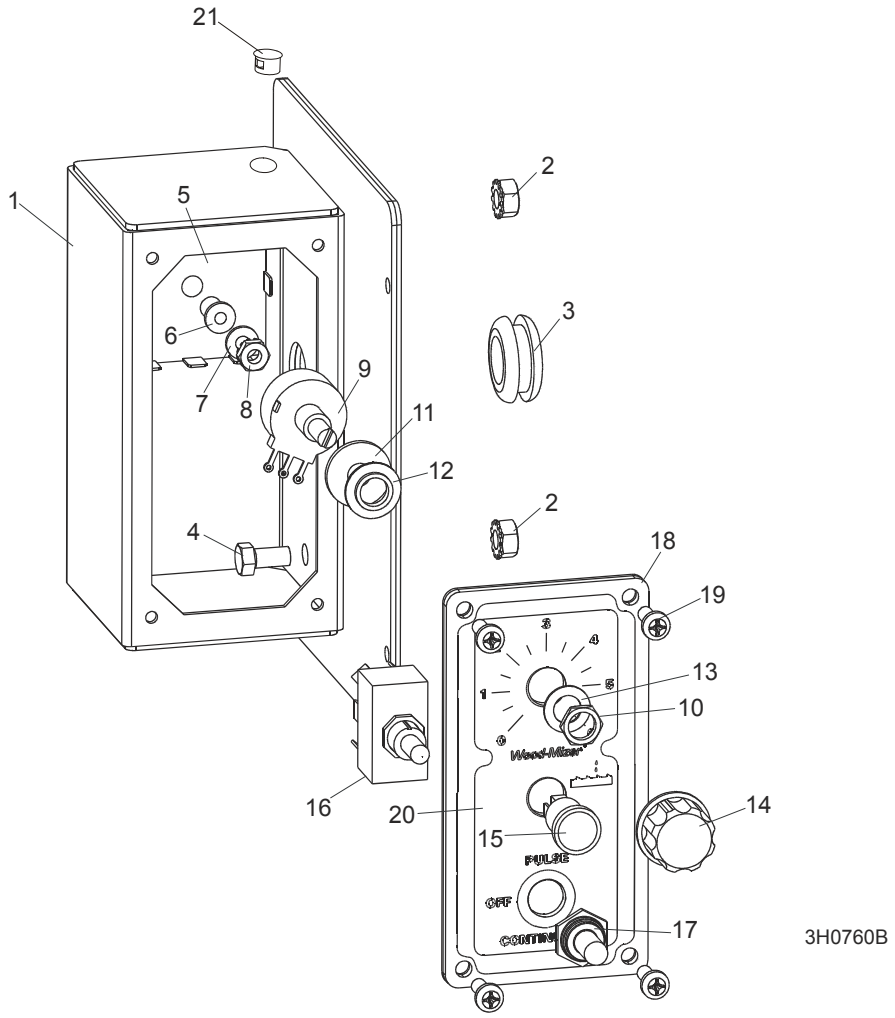
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	BLOCK WELDMENT, PRESSURE LUBE	033464	1	
2	FITTING, 90° ELBOW 1/8" MPT 1/4" TUBE SWIVEL	P09736	1	
3	FITTING, 1/8" NPT STREET ELBOW LONG	033440	2	
4	NOZZLE, BLADE LUBE SPRAY	033479	3	
5	FITTING, 1/16" NPT PLUG	P09206	1	

4.4 Control Box Assembly



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	CONTROL ASSEMBLY, LUBEMIZER	033480	1	
1	Control Box Weldment, LubeMizer	090456-1	1	
	Gasket, Side Panel	015274	1	◆
2	Nut, 1/4-20 Self Locking	F05010-9	2	
3	Grommet, HV12 White	R80670-1	1	
4	Bolt, 1/4-20 x 1/2” Hex Head	F05005-15	2	
5	Timer, Repeat Cycle 12VDC 1A .2 - 60 sec	024530	1	
6	Insulator, Nylon Screw #10 1/2”	024409	1	
7	Washer, #8 SAE Flat	F05011-41	1	
8	Nut, #10-24 Self Locking	F05010-14	1	
	Potentiometer Assembly, 500K 2W 10% CP Panel Mount w/Wires	024590	1	
9	Potentiometer	N/A	1	◆

10	Nut	N/A	1	◆
11	Washer, 5/16” Standard Flat	F05011-16	1	
12	Washer, 3/8” ID x 3/4” OD Nylon Shoulder	033454	1	
13	Washer, 3/8” ID x 5/8” OD x .032 Thick Nylon	033444	1	
14	Knob, 1/4” ID Fluted Round Plastic	033478	1	
15	Light, Green XB6 AV 3BB Tabs	087348	1	
16	Switch, 15A Toggle	024588	1	
17	Boot, Toggle Switch Sealing	024589	1	
18	Plate, LMS-DC Control Panel	090478-1	1	◆
	Gasket, LMS-DC Control Panel	090867	1	◆
19	Bolt, #10-24 x 1/2” Pan Head	F05015-17	4	
20	Decal, LMS-DC Control Panel	090514	1	◆
21	Plug, Hole 12.7 Heyman DP 500 #2643	086773	1	

SECTION 5 ELECTRICAL INFORMATON

5.1 Electrical Components

Component	Manufacturer Part No.	Manufacturer	Wood-Mizer Part No.	Description
F1	-	-	E85238	FITTING, FUSE, WITH WIRE CE PROTECTION
F2	-	-	E85238	FITTING, FUSE, WITH WIRE CE PROTECTION
L1	-	-	087348	Light, Green XB6 AV 3BB Tabs
Pot	N/A	N/A	024590	Potentiometer Assembly, 500K 2W 10% CP Panel Mount
R1	024591 A	Pioneer Standard	094807	Resistor, 47K / 0.25W
SW1	2GM51-73	Carlingswitch	024588	Switch, 15 Amp Toggle
T1	4600A-1-1-A	Artisan Controls	024530	Timer, Repeat Cycle 12VDC 1A .2-60 Seconds

5.2 Electrical Wiring Diagram