

## FORM 2508 MKIII (110212) DEBARKER INSTALLATION

## Part No. 110212 (used with LT40HD and LT50HD mills)

DESCRIPTION	PART #	QTY.
DEBARKER KIT, MKIII MECHANICAL ASSY	110212	
Assy, LT40 Mechanical Debarker, MKIII	110695	1
Key, 3/16 Sq x 5/8	065214	1
Assy, LT40 MKIII Debarker Pivot Arm	110694	1
Assy, LT40 Debarker Arm	110693	1
Assy, LT40 Deb. Upper Pivot, W/O Loc	110637	1
Shim, 1 ID 1-1/4 OD	076037	1
Belt, AX22	076689	1
Weldment, LT70 Debarker Belt Guard	076713	1
Pulley, 5x7/8 A Groove	076798	1
Bolt, 1/4-20x3/4 FT HHC	F05005-1	1
Bolt, 1/4-20x1 HH Gr5	F05005-101	1
Nut, 7/8-14 Half Nylock	F05010-238	1
Washer, 1/4 SAE Flat	F05011-11	2
Washer, 1/4 Split Lock	F05011-14	2
Decal, Revision	016187	1
Overlayment, Revision Decal	016200	1
Assy, LT70 Wide Debarker Pivot Stop	074879	1
Cover, 3/4HP Leeson Motor	015761	1
Grommet, Rubber, 1 x 1 3/4 Oval	085613	1
ROD END, 3/8-24 RIGHT HAND	018739	1
Spacer, .39x.625x.39	055323	1
Washer, 3/8 Flat SAE	F05011-3	10
Bolt, 3/8-16x4 HH Gr5	F05007-126	1
Bolt, 3/8-16x3 HH Gr5	F05007-73	3
Nut, 3/8-16 Hex Nyloc	F05010-10	4
Nut, 3/8-24 UNF Hex Jam	F05010-22	2
Pin, 3/8x1 3/8 Rnd Wire Lock	046412	1
Wire Kit, MRK III Debarker Extension	073671	1



**WARNING!** Turn the base unit's power to OFF, remove the key, and disconnect the battery ground terminal, if applicable.

Ensure all electrical installation, service, and/or maintenance is performed by a qualified electrician.

Ensure your unit is on a level surface and secure from movement.



## **DEBARKER INSTALLATION**



**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 debarker installation! Follow all applicable electrical codes.

**DANGER!** Before performing any service to this equipment, turn the key to the OFF (0) position, remove the key, and disconnect the sawmill battery ground terminal. Failure to do so will result in serious injury or death.



**CAUTION!** Due to various design changes and past retrofits and options, you should very carefully look your mill over to determine Debarker compatibility before beginning Debarker installation.

The Debarker Option may be installed to most sawmills with the required up/down chains and 60 amp or larger alternator systems.

Look at your sawmill up/down chains to verify they are the proper style for use with the Debarker Option. Refer to the chart below to determine if the Debarker Option may be installed on your specific sawmill.

Up/Down Chain Type	Install Debarker?	Comments	
Single #40	No	The Debarker Option can only be installed on sawmills equipped with dual up/down chains (after 7/86).	
Dual #40	Yes, if USA chain. See comments.	"USA" should be stamped into the side plates of the chain. If it is not, you will need to replace the existing chains with the proper specified chains. If you did not receive replacement chains with your Debarker order and find that you need them, call Wood-Mizer Customer Service at <b>1-800-525-8100</b> . Do not proceed with Debarker installation or further operation until your mill is equipped with the correct up/down chains.	
#50-2	Yes	The Debarker Option can be installed on any sawmill equipped with #50-2 up/down chain (after 3/97).	

#### TABLE 0-1

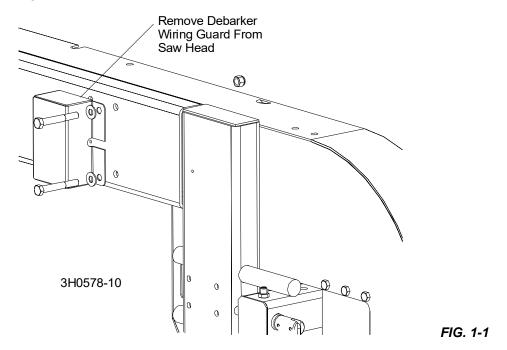
### **Debarker Mounting**

**NOTE:** You will not use all components of the debarker bag assembly during installation. Excess hardware is included to cover all possible mill variations and needs.

Sawmills are equipped with pre-drilled Debarker mounting holes. Verify hole locations before beginning Debarker installation. **Proper hole location is imperative for safe and effective Debarker operation.** 



The debarker wiring is pre-routed and secured at the debarker mounting location with a guard. This guard must be removed before the debarker can be installed.

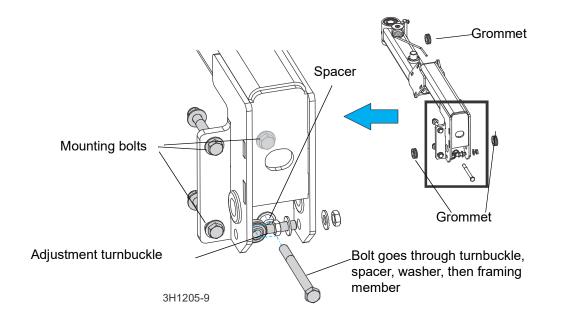


- 1. Assemble the adjustment turnbuckle (from the shipping hardware bag) to the debarker frame mounting arm.
- 2. Assemble the three larger grommets from the parts bag into the debarker frame mounting arm.
- 3. Open the middle blade housing cover.
- 4. Align the mounting arm holes with the holes in the saw head to insert the bolts from the front of the saw head, through the debarker mounting arm holes.

*NOTE:* The lower right bolt passes through the turnbuckle, then spacer, then washer before passing through the framing arm and sawhead.

- 5. Use hex head bolts, flat washers, and nuts to secure in place.
- 6. Use turnbuckle to adjust the framing arm until it is square to the saw head.
- 7. Tighten the jam nuts when the framing arm is square
- 8. Tighten all four framing bolts.



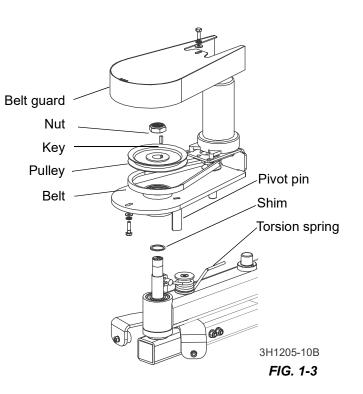




#### ASSEMBLE IN/OUT MOTOR.

- 1. Slide the shim (located in parts bag) over the mounting shaft.
- Slide the upper pivot assembly over the shaft on the framing arm.
- 3. Ensure the pivot pin is between the framing arm and the torsion spring.
- 4. Assemble the pulley, key, belt, nut, and belt guard

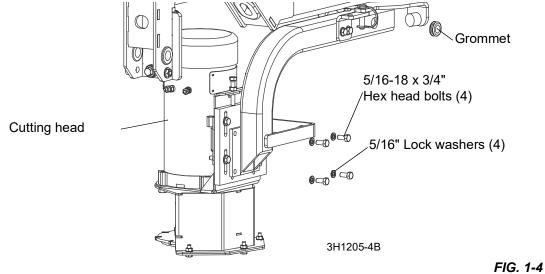
ASSEMBLE THE DEBARKER CUTTING HEAD TO THE MOUNT PLATE ON THE FRAME



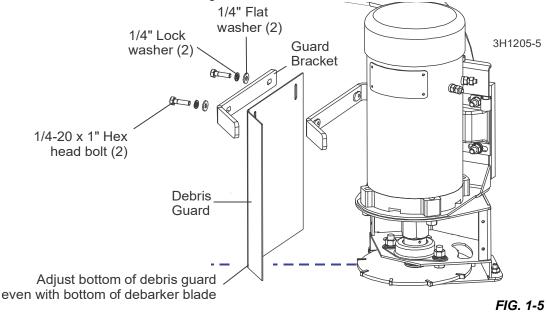
- 1. Install the remaining small grommet in the pivot arm tube near the upper end.
- 2. Use the four provided 5/16-18 x 3/4" bolts and 5/16" split lock washers to mount the cutting head to the debarker frame.
- 3. Use the lower set of four holes in the head mounting plate.



The upper set of holes are provided in the event the cutting head needs to be adjusted further down than the slotted motor mount holes will allow.



- 4. Install the blade guard bracket and flexible debris guard to the debarker head with two 1/4" flat washers, lock washers, and 1/4-20 x 1" hex head bolts.
- 5. Be sure the bottom of the debris guard is even with the bottom of the debarker blade.



## **Lower Harness Installation**



**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! Follow all applicable electrical codes.



**DANGER!** Before performing any service to this equipment, turn the key to the OFF (0) position, remove the key, and disconnect the sawmill battery ground terminal. Failure to do so will result in serious injury or death.

**NOTICE!** 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.

- 1. Remove the drive pulley housing and locate the wires (#21, 22, 23 & 24). The fifth wire (#25) is for the optional laser sight and should remain in place.
- 2. Remove the lower drive belt cover.
- 3. Slide the long piece of expandable conduit over all four wires.
- 4. Route the wire/conduit along the existing wiring under the sawmill engine/motor mount plate.
- 5. Secure the wires in the existing clamps or use the provided wire ties to secure the new harness to the existing harnesses.
- 6. Route the harnesses towards the debarker in/out and blade motors.
- 7. Install the provided rubber tubings to the wires on the blade motor harness.
- 8. Connect the provided blade motor harness extension to the blade motor harness using the bolts and nuts as shown in Figure 2-7.
- 9. Stretch the rubber tubings to secure the ring terminal connections properly.
- *10.* Install the wire ties to both ends of the rubber tubings.
- *11.* Continue routing the blade motor harness extension inside the debarker frame through the holes with grommets.



- Harness Rubber Wires Tubing Nut Small Wire Tie Secure In/Out Motor Wires with Wire Ties Extension Wires Connect In/Out Motor Cable Extension Bolt To In/Out Motor Wire Harness and In/Out Motor Saw Head Harness **1**00 000 Install Ring Terminals To Warning Light Wires. Install Boots Over Light And Motor Wires Warning And Connect To Debarker **Blade Motor** Light Blade Motor . Harness Wires 60 Extension 0 0 3H1211-3C FIG. 1-6
- 12. Cut the conduit of the in/out motor wire harness to expose the quick connect terminals.

- *13.* Remove the rubber cap from the in/out motor and install the removed conduit around the in/out motor wires.
- 14. Route the wires down the side of the in/out motor to the quick connects.
- *15.* Leave slack in the harness to avoid kinking and bending as the debarker moves in and out.
- *16.* Replace the rubber cap and secure the harness to the in/out motor by connecting two wire ties together and wrapping around the motor.
- 17. Use the provided in/out motor cable extension to connect the in/out motor wire harness to the in/out motor saw head harness.
- 18. Secure the harness to the blade motor frame with wire ties.



- *19.* Route the warning light harness on top of the blade motor pivot arm to the debarker blade motor.
- 20. Secure the warning light wires to the pivot arm with wire ties as shown in FIG. 1-6.



**DANGER!** Attach the blade motor wires as shown in FIG. 1-7. Failure to do so will result in serious injury or death.

The Mark III debarker motor spins in the opposite direction of the Mark II debarker. This throws the chips away from the operator.



**DANGER!** If installing the MKIII as an upgrade from a MKII, see the *do not reuse the mandrel or blade bolt from the MKII!* Failure to do so will result in serious injury or death.

The blade may loosen and spin off if the wrong hardware is applied.

- 21. Remove the top nuts from each of the motor terminals.
- 22. Route the black motor wires from both the motor and warning light harnesses through one of the rubber boots and the red motor and light wires through the other rubber boot.
- 23. Connect the red motor and light wires to the *left motor terminal and replace* the terminal nut to secure the wires. *See FIG. 1-7*

**NOTICE** Make sure that the ring terminals do not touch the motor body.

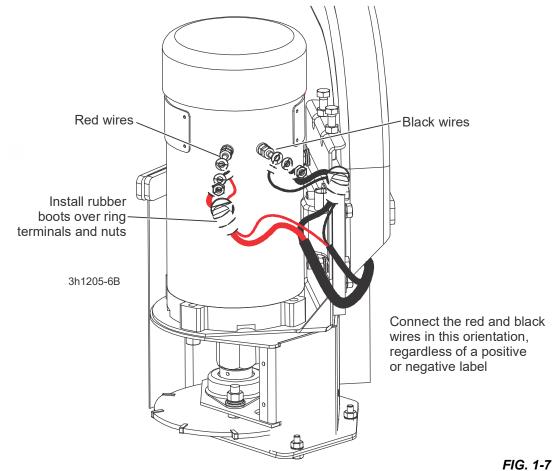
24. Connect both black wires to the *right motor terminal* and replace the terminal nut to secure the wires. *See FIG. 1-7!* 

**NOTICE** Make sure that the ring terminals do not touch the motor body.

25. Slide the rubber boots over the motor terminal posts to protect the connections.



26. Replace all removed covers and guards.



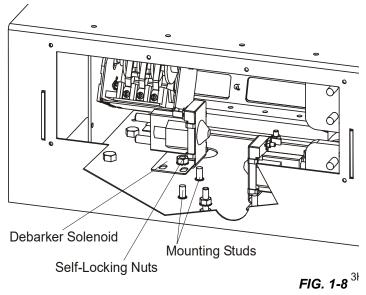
## **Control Component Installation (Non-Remote Mills)**

**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! Follow all applicable electrical codes.

**DANGER!** Before performing any service to this equipment, turn the key to the OFF (0) position, remove the key, and disconnect the sawmill battery ground terminal.

- 1. Remove the side, front and rear panels (leave wire connections) from the control box.
- 2. Locate the solenoid mounting studs in the control box.
- 3. Place the solenoid on the mounting studs and place the diode assembly ring terminal over one of the studs.

- 4. Use the two 1/4-20 self-locking nuts provided to secure in place.
- 5. Remove the two small bolts and nuts and the one large bolt and nut from the back of the control box.
- 6. Locate the bundle of wires on the floor of the sawmill control box.
- 7. Make sure the large black #24 wire is connected to the rear ground stud.
- Connect the large red #23 wire to the empty terminal on the provided 70 amp breaker.



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**CAUTION!** Do not overtighten this connection. Overtightening could cause component breakage.

- 9. Install the 70 amp breaker and rubber boot to the large hole on the back of the control box.
- *10.* Ensure the breaker terminals do not touch any other components or wires inside the control box.
- *11.* Install the provided 15 amp breaker to the two small holes in the back of the control box (position the breaker so the reset tab is near the rear opening of the control box).



12. Use the existing screws and nuts (removed earlier) to secure in place.

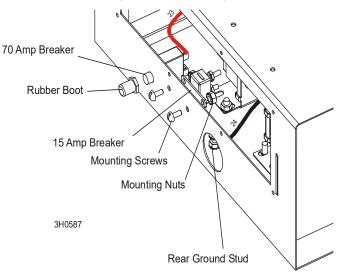
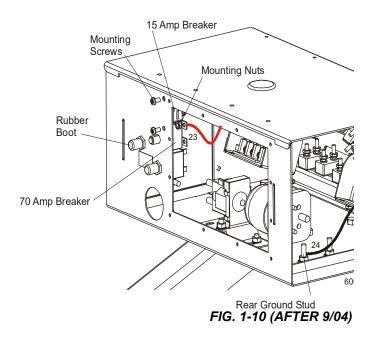


FIG. 1-9STANDARD (ALL) & SUPER (BEFORE 9/04)

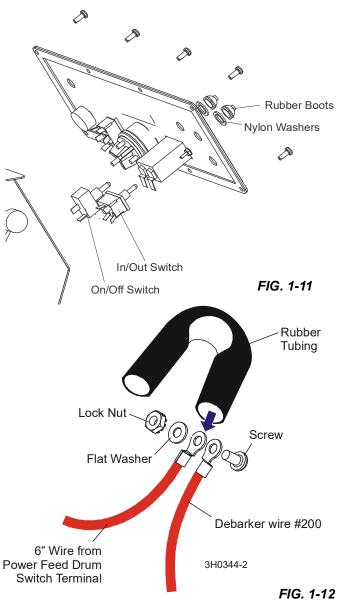




- 13. Using the back side of the front panel for a guideline, cut out holes in the front panel lexan decal for the debarker switches.
- 14. Install the provided toggle switches, 1/16" nylon washers, and rubber boots in place as shown.
- 15. Connect the red #205 wire from the 15 amp breaker to the ACC post on the key switch.
- 16. Make sure the red #206 wire from <sup>7</sup>/<sub>2</sub> the 15 amp breaker to the debarker in/out switch is connected.
- 17. Connect the red #202 wire from the debarker solenoid to the DBKR terminal on the LED board.

**NOTE:** If the control box is not equipped with the LED board, remove the red #202 wire from the debarker solenoid.

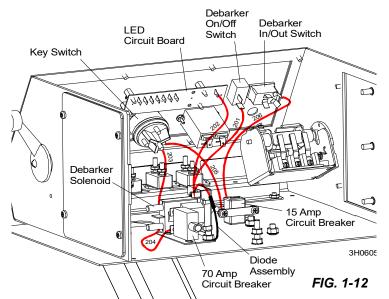
- *18.* Make sure the red #201 wire from the small terminal on the debarker solenoid to the debarker on/off switch is connected.
- 19. Connect the red #203 wire from debarker solenoid to the BAT post of the key switch.



20. Make sure the red #204 wire from the bottom debarker solenoid terminal to the 70 Amp breaker is connected.

**NOTE:** Box housing removed for clarity. Only wires referred to above are shown. Standard control box shown, Super model control differs slightly.

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21. Connect the red #200 wire from the debarker on/off switch to the sawmill control:

**LT40HD-H Hydro Models:** Connect red wire #200 to the existing short red wire connected to relay L13 mounted on the back of the control box. Use the provided #10 screw, washer and lock nut to connect the wires. Wrap the connection with the provided piece of rubber tubing and secure with a tie wrap.

**LT40HD Super/LT50HD Wireless Models:** Connect red wire #200 to the existing short red wire connected to terminal #T13 of the wireless interface control board. Use the provided #10 screw, washer and lock nut to connect the wires. Wrap the connection with the provided piece of rubber tubing and secure with a tie wrap.

**Super Models between 9/04 and 7/10:** Connect red wire #200 to the existing short red wire connected to terminal #3 of the power feed drum switch. Use the provided #10 screw, washer and lock nut to connect the wires. Wrap the connection with the provided piece of rubber tubing and secure with a tie wrap.

All Standard Models & Super Models before 9/04 and after 8/10: Connect red wire #200 to terminal #2 of the power feed drum switch.

**NOTE:** Some sawmills are equipped with a short red wire connected to terminal #2 of the power feed drum switch. If so, connect debarker wire #200 to the end of the short wire with the provided #10 screw, washer and lock nut. Wrap the connection with the provided piece of rubber tubing and secure with a tie wrap. If no short wire exists, connect debarker wire #200 directly to power feed drum switch terminal #.2

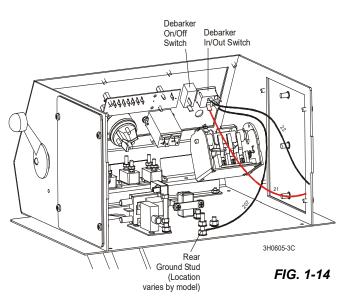
22. Connect the black #207 wire from the debarker in/out switch to the rear ground stud.



- 23. Locate the bundle of wires on the floor of the sawmill control box. Make sure the debarker in/out switch is oriented horizontally as shown.
- 24. Connect the small red #21 wire to the debarker in/out switch bottom left terminal.
- 25. Connect the small black #22 wire to the debarker in/out switch top left terminal.

**NOTE:** Box housing removed for clarity. Only wires referred to above are shown. Standard control box shown, Super model control differs slightly.

26. Reinstall the front and rear panels, side panel, and control box top cover to the control box.



### **Control Component Installation (Remote Mills)**

**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! Follow all applicable electrical codes.

**DANGER!** Before performing any service to this equipment, turn the key to the OFF (0) position, remove the key, and disconnect the sawmill battery ground terminal.

<u>See Section 2.3</u> if assembling the Debarker option to a sawmill not equipped with the remote operation option. <u>See SECTION 5</u> for a complete wiring diagram to aid in installation.

#### REMOTE POWER BOX COMPONENT INSTALLATION

- 1. Open the remote power junction box door.
- 2. Install the debarker solenoid next to the existing solenoid with the two bolts and nuts provided in the bottom of the box.
- 3. Place the diode ring terminal over one of the solenoid mounting bolts before securing with the nuts.
- 4. Locate the large red #23 wire in the remote power box and connect it to the empty terminal on the provided 70 Amp breaker.





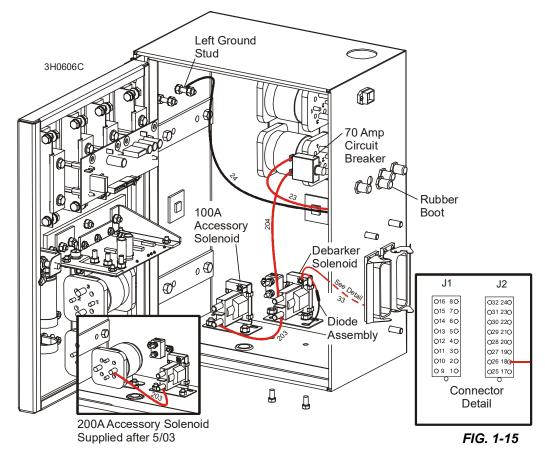
**CAUTION!** Do not overtighten this connection. Overtightening could cause component breakage.

- 5. Remove the bolt and nut from the hole in the side of the remote power box and install the 70 Amp breaker and rubber boot to the hole.
- 6. Ensure the breaker terminals do not touch any other components or wires inside the control box.
- 7. Make sure the large black #24 wire is connected to the side ground stud.
- 8. Locate the small red #33 wire from connector J2 terminal #18.
- 9. Connect it to the small, top terminal on the debarker solenoid.
- *10.* Connect large red #203 wire from the large bottom terminal of the debarker solenoid to the accessory solenoid:

100A Solenoid before 5/03: Connect red wire #203 to the large bottom terminal.

**200A Solenoid after 5/03:** Connect red wire #203 to the large terminal closest to the debarker solenoid.

#### Only wires referred to above are shown.

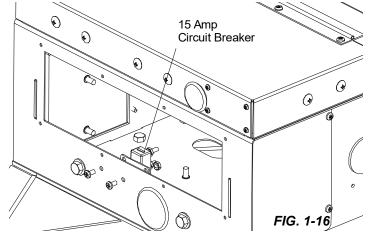




Close the remote power box door. Engage the door latch and tighten with a hex key to properly seal the box.

#### SAWMILL CONTROL BOX COMPONENT INSTALLATION

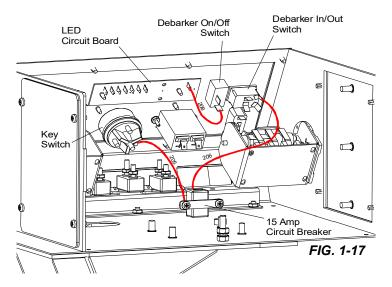
- 1. Remove the rear panel from the sawmill control box (leave wire connections).
- 2. Remove the two small bolts and nuts from the back of the control box.
- 3. Install the provided 15 Amp breaker to the two small holes in the back of the control box (reset tab up).
- 4. Replace the screws and nuts to secure the breaker to the back panel.



- 5. Using the back side of the front panel for a guideline, cut out holes in the front panel lexan decal for the debarker switches. Install the provided toggle switches, 1/16" nylon washers, and rubber boots in place as shown.
- 6. Connect the red #205 wire from the 15 Amp breaker to the ACC post on the key switch.
- 7. Make sure the red #206 wire from the 15 Amp breaker to the debarker in/out switch is connected.
- 8. Connect the red #208 wire from the debarker on/off switch to the DBKR terminal on the LED board.

**NOTE:** If the control box is not equipped with the LED board, remove the red #208 wire from the debarker on/of switch.



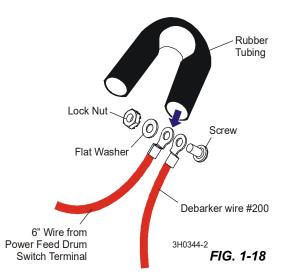


#### Box housing removed for clarity. Only wires referred to above are shown.

9. Connect the red #200 wire from the debarker on/off switch to the power feed drum switch.

**Super Models after 9/04:** Connect red wire #200 to the existing short red wire connected to terminal #3 of the power feed drum switch. Use the provided #10 screw, washer and lock nut to connect the wires. Wrap the connection with the provided piece of rubber tubing and secure with a tie wrap.

All Standard Models & Super Models before 9/04: Connect red wire #200 to terminal #2 of the power feed drum switch. NOTE: Some sawmills are equipped with a short red wire connected to terminal #2 of the power feed drum switch. If so, connect debarker wire #200 to the end of the short wire with the provided #10 screw, washer

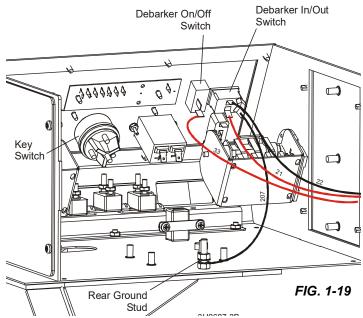


and lock nut. Wrap the connection with the provided piece of rubber tubing and secure with a tie wrap. If no short wire exists, connect debarker wire #200 directly to power feed drum switch terminal #2.

10. Connect the black #207 wire from the debarker in/out switch to the rear ground stud.



- 11. Locate the bundle of wires on the floor of the sawmill control box.
- 12. Ensure the debarker in/out switch is oriented horizontally as shown.
- 13. Connect the small red #21 wire to the debarker in/out switch bottom left terminal.
- *14.* Connect the small black #22 wire to the debarker in/out switch top left terminal.
- 15. Connect the small red #33 wire to the male terminal extension on the debarker on/off switch bottom terminal.
- 16. Reinstall the control box panels.





## ALIGNMENT



**DANGER!** Before performing any service to this equipment, turn the key to the OFF (0) position and remove the key. Failure to do so will result in serious injury or death.

**NOTICE!** The debarker blade must swing parallel to the sawmill blade and be aligned vertically with the sawmill blade to insure proper operation.

#### Level the in/out swing

- 1. Turn the key to ACC (3) and use the debarker in/out switch to move the debarker all the way **outward**.
- 2. Turn the key to OFF (0) and remove the key to prevent the debarker from being turned on while performing alignment procedures.
- 3. Clip the blade guide alignment tool (or an appropriate straight edge) to the sawmill blade.

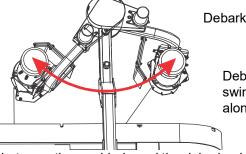
**NOTICE!** Make sure the tool lies flat on the blade and does not contact a tooth that could cause it to angle.

- 4. Mark the position of the debarker blade in relationship to the bottom of the blade guide alignment tool. (Measurement A in FIG. 1-20.)
- 5. Turn the key to ACC (3) and use the debarker in/out switch to move the debarker all the way *inward*.
- 6. Turn the key to OFF (0) and remove the key to prevent the debarker from being turned on while performing alignment procedures.
- 7. Mark the position of the debarker blade in relationship to the bottom of the blade guide alignment tool. (Measurement B in FIG. 1-20.)



The debarker blade should be the same distance from the sawmill blade during the entire swing of the debarker.

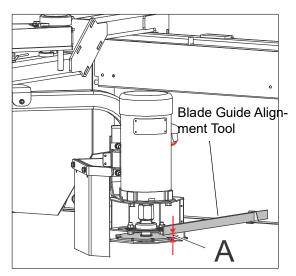
Debarker fully inward



Debarker fully outward

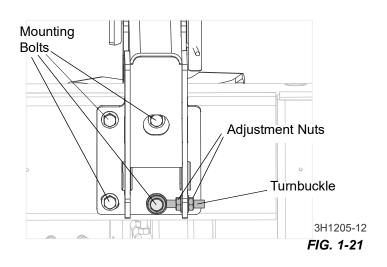
Debarker blade must swing evenly horizontal along entire arc.

Record the distance between the sawblade and the debarker blade at both ends of the operating arc. Adjust frame until measurements are equal.



Debarker fully inward

- 8. Use the turnbuckle on the frame arm mount to adjust the debarker until it is square with the sawmill.
- 9. *Lightly* loosen the four mounting bolts for the framing arm.
- 10. Loosen one of the turnbuckle adjustment nuts while tightening the other to move the turnbuckle in the desired direction.



B

Debarker fully outward

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FIG. 1-20



## Adjust the blade height

1. Clip the blade guide alignment tool (or an appropriate straight edge) to the sawmill blade. (Refer to Figure 2-3.)

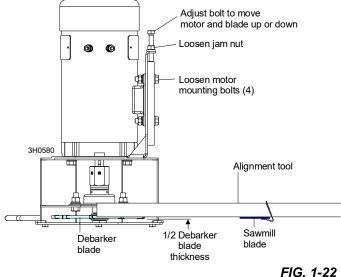
**NOTICE!** Make sure the tool lies flat on the blade and does not contact a tooth that could cause it to angle.

2. Check the height of the debarker blade against the alignment tool.

The bottom edge of the tool should align with the center of the debarker blade.

- 3. Loosen the four blade motor mount bolts.
- 4. Loosen the jam nut on the adjustment bolt.
- 5. Turn the adjustment bolts as needed to raise or lower the motor/blade assembly.
- 6. Turn the appropriate adjustment bolt to level the blade.

**NOTICE!** Make sure the blade is level.



- 7. Retighten the adjustment bolt jam nut and four motor mount bolts.
- 8. Turn the key to ACC (3) and use the debarker in/out switch to move the debarker all the way **outward**.
- 9. Turn the key to OFF (0) and remove the key to prevent the debarker from being turned on while performing alignment procedures
- *10.* Move the blade guide alignment tool on the sawmill blade and recheck the position of the debarker blade against the tool.
- 11. If the debarker blade is not centered with the tool, the debarker is not swinging level. Repeat the <u>Level the in/out swing</u> procedure.



## **OPERATION AND MAINTENANCE**

## **Travel Lock Pin**

The debarker is equipped with a travel lock pin. Insert the lock pin to lock the debarker in place when towing the sawmill. Remove the lock pin to unlock the debarker while the debarking is required during sawing.

12. Before operating the debarker, make sure the lock pin is secured in its travel position. Turn the key switch to OFF (0) and remove the key. Pull the debarker out to relieve pressure on the lock pin. Remove the lock pin.

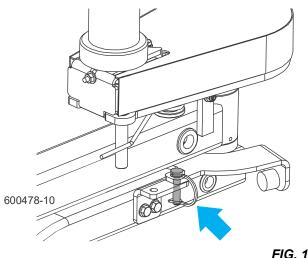
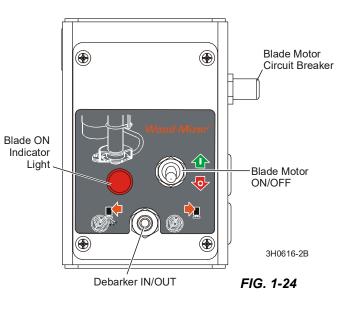


FIG. 1-23

- *13.* **Before towing the sawmill**, lock the debarker in the travel position. Turn the key switch to ACC (3) and use the debarker in/out switch to move the debarker all the way in. Turn the key to OFF (0) and remove the key. Push the debarker in until the travel position holes align. Insert the lock pin.
- *14.* **To move the debarker out of the way during sawing,** turn the key switch to ACC (3) and use the debarker in/out switch to move the debarker all the way out.

### **Control Overview**

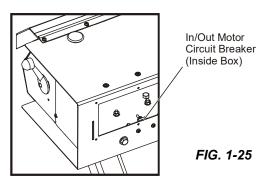
The Debarker Option allows removal of bark from logs ahead of the bandsaw blade. This prevents the bandsaw blade from contacting dirt, sand, or other debris in the bark that can dull the blade.



The debarker control includes two toggle switches, an indicator light, and circuit breakers with manual reset.

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The Debarker IN/OUT toggle switch controls the debarker in/out motor to move the debarker cutting head toward or away from the log. The sawmill key switch must be on before the in/out function can be performed.



**NOTE:** The distance between the debarker blade and the side support with the cutting

head all the way in is  $6^{''}$  (150mm) for the sawmill equipped with the standard head and 12" (300mm) for the sawmill equipped with the wide head.

- The Blade Motor ON/OFF toggle switch turns the blade motor on to start the debarker blade. The sawmill key switch must be on and the sawmill power feed drum switch must be activated in the forward direction before the blade motor can be turned on.
- The Blade ON indicator light comes on whenever the debarker blade motor is on.
- The blade motor circuit breaker can be reset by pushing the boot-covered tab on the side of the control box.

#### Operation



**DANGER!** Make sure all guards and covers are in place and secured before operating the debarker option. Failure to do so may result in serious injury.

**DANGER!** Keep all persons out of the path of moving equipment when operating the debarker. Failure to do so will result in serious injury.

- 1. Remove the blade motor cover before operating the debarker.
- 2. Make sure the warning light is on when the debarker is turned on.



**WARNING!** Debarker is ON when warning light is on. DO NOT disconnect the warning light. Doing so may result in serious injury.

3. Use the in/out switch on the control box to pivot the debarker all the way out.



4. Move the sawmill carriage forward and pivot the debarker in until the front fence engages with the end/side of the log.



- 5. Turn the debarker on/off switch to ON (1).
  - . .
- Proceed with cutting. The actuator will keep the debarker against the side of the log. Depending on log shape, you may have to pivot the debarker in and out for smooth cutting.

**NOTE:** The debarker can continuously remove up to approximately 1" of material from the log; no motor cool down time is required. Slower feed rates may be required for optimal debarker operation.

7. Once the carriage is past the end of the log, pivot the debarker away from the log. Return the carriage.

**NOTICE!** Should the carriage be returned before the debarker has been pivoted out of the way of the log, the debarker is designed to pivot upwards. If this happens, continue to **SLOWLY** return the carriage; or stop, pivot the debarker out and then return the carriage. **DO NOT** move the carriage forward while the debarker is contacting the log without the blade spinning.

- 8. When done sawing and ready to store or transport the sawmill, replace the debarker blade motor cover.
- 9. Place the debarker in its travel position before towing the sawmill.

#### Maintenance

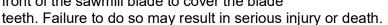


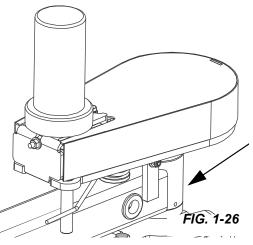
**DANGER!** Before performing any service to this equipment, turn the key to the OFF (0) position and remove the key. Failure to do so will result in serious injury or death.

- 1. Lubricate the pivot joint with a NLGI #2 grade lithium grease every 40 hours of operation.
- 2. Periodically check and/or adjust the guard up or down so the bottom is even with the bottom of the debarker blade. Replace the guard as needed.
- 3. Periodically check the debarker blade. Align or replace as needed.



WARNING! Before replacing the debarker blade, move the sawmill blade guide arm in front of the sawmill blade to cover the blade







#### **REPLACING BLADE**

- 1. Remove the lower blade guard plate.
- 2. Place one wrench on the blade arbor, above the blade bearing.
- 3. Place the other wrench on the lower bolt and rotate clockwise (bolt has left-hand threads).
- 4. Remove the bolt and washer. Remove the blade and spacer.
- 5. Reinstall the spacer with the new blade.
- 6. Reinstall the bolt and washer and turn counterclockwise to tighten to 35 foot-pounds (±5).
- 7. Reinstall the blade guard plate.



**CAUTION!** Tighten the blade bolt manually. Using power-assisted tools may result in over-torquing and damage to the bolt.

### Troubleshooting



**DANGER!** Before performing any service to this equipment, turn the key to the OFF (0) position, remove the key, and disconnect the sawmill battery ground terminal. Failure to do so will result in serious injury or death.

PROBLEM	CAUSE	SOLUTION
amp circuit breaker tripping	Wood or bark jammed in blade guard	Turn key to OFF position, remove key. Remove wood or bark from blade guard
	Pivot pin is binding.	Inspect for bind by moving debarker head to full in position. Turn key to OFF position, remove key. Pull arm to full out position by hand. If available, use a weight scale to pull arm to full out position. Should not have more than 12 pounds of resistance to pull out. Ensure pivot pin has been greased properly. Check pivot clamps for correct installation. Loosen pivot clamp bolts slightly, check for reduced bind- ing
	Ring terminal of red wire touching debarker motor housing at motor	Move terminal away from motor housing. Reset circuit breaker and retest.
	Circuit breaker weak from repeated tripping.	Replace circuit breaker
	Blade binds in log; torsion spring too tight	Loosen the spring tensioning nut (part #10 in Section 6.1 Mount Arm Assembly) until the last few threads of the retainer bushing are engaged by the nylon in the nut.



Light comes on, but debarker motor and warning light do not operate	Circuit breaker tripped	Reset circuit breaker.
Debarker shuts off, but the circuit breaker is not tripped.	Bad ignition wire connection	Check ignition wire connection outside and inside of debarker control box.
	Intermittent key switch	Replace key switch
	Other loose wiring connection	Check wiring connections inside control box.
Debarker will not shut off.	Solenoid is stuck closed.	Replace solenoid.
IN/OUT Motor does not move IN or OUT	Drive belt too loose	Tighten enough to allow movement. DO NOT OVER-TIGHTEN.
	Switch not working properly	Check wiring to switch for loose connections. If wiring looks OK, replace switch.
Blade binds in log; breaker trips	Torsion spring too tight; Debarker hits log too hard	Loosen the spring tensioning nut (part #10 in Section 6.1 Mount Arm Assembly) until the last few threads of the retainer bushing are engaged by the nylon in the nut.



## **ELECTRICAL INFORMATION**

## **Electrical Symbol Diagram**

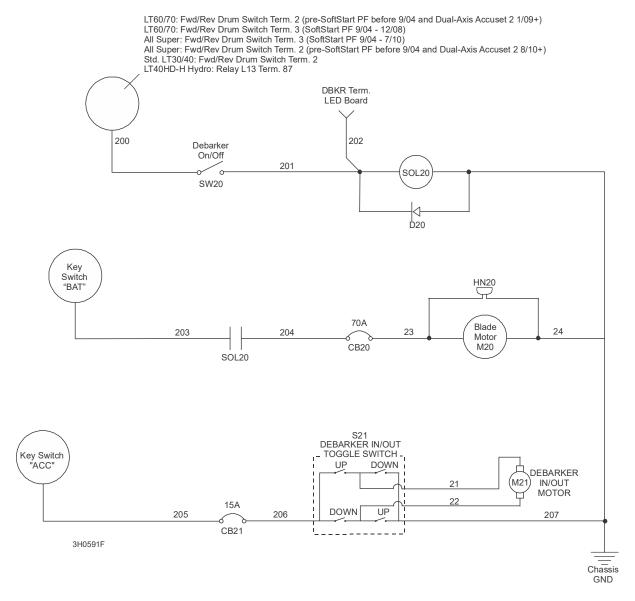


FIG. 1-27 NON-REMOTE SAWMILL



## **Electrical Symbol Diagram (Remote)**

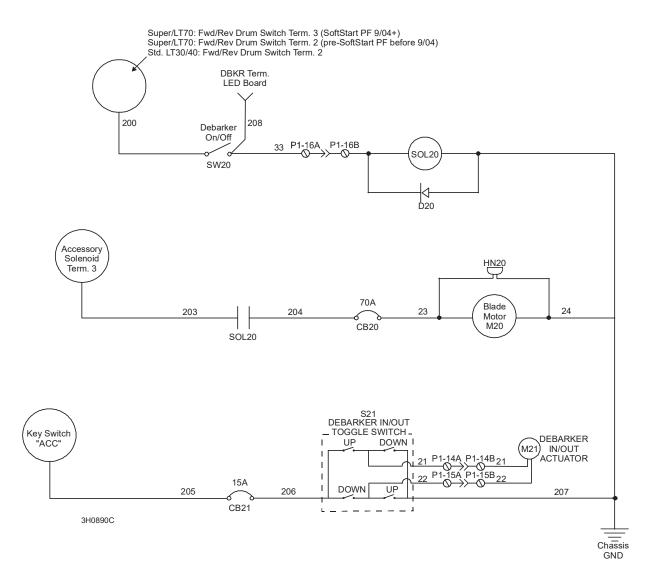


FIG. 1-28 REMOTE SAWMILL



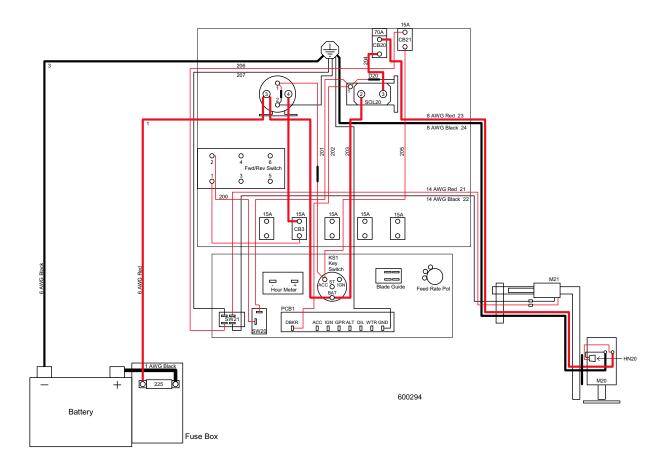
## **Electrical Component List**

ID	Wood-Mizer Part No.	Description
HN20	073555	Light Assembly, Debarker ON Warning Strobe
	P09698-1	Motor, 53:1 Gear

### **Electrical Wiring Diagram (non-Remote Sawmills)**

#### LT40 SuperRev. J7.05+ LT30HD/40HD SuperRev. K3.04+ LT50HDRev. A5.04+

This diagram applies to non-Remote Super model sawmills built after 8/10 with dual-axis Accuset 2 system.







#### LT30 SuperRev. J3.00 - J3.08 LT40 SuperRev. J4.00 - J7.04 LT30HD/40HD SuperRev. J8.00 - K3.03 LT50HDRev. A1.01 - A5.03

This diagram applies to non-Remote Super model sawmills built between 9/04 and 7/10 with softstart power feed system.

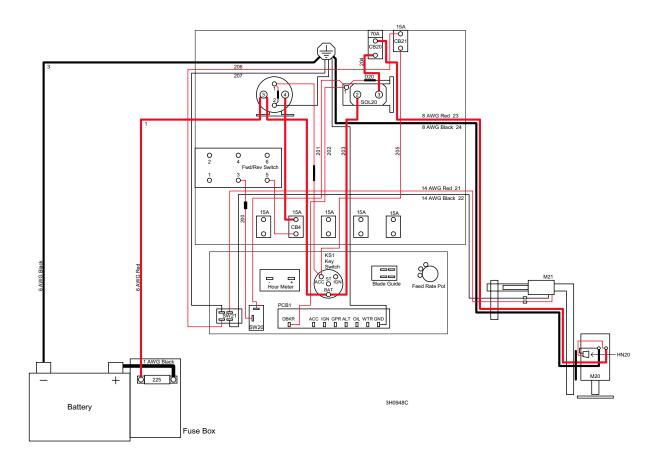


FIG. 1-30



#### LT30 SuperRev. F8.00 - J2.03 LT40 SuperRev. F9.00 - J3.03 LT30HD/40HD SuperRev. G1.00 - J7.03

This diagram applies to non-Remote Super model sawmills built before 9/04.

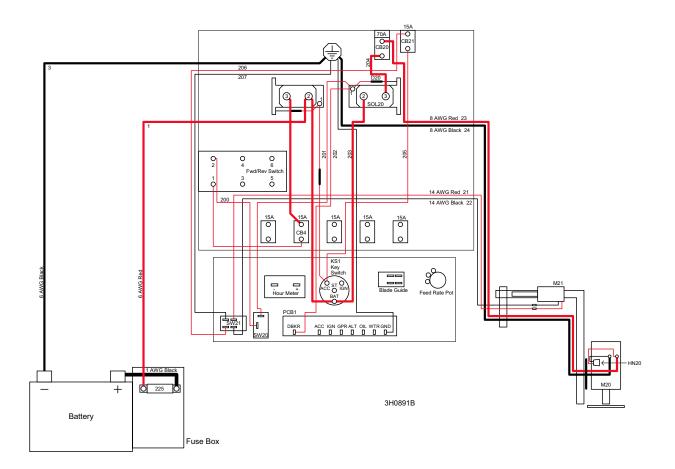


FIG. 1-31



#### LT30/40AII Revs LT30HD/40HDAII Revs

This diagram applies to all non-Remote Standard model sawmills.

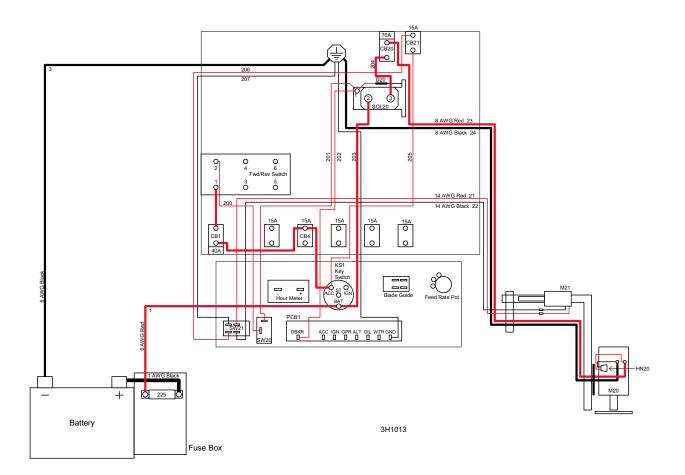


FIG. 1-32



#### LT40HD-H HydroRev. J9.02+

This diagram applies to LT40HD Hydro model sawmills.

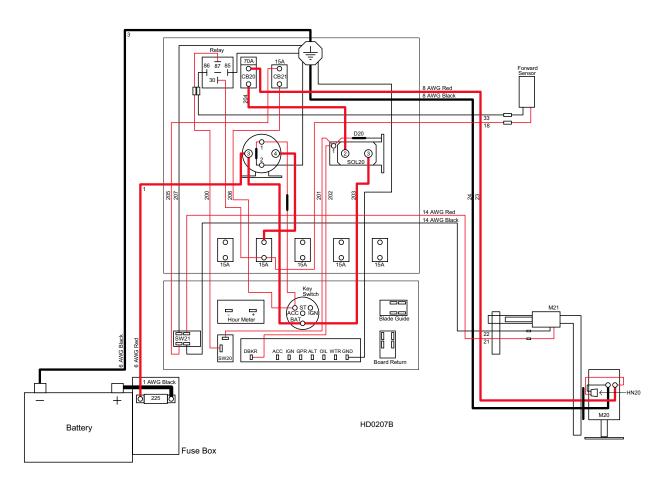


FIG. 1-33

## **Electrical Wiring Diagram (Remote Sawmills)**

#### LT40HD Super RemoteRev. K3.00+ LT50HD RemoteRev. A5.00+

This diagram applies to Super Remote model sawmills built after 1/09 with dual-axis Accuset 2 system.

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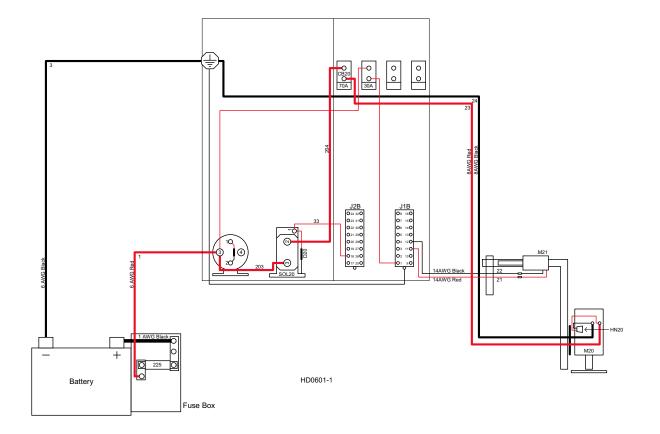


FIG. 1-34 (PAGE 1 OF 2)

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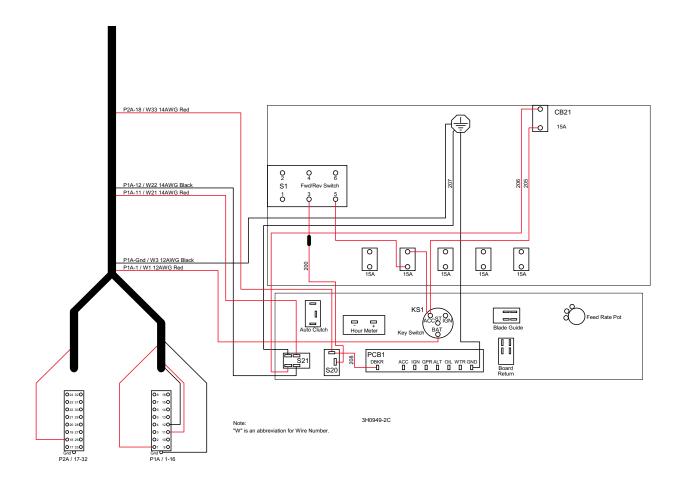


FIG. 1-35 (PAGE 2 OF 2)



#### LT40HD RemoteRev. K5.00+

This diagram applies to Standard Remote model sawmills built after 1/09 with dual-axis Accuset 2 system.

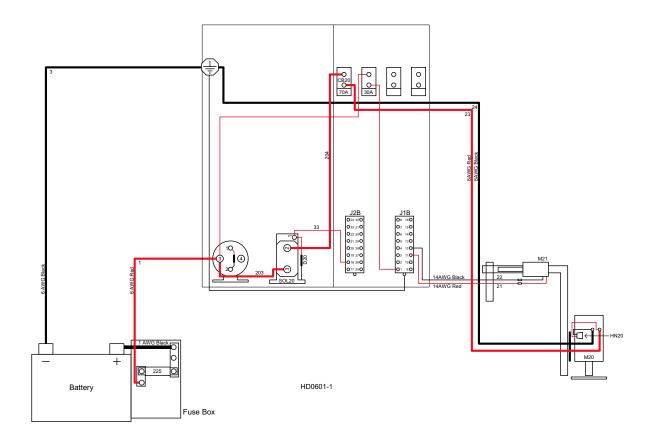


FIG. 1-36 (PAGE 1 OF 2)

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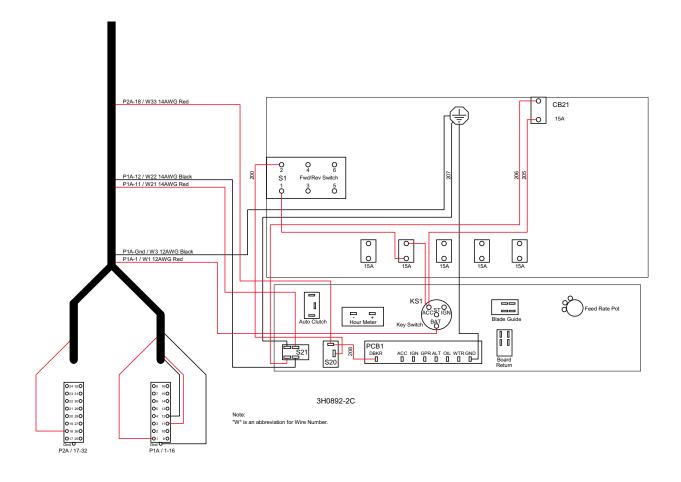


FIG. 1-37 (PAGE 2 OF 2)



#### LT30HD Super RemoteRev. J8.00 - J8.09 LT40HD Super RemoteRev. J8.00 - K2.00 LT50HD RemoteRev. A1.01 - A4.00

This diagram applies to Super Remote model sawmills built between 9/04 and 12/08 with softstart power feed system.

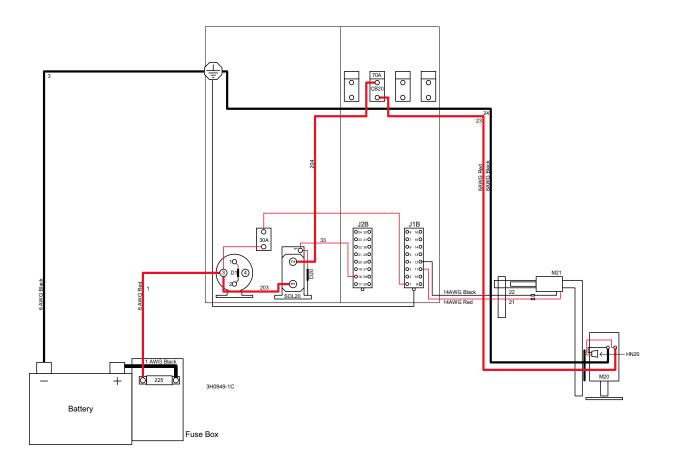


FIG. 1-38 (PAGE 1 OF 2)

# Wood-Mizer<sup>®</sup>

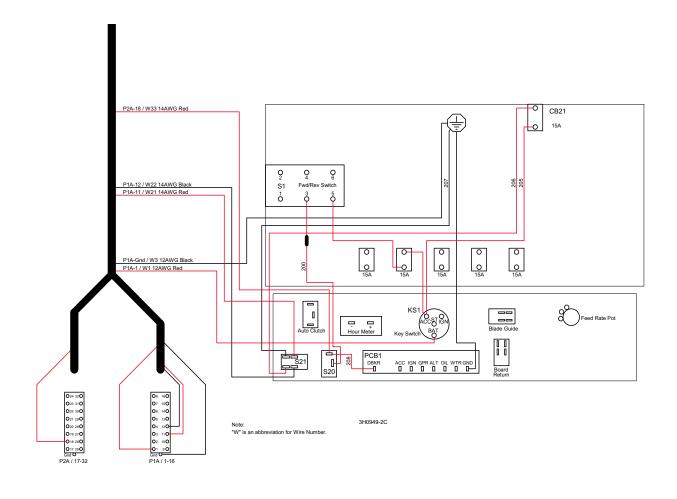


FIG. 1-39 (PAGE 2 OF 2)



#### LT40HD RemoteRev. H4.00 - K4.01 LT30HD Super RemoteRev. G5.00 - J7.03 LT40HD Super RemoteRev. G5.00 - J7.03

This diagram applies to Standard Remote model sawmills built before 1/09 and Super Remote model sawmills built before 9/04.

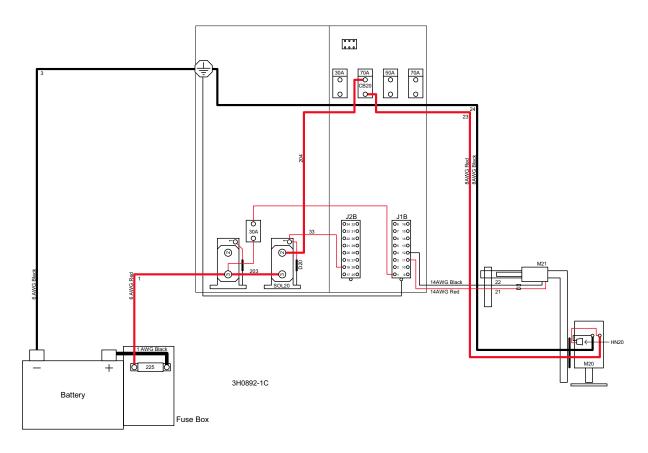


FIG. 1-40 (PAGE 1 OF 2)

# Wood-Mizer<sup>®</sup>

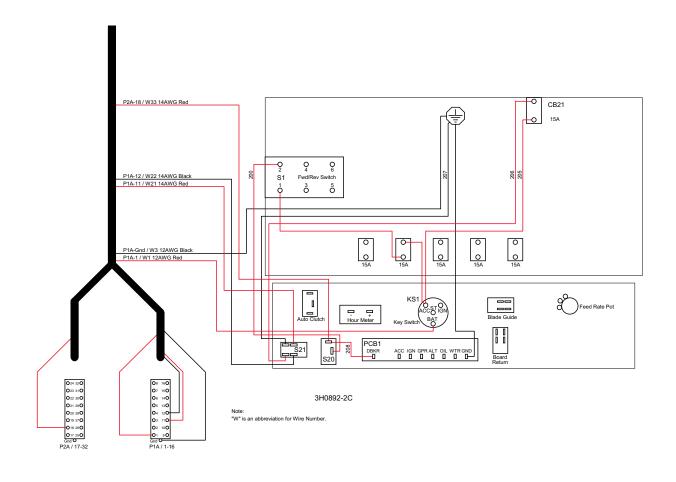


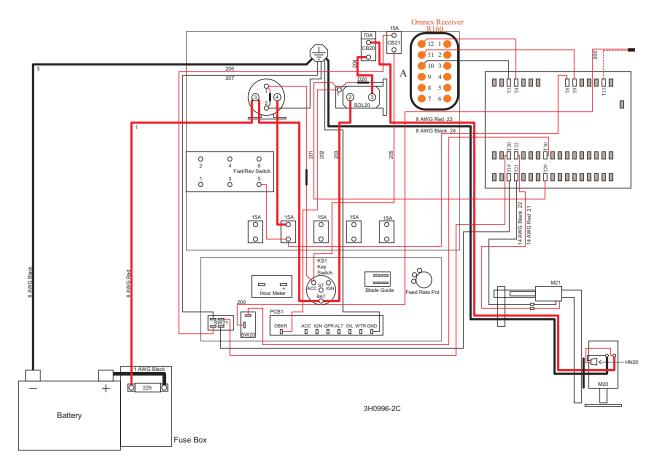
FIG. 1-41 (PAGE 2 OF 2)

## **Electrical Wiring Diagram (Wireless Sawmills)**

#### LT40HD WirelessRev. K1.01+ LT50HD WirelessRev. A2.01+

This diagram applies to Wireless Super model sawmills.

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FIG. 1-42
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