LX150 Debarker Safety, Operation, Maintenance, & Parts Manual

LX150 Debarker

rev.A1.00 - A1.00

Safety is our #1 concern!

September 2019

Form #2408



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

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SECTION 1 SAFETY

SECTION 1 SAFETY

1.1 Safety Symbols

The following symbols and signal words call your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions.



DANGER! indicates an imminently hazardous situation which, if not avoided, will result in serious injury or death.



WARNING! suggests a potentially hazardous situation which, if not avoided, could result in serious injury or death.



CAUTION! refers to potentially hazardous situations which, if not avoided, may result in minor or moderate injury or damage to equipment.

NOTICE indicates vital information.



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

On electric equipment, lock out power supply before performing any installation. See Electrical Lockout Procedures (OSHA regulation 1910.147, appendix A reprinted in the Operator's Manual).

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.

SECTION 2 INSTALLATION



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

On electric equipment, lock out power supply before performing any installation. See Electrical Lockout Procedures (OSHA regulation 1910.147, appendix A reprinted in the Operator's Manual).

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.

2.1 Torque Values

Use these torque values on this unit unless otherwise specified.

| Grade | | Units | SAE 5 | SAE 8 |
|---|--|---|---|--|
| Grade Ma | ark | | | |
| Bolt Dia. | Threads. Per In. | Units | SAE 5 | SAE 8 |
| 6 8 10 10 12 1/4 5/16 5/16 3/8 3/8 7/16 7/16 1/2 1/2 9/16 9/16 5/8 5/8 | 32 32 24 32 24 20 28 18 24 16 24 14 20 13 20 13 20 12 18 | in-lbs (Nm) ft-lbs (Nm) | 20 (2.3) 24 (2.7) 35 (4.0) 40 (4.5) 50 (5.7) 95 (10.7) 17 (22.6) 20 (27.1) 30 (40.7) 35 (47.5) 50 (67.8) 55 (74.6) 75 (101.7) 85 (115.3) 105 (142.4) 115 (155.9) 150 (203.4) 160 (217.0) | 30 (3.4) 45 (5.1) 50 (5.7) 65 (7.3) 125 (14.1) 150 (17.0) 23 (31.2) 25 (33.8) 40 (54.2) 45 (61.0) 65 (88.1) 70 (94.9) 100 (135.6) 110 (149.2) 135 (183.1) 150 (203.4) 195 (264.4) 210 (284.8) |
| 3/4 3/4 7/8 7/8 1 | 10 16 9 14 8 | ft-lbs (Nm) ft-lbs (Nm) ft-lbs (Nm) ft-lbs (Nm) ft-lbs (Nm) | 170 (230.5) 175 (237.3) 302 (409.5) 300 (406.8) 466 (631.8) | 220 (298.3) 225 (305.1) 473 (640.9) 400 (542.4) 714 (967.4) |

2.2 Assemble Debarker

Assemble Mounting Plate

1. Tighten the hardware holding the mounting plate on the debarker arm. See Figure 1.

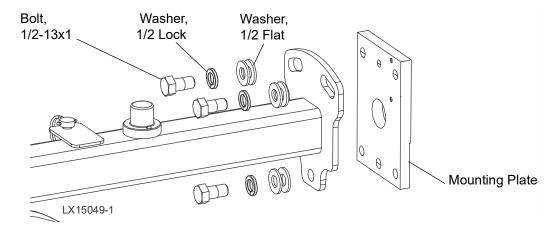


FIG. 2-1

- 2. Remove wire harness clamp hardware from the mounting hole on the sawhead.
- **3.** Align the debarker hardware into the mounting holes. See Figure 2-2.

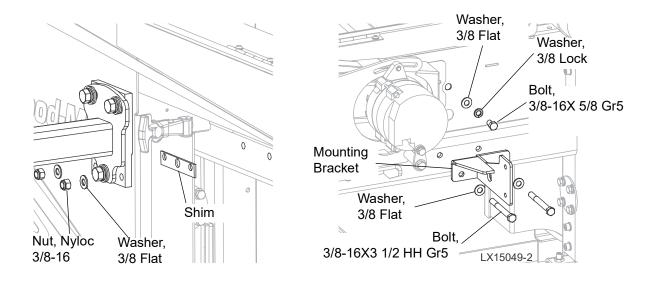


FIG. 2-2

4. Ensure the debarker is square to the sawhead before tightening.

Mount the Solenoid Assembly

1. Install the solenoid/breaker box to the mounting bracket. See Fig. 2-3.

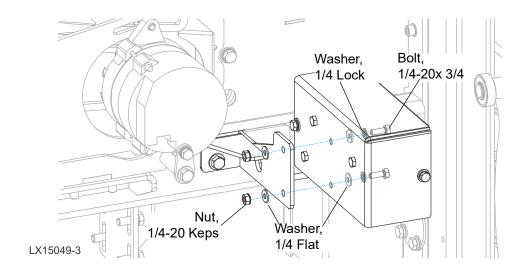


FIG. 2-3

Mount the Cutter Motor

1. Install the cutter head to the pivot arm mounting bracket. See Fig. 2-4.

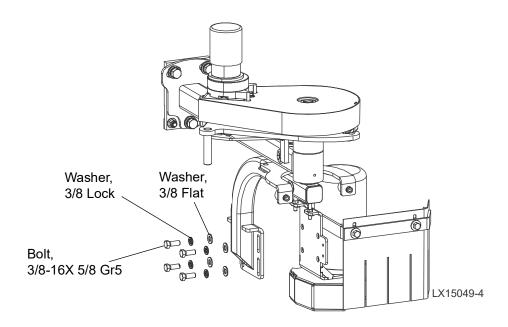


FIG. 2-4

2.3 Install the motor harnesses

NOTICE: Avoid pinch and pivot points, unnecessary wire bending, and open spaces where the wire could get caught by a log, etc.

1. Unclip the strobe light wire coming out of the debarker arm and thread it through the starred grommet from the hardware bag.

2. Install the grommets from the hardware bag into the arms as shown in Fig.2-5

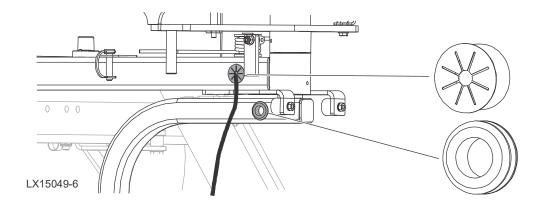


FIG. 2-5

- 3. Thread the rest of the strobe light wire through lower grommet and through the pivot arm.
- 4. Remove the cap from the cutter motor.
- **5.** Remove the motor terminal nuts. (Set aside for reuse.)
- **6.** Place the strobe light ring terminals over the motor terminals -- **red to positive, black to negative.** See Fig. 2-6.

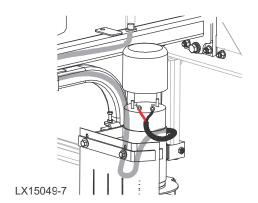


FIG. 2-6

NOTICE: The main mill wiring harness has the wires to the debarker in/out motor (#21 and 22) and the debarker solenoid coil pre-wired on it and bundled near the engine. Clip the ties and unfold the wires.

7. Route the debarker in/out motor harness through the saw head frame hole as shown in Fig. 2-7.

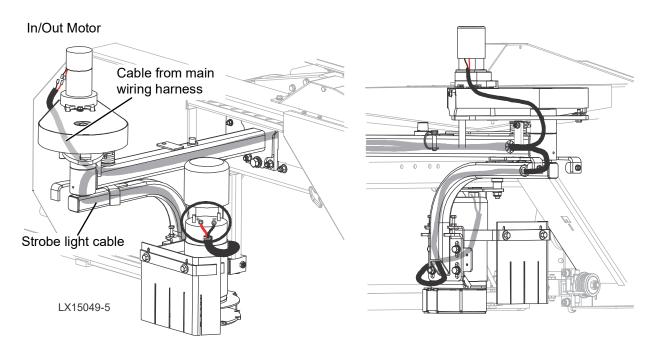
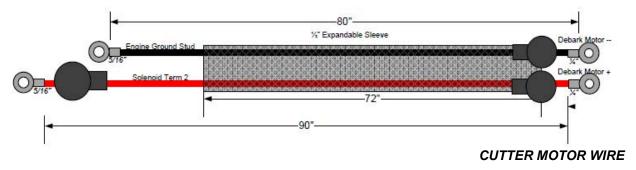


FIG. 2-7

- 8. Crimp the male disconnect terminals (blue) (from the hardware bag) to the motor wires.
- **9.** Connect the in/out motor wires red-to-red and black-to-black.
- **10.** Install the cutter motor wire (longest) from the engine area to the cutter motor.



a. Thread the cable end with the two boots through the straight arm and the pivot arm, similar to the strobe light wire. See Fig.

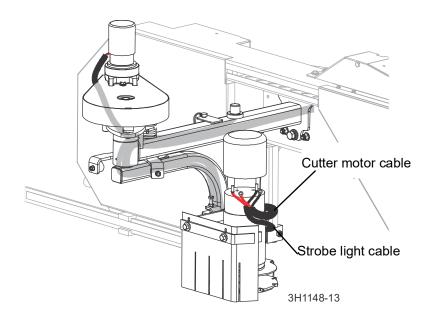


FIG. 2-8

- b. Place the ring terminals on the motor -- red to positive, black to negative.
- **c.** Replace the terminal nuts removed in step 5.

NOTICE: Ring terminals must not touch the motor.

- **d.** Slide the rubber boots over the motor terminal studs.
- **11.** Replace the motor cap.
- **12.** Use wire ties as necessary to bundle the cables neatly.



2.4 Solenoid wiring

1. Remove the solenoid/breaker box cover for easier access. See Fig.2-9.

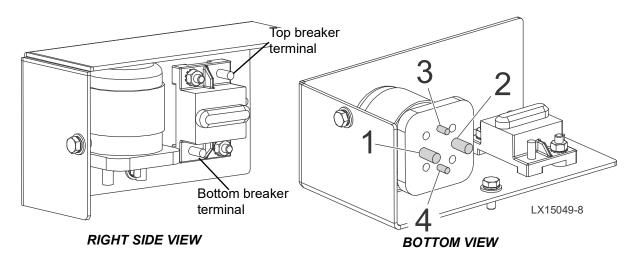


FIG. 2-9

2. Remove the nuts from the terminal posts and retain them for reinstallation.

3. From the mill's main wiring harness (located for step 6), place the remaining wire (201) on solenoid terminal 3. (See Fig. 2-10.)

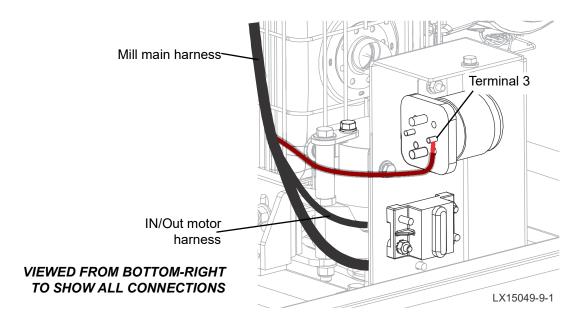


FIG. 2-10

4. Connect the red 27" wire between the alternator battery terminal and the top breaker terminal. See Fig. 2-11.

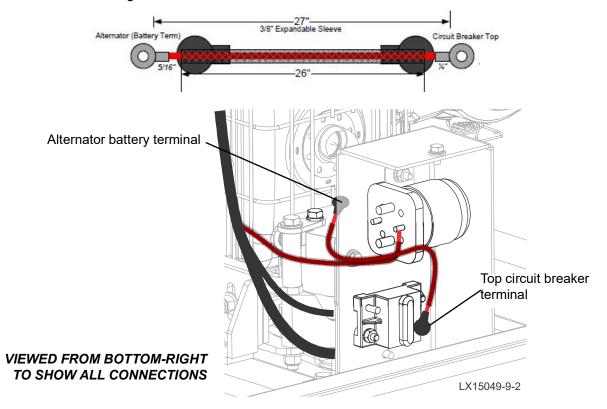
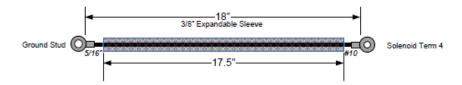


FIG. 2-11

5. Reinstall terminal nuts and slide the boot on the terminal.

6. Connect the 18" black wire between the alternator ground stud and solenoid terminal 4.



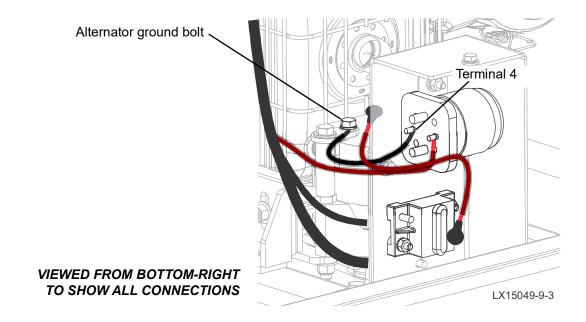
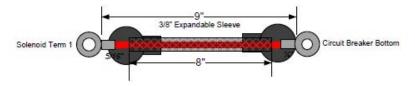
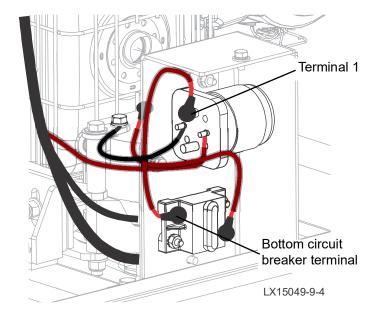


FIG. 2-12

7. Connect the 9" red wire between the bottom circuit breaker and solenoid terminal 1.





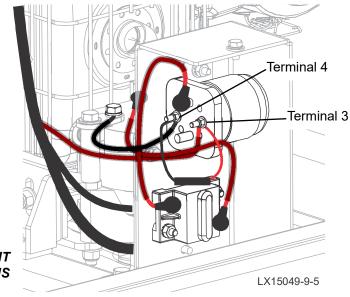
VIEWED FROM BOTTOM-RIGHT TO SHOW ALL CONNECTIONS

FIG. 2-13

8. Reinstall terminal nuts and slide the boots on the terminal.

9. Connect the 7" diode assembly (from the hardware bag) between solenoid terminal 3 (red end) and solenoid terminal 4 (black end).



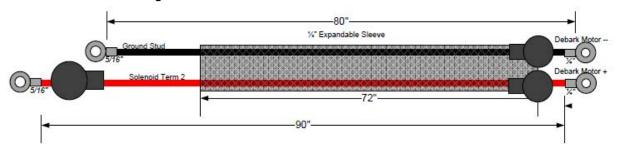


VIEWED FROM BOTTOM-RIGHT TO SHOW ALL CONNECTIONS

FIG. 2-14

10. Replace the terminal 3 and 4 nuts.

11. Connect the 90" cutter motor cable red wire to the solenoid terminal 2 and the black wire to the alternator ground bolt.



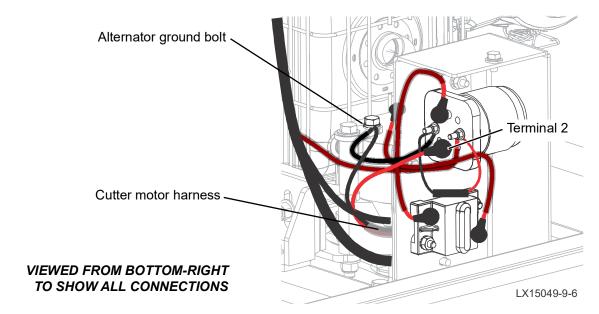


FIG. 2-15

- **12.** Reinstall terminal nuts and slide the boots on the terminal. Tightened alternator ground bolt.
- **13.** Check all nuts for tightness and secure protective boots over terminals.

2.5 Control box harness installation

- 1. Remove the front panel (leave wires connected) from the control box.
- 2. Cut out debarker on/off and in/out switch holes in the front panel decal.

3. Install the debarker on/off and in/out switches, 1/16" nylon washers, and rubber boots in place. See Fig. 2-16.

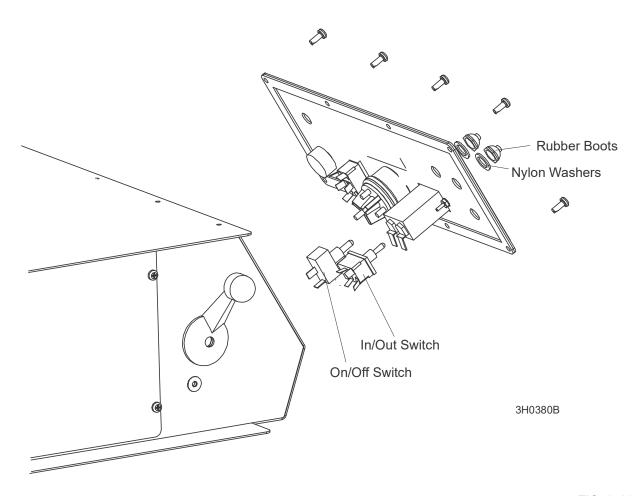


FIG. 2-16

- **4.** Connect the red wire "200" from the AUX post of the circuit breaker CB7 to the top terminal on the debarker on/off switch.
- **5.** Connect the red wire labeled "201" from the debarker harness to the bottom terminal on the debarker on/off switch.
- **6.** Connect the black wire labeled "22" from the debarker harness to the top middle terminal on the debarker in/out switch.
- **7.** Connect the red wire labeled "21" from the debarker harness to the bottom middle terminal on the debarker in/out switch.

- **8.** Connect the red wire "205" from the AUX post of the circuit breaker CB3 to the top end terminal on the debarker in/out switch.
- **9.** Connect the black wire from the ground stud to the bottom end terminal on the debarker in/out switch.
- **10.** Reinstall the front panel to the control box.

NOTE: Only wires referred to above are shown in Fig. 2-17.

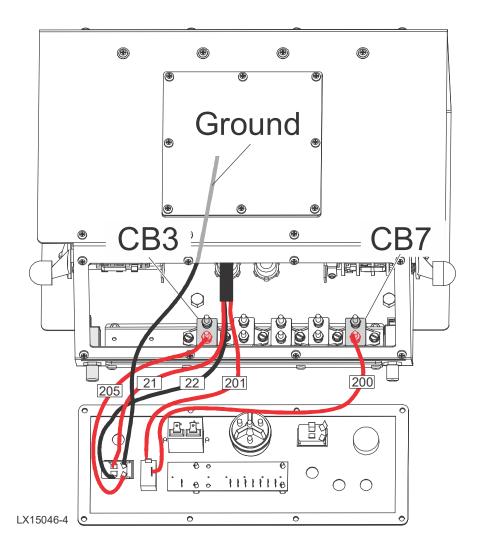


FIG. 2-17

SECTION 3 ALIGNMENT

3.1 Align the Debarker to the Sawblade

Horizontal Alignment

1. Turn the power key to ACC (3) and use the debarker in/out switch to move the debarker completely inward.



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

2. Clip the blade guide alignment tool (or an appropriate straight edge) to the sawmill blade.

NOTE: Ensure the tool lies flat on the blade and does not contact a tooth or burr.

- **3.** Check the squareness of the debarker with the sawmill blade.
 - **a.** Mark the position of the debarker blade in relationship to the bottom of the blade guide alignment tool. (Measurement A in Fig. 3-1.)
 - **b.** Turn the key to ACC (3) and use the debarker in/out switch to move the debarker all the way inward.

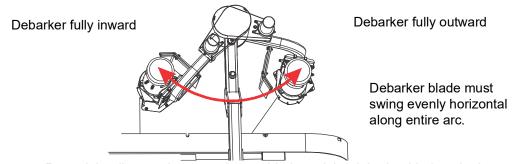


WARNING! Turn the base unit's power to OFF, remove the key, and disconnect the battery ground terminal, if applicable.

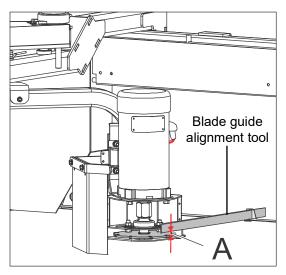
c. Mark the position of the debarker blade in relationship to the bottom of the blade guide alignment tool. (Measurement B in Fig 3-1.)



The debarker blade should be the same distance from the sawmill blade during the entire swing of the debarker. (Measurement A=B)



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



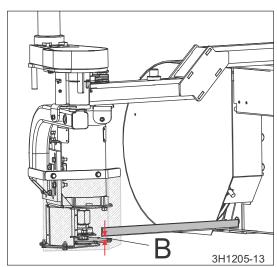


FIG. 3-1

4. Adjust the debarker mounting bolts until debarker is square with the sawmill blade. See Fig. 3-2.

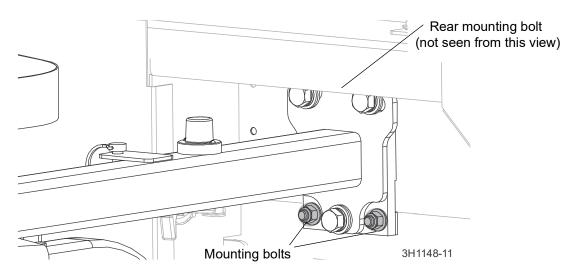
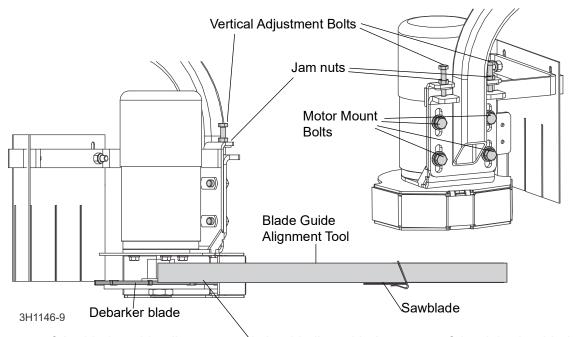


FIG. 3-2

Vertical Alignment

- 1. Loosen the four blade motor mount bolts. See Fig. 3-3.
- 2. Loosen the jam nuts on the adjustment bolts.



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

FIG. 3-3

- 3. Turn the adjustment bolt to position the motor with blade up or down.
- **4.** Retighten the adjustment bolt jam nut and four motor mount bolts.
- **5.** Recheck that the debarker blade has remained parallel with the sawblade.
- **6.** Repeat the adjustment steps until the debarker blade is **both** centered on the bottom of the blade guide adjustment tool **and** parallel to the sawmill blade.

SECTION 4 OPERATION

4.1 Locking Pin Operation



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

Insert the locking pin to lock the debarker in place when transporting the sawmill.

Remove the locking pin during sawing operation. See Fig. 4-0.

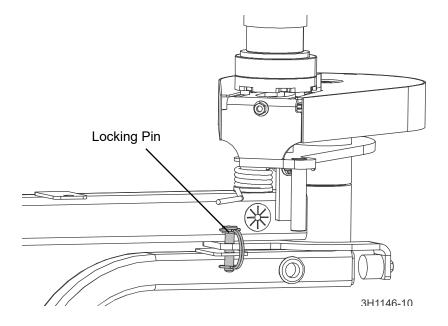


FIG. 4-0

4.2 Control Overview

The Debarker Option allows you to remove 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.

See Figure 4-1. The debarker control includes two toggle switches, an indicator light, and



circuit breakers with manual reset.

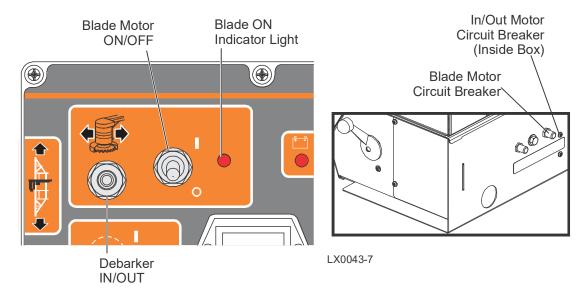


FIG. 4-1

- 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 back of the control box.

4.3 Operation



WARNING! 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.

Keep all persons out of the path of moving equipment when operating the debarker.

- 1. Remove the debarker motor cover before operating.
- 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.

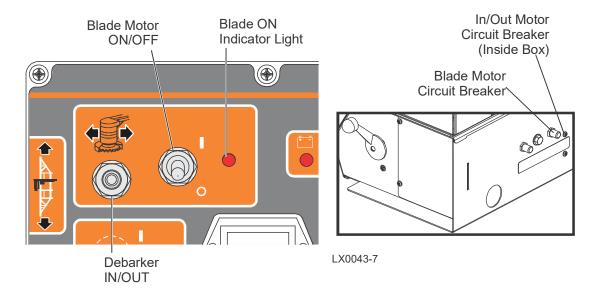


FIG. 4-1

- 3. Use the in/out switch
- **+I**+

on the control box to pivot the debarker outboard.

- **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).

6. 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.
- **8.** 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.

9. When done sawing and ready to store or transport the sawmill, replace the debarker blade motor cover. Place the debarker in its travel position before towing the sawmill (<u>See Section 3.1</u>).

4.4 Maintenance



WARNING! Before performing any service to this equipment, turn the power toggle switch to the OFF position and disconnect the sawmill battery ground terminal. Failure to do so will result in serious injury or death.

- 1. Periodically check the flexible guard. Replace the guard as needed.
- 2. 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 teeth.

BLADE REPLACEMENT

- 1. Place one wrench on the blade holder bushing, above the blade.
- 2. Place the other wrench on the lower hex nut.
- 3. Remove the hex nut and washer.

- 4. Remove the blade and washer.
- **5.** Reinstall the washer with the new blade.
- 6. Reinstall the hex nut and washer and tighten to 35 foot-pounds (±5).



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

4.5 Troubleshooting



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

| PROBLEM | CAUSE | SOLUTION |
|--|--|---|
| Circuit breaker tripping | Wood or bark jammed in blade guard | Turn power toggle switch to OFF position. Remove wood or bark from blade guard |
| | Circuit breaker weak from repeated tripping. | Replace circuit breaker |
| Light comes on, but debarker motor and warning light (or horn prior to Rev. A.07) do not operate | Circuit breaker tripped | Reset circuit breaker. |
| Debarker shuts off, but the circuit breaker is not tripped. | Loose wiring connection | Check wiring connections inside control box. |
| Debarker will not shut off. | Solenoid is stuck closed. | Replace solenoid. |

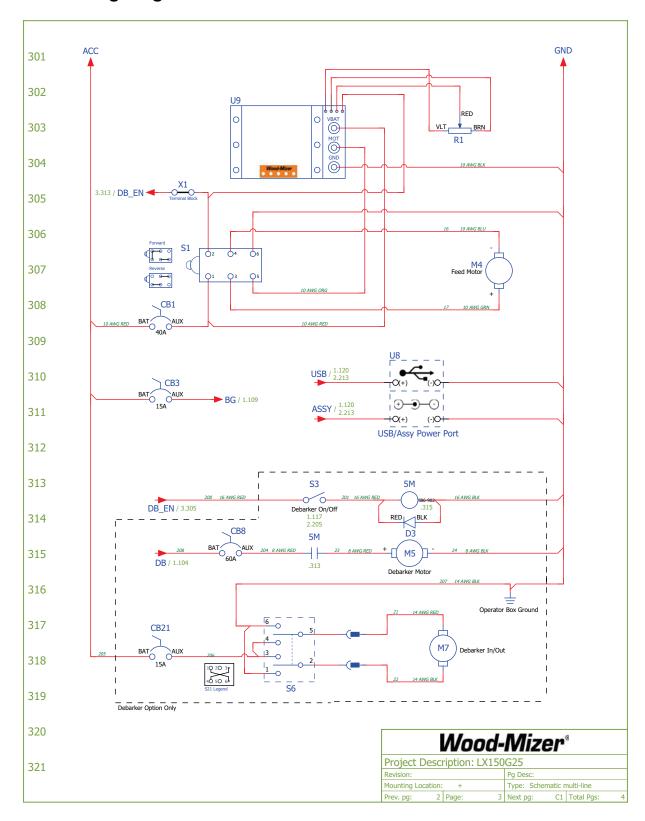


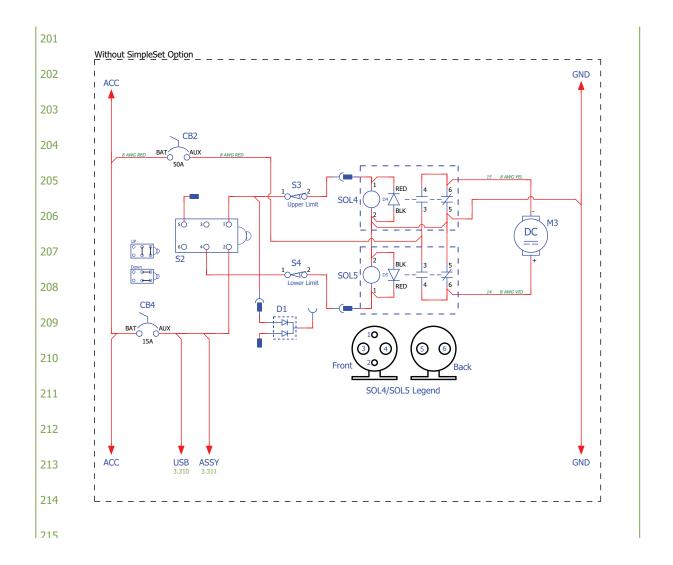
SECTION 5 ELECTRICAL

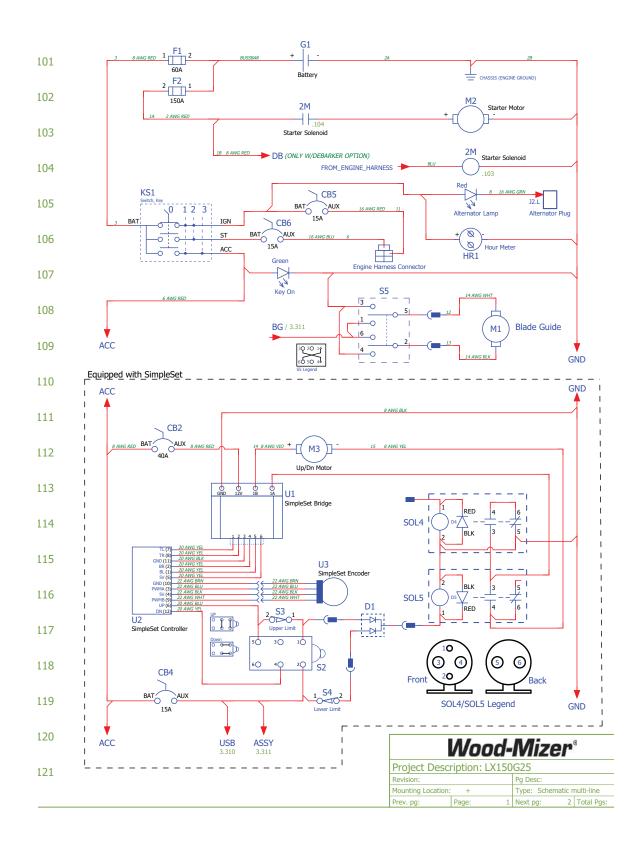
5.1 Components

| CB2 Up CB3 Ke CB4 U/I CB5 Ke CB6 Ke CB8 De CB21 U/I D1 Lin D3 Dic D4 " D5 " F1 Bai F2 Sta G1 Bai HR1 Ho | F Motor breaker b/Down Motor Breaker cy Switch ST Terminal Breaker D Drum / DB In_Out Breaker cy Switch IGN Terminal Breaker cy Switch ST Terminal Breaker cy Switch ST Terminal Breaker cy Switch ST Terminal Breaker cy Switch Breaker D Drum / DB In_Out Breaker mit Switch Diode "OR" ode Assy, Solenoid Coil sttery Fuse arter Fuse tttery | 051981 051981 E20430 053464 E20430 024256 053464 073668 015426 015426 015426 073683 | Circuit Breaker, 40A Circuit Breaker, 40A Breaker, 15A Manual Reset Breaker, 10A Manual Reset Breaker, 15A Manual Reset Breaker, 15A Manual Reset Breaker, 15A Manual Reset Circuit Breaker, 50A Breaker, 10A Manual Reset Wire Assembly, LX150 Up/Down Limit Diode OR Diode Assy, Solenoid Coil Chassis GND Diode Assy, Solenoid Coil Chassis GND | 1 1 1 1 1 1 1 1 1 2 | 3.309 2.204 3.311 2.209 1.105 1.106 3.315 3.318 1.117;2.209 3.314 |
|---|---|--|--|--|--|
| CB3 Ke CB4 U/I CB5 Ke CB6 Ke CB8 De CB21 U/I D1 Lin D3 Dic D4 " D5 " F1 Bai F2 Ste G1 Bai HR1 Ho | ey Switch ST Terminal Breaker D Drum / DB In_Out Breaker ey Switch IGN Terminal Breaker ey Switch ST In_Out Breaker D Drum / DB In_Out Breaker mit Switch Diode "OR" ode Assy, Solenoid Coil stery Fuse arter Fuse | E20430 053464 E20430 E20430 024256 053464 073668 015426 015426 | Breaker, 15A Manual Reset Breaker, 10A Manual Reset Breaker, 15A Manual Reset Breaker, 15A Manual Reset Breaker, 15A Manual Reset Circuit Breaker, 50A Breaker, 10A Manual Reset Wire Assembly, LX150 Up/Down Limit Diode OR Diode Assy, Solenoid Coil Chassis GND Diode Assy, Solenoid Coil Chassis GND | 1 1 1 1 1 1 2 | 3.311 2.209 1.105 1.106 3.315 3.318 1.117;2.209 |
| CB4 U/I CB5 Ke CB6 Ke CB8 De CB21 U/I D1 Lin D3 Dic D4 " D5 " F1 Bal F2 Sta G1 Bal HR1 Ho | D Drum / DB In_Out Breaker ey Switch IGN Terminal Breaker ey Switch ST Terminal Breaker ey Switch ST Terminal Breaker ey Switch ST Terminal Breaker both Terminal Breaker D Drum / DB In_Out Breaker mit Switch Diode "OR" ode Assy, Solenoid Coil ettery Fuse arter Fuse | 053464 E20430 E20430 024256 053464 073668 015426 015426 | Breaker, 10A Manual Reset Breaker, 15A Manual Reset Breaker, 15A Manual Reset Breaker, 15A Manual Reset Circuit Breaker, 50A Breaker, 10A Manual Reset Wire Assembly, LX150 Up/Down Limit Diode OR Diode Assy, Solenoid Coil Chassis GND Diode Assy, Solenoid Coil Chassis GND | 1 1 1 1 1 2 | 2.209 1.105 1.106 3.315 3.318 1.117;2.209 |
| CB5 Ke CB6 Ke CB8 De CB21 U//I D1 Lin D3 Dic D4 " D5 " F1 Ba' F2 Sta G1 Ba' HR1 Ho | ey Switch IGN Terminal Breaker ey Switch ST Terminal Breaker ey Switch Policy Breaker D Drum / DB In_Out Breaker mit Switch Diode "OR" ode Assy, Solenoid Coil extery Fuse arter Fuse | E20430 E20430 024256 053464 073668 015426 015426 | Breaker, 15A Manual Reset Breaker, 15A Manual Reset Circuit Breaker, 50A Breaker, 10A Manual Reset Wire Assembly, LX150 Up/Down Limit Diode OR Diode Assy, Solenoid Coil Chassis GND Diode Assy, Solenoid Coil Chassis GND | 1 1 1 1 2 | 1.105 1.106 3.315 3.318 1.117;2.209 |
| CB6 Ke CB8 De CB21 U/I D1 Lin D3 Dic D4 " D5 " F1 Bai F2 Sta G1 Bai HR1 Ho | ey Switch ST Terminal Breaker ebarker Motor Breaker ID Drum / DB In_Out Breaker mit Switch Diode "OR" ode Assy, Solenoid Coil sttery Fuse arter Fuse | E20430 024256 053464 073668 015426 015426 | Breaker, 15A Manual Reset Circuit Breaker, 50A Breaker, 10A Manual Reset Wire Assembly, LX150 Up/Down Limit Diode OR Diode Assy, Solenoid Coil Chassis GND Diode Assy, Solenoid Coil Chassis GND | 1 1 1 2 1 | 1.106 3.315 3.318 1.117;2.209 |
| CB8 De CB21 U/I D1 Lin D3 Dic D4 " D5 " F1 Bai F2 Sta G1 Bai HR1 Ho | barker Motor Breaker D Drum / DB In_Out Breaker mit Switch Diode "OR" ode Assy, Solenoid Coil attery Fuse arter Fuse | 024256 053464 073668 015426 015426 015426 | Circuit Breaker, 50A Breaker, 10A Manual Reset Wire Assembly, LX150 Up/Down Limit Diode OR Diode Assy, Solenoid Coil Chassis GND Diode Assy, Solenoid Coil Chassis GND | 1 1 2 1 | 3.315 3.318 1.117;2.209 |
| CB21 U/I D1 Lin D3 Dic D4 " D5 " F1 Bai F2 Sta G1 Bai HR1 Ho | D Drum / DB In_Out Breaker mit Switch Diode "OR" ode Assy, Solenoid Coil attery Fuse arter Fuse | 053464 073668 015426 015426 015426 | Breaker, 10A Manual Reset Wire Assembly, LX150 Up/Down Limit Diode OR Diode Assy, Solenoid Coil Chassis GND Diode Assy, Solenoid Coil Chassis GND | 1 2 1 | 3.318 1.117;2.209 |
| D1 Lin D3 Dic D4 " D5 " F1 Bai F2 Sta G1 Bai HR1 Ho | mit Switch Diode "OR" ode Assy, Solenoid Coil attery Fuse arter Fuse | 073668 015426 015426 015426 | Wire Assembly, LX150 Up/Down Limit Diode OR Diode Assy, Solenoid Coil Chassis GND Diode Assy, Solenoid Coil Chassis GND | 2 | 1.117;2.209 |
| D3 Dic D4 " D5 " F1 Bai F2 Sta G1 Bai HR1 Ho | ode Assy, Solenoid Coil attery Fuse arter Fuse | 015426 015426 015426 | Diode Assy, Solenoid Coil Chassis GND Diode Assy, Solenoid Coil Chassis GND | 1 | |
| D4 " D5 " F1 Bai F2 Sta G1 Bai HR1 Ho | attery Fuse arter Fuse | 015426 015426 | Diode Assy, Solenoid Coil Chassis GND | | 2 214 |
| D5 " F1 Bai F2 Sta G1 Bai HR1 Ho | arter Fuse | 015426 | | 1 | 3.314 |
| F1 Bai F2 Sta G1 Bai HR1 Ho | arter Fuse | 015426 | | 1 | 1.114 |
| F2 Sta G1 Ba HR1 Ho | arter Fuse | | Diode Assy, Solenoid Coil Chassis GND | 1 | 1.116 |
| F2 Sta G1 Bai HR1 Ho | arter Fuse | 0/3083 | Z-Case Fuse 60A | 1 | 1.101 |
| HR1 Ho | attony | 073684 | Z-Case Fuse 150A | 1 | 1.102 |
| HR1 Ho | ILLEI V | 079462 | Battery, 12V 8A24M AGM | 1 | 1.101 |
| | our Meter | 015401 | Digital Meter, Hour Rect Mount w/Gasket | 1 | 1.106 |
| | ev Switch | P04350 | Switch, kev | 1 | 1.107 |
| M1 Bla | ade Guide Arm In/Out Motor | 079214 | Motor Assy, 1/30HP 12V Gear w/Flying Leads | 1 | 1.109 |
| | D/Down Motor | 006747 | 0.50 HP DC Motor | 1 | 2.207 |
| | ed Motor | 006747 | 0.50 HP DC Motor | 1 | 3.307 |
| M5 De | ebarker Motor | 053683 | 0.75 HP DC Motor | 1 | 3.315 |
| M7 De | ebarker In/Out Motor | 079214 | Motor Assy, 1/30HP 12V Gear w/Flying Leads | 1 | 3.318 |
| | ebarker Solenoid | 015470 | Solenoid, 200A 12V SPST Cont. Duty | 1 | 3.313 |
| | ed Rate Switch (Potentiometer) | 024450 | Pot Assy, Feed Rate Control Sawmill | 1 | 3.302 |
| | rward/Reverse Drum Switch | E20439 | Drum Switch, P/F | 1 | 3.307 |
| | D/Down Drum Switch | E20440 | Drum Switch, U/D | 2 | 1.118:2.207 |
| | ade Guide Arm Switch | 024200 | Switch, DPDT Toggle 21A Rev Mom Spade | 1 | 1.109 |
| | ebarker In/Out Switch | 024200 | Switch, DPDT Toggle 21A Rev Mom Spade | 1 | 3.319 |
| | olenoid, 200A DPST | 015417 | Solenoid, 200A 12V DPST Cont. Duty | 1 | 1.114 |
| SOL5 " | , | 015417 | Solenoid, 200A 12V DPST Cont. Duty | 1 | 1.116 |
| | mpleSet H-Bridge Assembly | 053373 | Bridge, SS | 1 | 1.114 |
| | mpleSet Controller | 053774 | Controller, SimpleSet | 1 | 1.116 |
| - | mpleSet Encoder Assembly | 074021 | Encoder Assy, SimpleSet | 1 | 1.116 |
| | SB/Assy Power Port | 011274 | USB/ASSY Port | 1 | 3.310 |
| | orward Feed Control Module | 073547. | Module, Consolidated P/F | 1 | 3.303 |

5.2 Wiring diagram



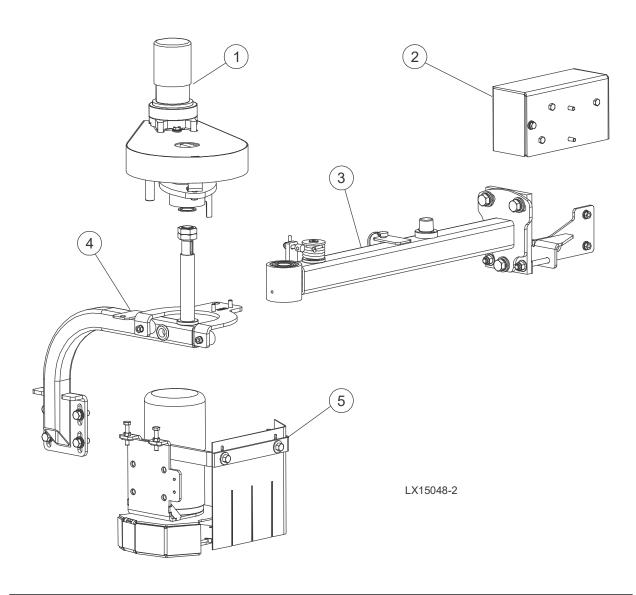






SECTION 6 PARTS

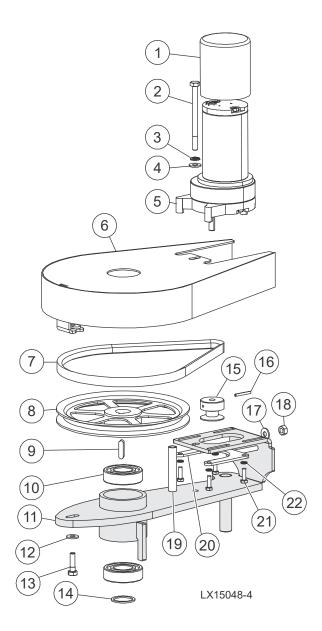
6.1 Debarker Assemblies



| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|-----------|---|----------|------|
| | 113422 | ASSY, LX150 DEBARKER | | 1 |
| | 113422-FI | Assy, LX150 Debarker (Field Installed) | | 1 |
| 1 | N/A | Pivot head parts (See Section 6.2) | | 1 |
| 2 | 065749 | Assy, Debarker Solenoid/Breaker (See Section 6.3) | | 1 |
| 3 | 113427 | Assy, LX150 Debarker Arm (See Section 6.4) | | 1 |
| 4 | 113429 | Assy, Debarker Swing Arm and Stop Bracket <u>(See Section 6.5)</u> | | 1 |
| 5 | 113427 | Assy, LX150 Debarker Cutter Head (See Section 6.6) | | 1 |

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6.2 Pivot Head



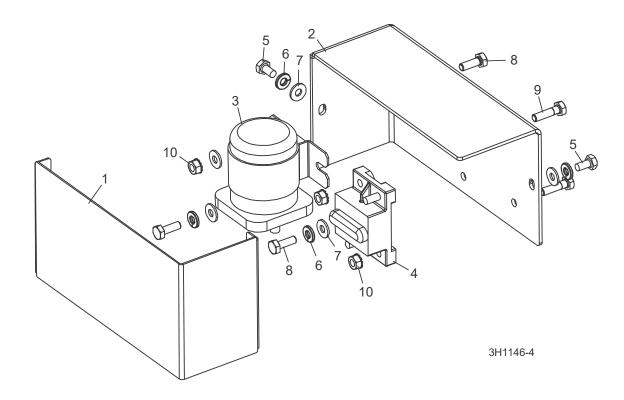
| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|------------|---|----------|------|
| 1 | 023720 | Cap, Rubber, 2.5 ID x 3 | | 1 |
| 2 | F05005-54 | Screw, 1/4-20 x 3 1/2" Hex Head Cap Grade 5 | | 1 |
| 3 | F05011-14 | Washer, 1/4" Split Lock | | 1 |
| 4 | F05011-11 | Washer, 1/4"SAE Flat | | 1 |
| 5 | 079214 | Motor, Current Applications 1/30HP 12VDC Gear | | 1 |
| 6 | 076161 | Guard Weldment, LT35 Debarker | | 1 |
| 7 | P04031 | Belt, 4L280 | | 1 |
| 8 | 076052 | Pulley, 7" x 20mm ID | | 1 |
| 9 | 076051 | Key, 6 x 6 x 25mm | | 1 |
| 10 | 087353 | Bearing, SKF 6205 2RS Roller | | 2 |
| 11 | 076047 | Weldment, LT35 Debarker Pivot Arm | | 1 |
| 12 | F05011-11 | Washer, 1/4"SAE Flat | | 1 |
| 13 | F05005-101 | Bolt, 1/4-20 x 1" Hex Head Grade 5 | | 1 |
| 14 | 076037 | Shim, 1" ID 1-1/4" OD | | 1 |

6 Pivot Head

| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|------------|-------------------------------|----------|------|
| 15 | 016181 | Sheave, Gearmotor Pinned | | 1 |
| 16 | F05012-34 | Pin, 1/8" x 1" Roll | | 1 |
| 17 | F05011-11 | Washer, 1/4"SAE Flat | | 1 |
| 18 | F05010-21 | Nut, 1/4-20 Swaged | | 1 |
| 19 | 076034 | Spacer, LT35 Debarker | | 1 |
| 20 | 023637 | Tensioner Weldment, Gearmotor | | 1 |
| 21 | F05004-152 | Screw, 10-32x5/8 HH Machine | | 4 |
| 22 | F05011-20 | Washer, #10 Split Lock | | 4 |

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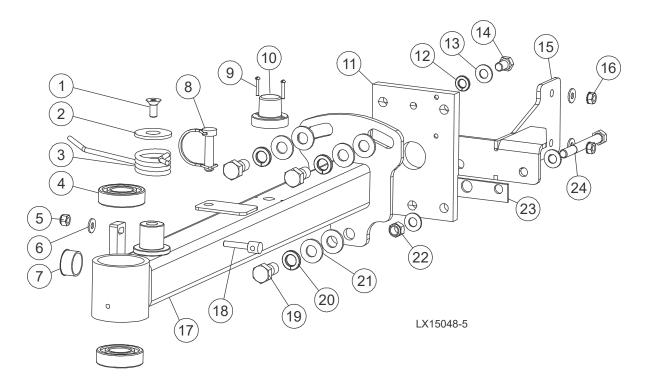
6.3 Debarker Solenoid Assembly



| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|------------|--|----------|------|
| | 065749 | SOLENOID/BREAKER ASSEMBLY, DEBARKER | | 1 |
| 1 | 065759 | Cover Weldment, Debarker Solenoid/Breaker | | 1 |
| 2 | 065757 | Plate, Debarker Solenoid/Breaker Mount | | 1 |
| | 016371 | Solenoid Kit, 200A 12V SPST Cont. Duty | | 1 |
| 3 | 015470 | Solenoid, 200A 12V SPST Cont. Duty | | 1 |
| | 015426 | Diode Assembly, Solenoid Coil Chassis GND | | 1 |
| | 016370-927 | Instruction Sheet, Solenoid Replacement | | 1 |
| 4 | 053440 | Breaker, 60A Hi-Amp Panel Mount | | 1 |
| 5 | F05005-15 | Bolt, 1/4-20 x 1/2" Hex Head | | 2 |
| 6 | F05011-14 | Washer, 1/4" Split Lock | | 4 |
| 7 | F05011-11 | Washer, 1/4" SAE Flat | | 5 |
| 8 | F05005-1 | Bolt, 1/4-20 x 3/4" Full Thread Hex Head | | 3 |
| 9 | F05005-38 | Screw, 1/4-20 x 1" Hex Head Cap | | 2 |
| 10 | F05010-9 | Nut, 1/4-20 Keps | | 3 |

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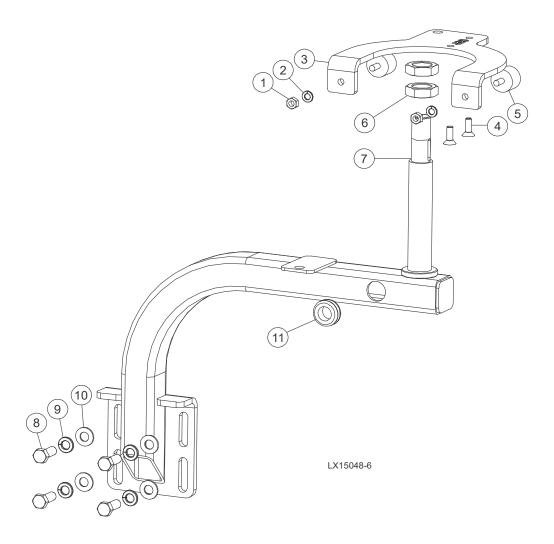
6.4 Debarker Arm



| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|------------|------------------------------------|----------|------|
| | 113427 | Assy, LX150 Debarker | | |
| 1 | F05006-95 | Bolt, 5/16-18x3/4 FHS Zinc | | 1 |
| 2 | 076039 | Washer, LT35 Torsion Spring | | 1 |
| 3 | 098605 | Spring, Debarker Tension | | 1 |
| 4 | 087353 | Bearing, SKF 6205 2RS Roller | | 2 |
| 5 | F05010-69 | Nut, 1/4-20 Nylock | | 1 |
| 6 | F05011-11 | Washer, 1/4 SAE Flat | | 3 |
| 7 | 074557 | Grommet, Heyco 13/16" | | 1 |
| 8 | 046412 | Pin, 3/8x1 3/8 Rnd Wire Lock | | 1 |
| 9 | F05004-13 | Bolt, 4-40x3/4 SI | | 2 |
| 10 | 073555 | Lamp Assy, 180 Degree Amber Strobe | | 1 |
| 11 | 110739 | Plate, LX150 Debarker Mount | | 1 |
| 12 | F05011-4 | Washer, 3/8 Split Lock | | 1 |
| 13 | F05011-3 | Washer, 3/8 Flat SAE | | 5 |
| 14 | F05007-148 | Bolt, 3/8-16x5/8 HH Gr5 | | 1 |
| 15 | 110736 | Mount Weldment, Debarker Solenoid | | 1 |
| 16 | F05010-9 | Nut, 1/4-20 Keps-> | | 2 |
| 17 | 110702 | Weldment, LT35/LX150 Debarker | | 1 |
| 18 | 076139 | Bushing, Debarker Spring Retaining | | 1 |
| 19 | F05008-50 | Bolt, 1/2-13x1 HH | | 3 |
| 20 | F05011-9 | Washer, 1/2 Split Lock | | 3 |
| 21 | F05011-2 | Washer, 1/2 SAE Flat | | 6 |
| 22 | F05010-10 | Nut, 3/8-16 Hex Nyloc | | 2 |
| 23 | 065769 | Plate, Debarker Mount Spacer | | 1 |
| 24 | F05004-123 | Bolt, 3/8-16x3 1/2 HH Gr5 | | 2 |

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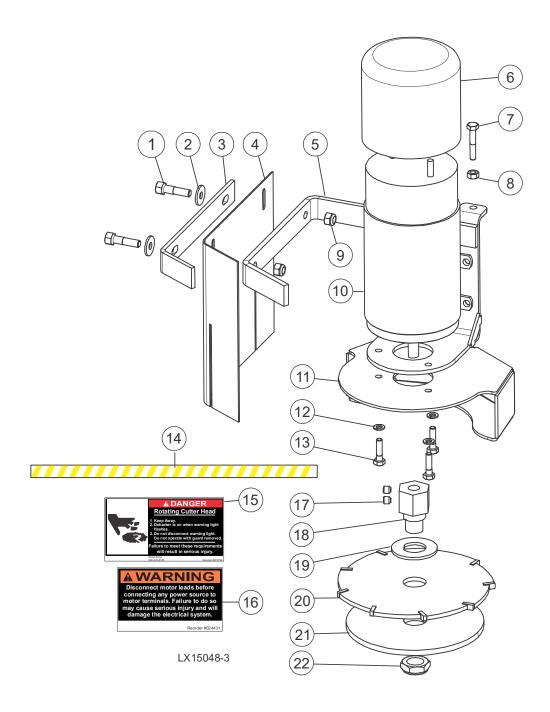
6.5 Debarker Swing Arm and Stop Bracket



| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|-----------|--------------------------------------|----------|------|
| | 113421 | Bracket, LX150 Debarker Stop | | 1 |
| 1 | F05010-63 | Nut, 1/4-20 Free Zinc | | 2 |
| 2 | F05011-14 | Washer, 1/4 Split Lock | | 2 |
| 3 | 113420 | Plate, LX150 Debarker Stop | | 1 |
| 4 | F05005-70 | Screw, 1/4-20x3/4 FHSH Stainless Stl | | 2 |
| 5 | 065717 | Bumper, 1x3/4 Rubber | | 2 |
| | 113429 | Assy, Debarker Swing Arm | | 1 |
| 6 | F81037-7 | Nut, M20x1.5 Zinc Plated Thin | | 2 |
| 7 | 076048 | Weldment, Debarker Swing Arm | | 1 |
| 8 | F05007-87 | Bolt, 3/8-16x1 HH Gr5 | | 4 |
| 9 | F05011-4 | Washer, 3/8 Split Lock | | 4 |
| 10 | F05011-3 | Washer, 3/8 Flat SAE | | 4 |
| 11 | 033475 | Grommet, 5/8 ID 3/16 GW Rubber | | 1 |

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6.6 Cutter Head Assembly



| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|-----------|----------------------------------|-------------------------------|------|
| | 113426 | Assy, LX150 Debarker Cutter Head | | |
| 1 | F05009-62 | Bolt, 5/16-18x1 1/4 HH | | 2 |
| 2 | F05011-16 | Washer, 5/16 Standard Flat | | 2 |
| 3 | N/A | Retainer, LT35 Debarker Flex | Available in assemblies only. | 1 |
| 4 | 076192 | Guard, Debarker Flex | | 1 |
| 5 | 076055 | Weldment, Debarker Cutter Head | | 1 |
| 6 | 065732 | Boot, LT35 Debarker Motor Rubber | | 1 |
| 7 | F05005-31 | Bolt, 1/4-20x1 1/2 HH FT | | 2 |
| 8 | F05010-63 | Nut, 1/4-20 Free Zinc | | 2 |

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| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|------------|---|----------|------|
| 9 | F05010-58 | Nut, 5/16-18 Nylok Hex | | 2 |
| 10 | 053683 | Motor, 3/4HP 12VDC Electric Std Mill | | 1 |
| 11 | 113425 | Guard, LX150 Debarker Blade | | 1 |
| 12 | F05011-14 | Washer, 1/4 Split Lock | | 3 |
| 13 | F05005-101 | Bolt, 1/4-20x1 HH Gr5 | | 3 |
| 14 | 015849 | Decal, LT15 Blade Guide Bar | | 1 |
| 15 | 076799 | Decal, Debarker Light Warning | | 1 |
| 16 | 024431 | Decal, Disconnect Motor Leads Warning | | 1 |
| 17 | F05006-6 | Screw, 5/16-18x5/16 SH CP | | 2 |
| 18 | 071000 | Bushing, Debarker Blade Holder | | 1 |
| 19 | 071001 | Washer, LT35 Debarker Blade | | 1 |
| 20 | 021236 | Blade, Debarker, 1/4 Kerf | | 1 |
| | 065852 | Blade, 7" Dia. Debarker w/1/2" Inserts (Optional Purchased Separately) | | 1 |
| 21 | 076195 | Guard, LT35 Debarker Depth | | 1 |
| 22 | F05010-122 | Nut, 3/4-10 Half Nyloc | | 1 |