Debarker Option

Safety, Installation, Operation, Maintenance & Parts Manual

LX450DB-A Debarker

rev. C.00



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

Form #2298

Used with all LX450 mills rev. A1.00 - A1.07 +.

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

The following symbols and signal words call your attention to instructions concerning your personal safety.



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.

OWNER/OPERATOR'S RESPONSIBILITY

The procedures listed in this manual may not include all ANSI, OSHA, or locally required safety procedures. It is the owner/operator's responsibility and not Wood-Mizer LLC to ensure all operators are properly trained and informed of all safety protocols. Owner/Operators are responsible for following all safety procedures when operating and performing maintenance to the equipment.

1.1 Installation and 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 debarker installation! Follow all applicable electrical codes.

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.

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



WARNING! Before replacing the debarker blade, move the sawmill blade guide arm in front of the sawmill blade to cover the blade teeth. Failure to do so may result in serious injury or death.

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1.2 Operation and Towing



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.

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

Always remove the key from the control panel before preparing the debarker for towing. Failure to do so may result in serious injury.



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

If the debarker continues to run with the key switch in the OFF position, remove the negative battery terminal from the battery post.

DO NOT continue to operate the mill if the main key switch does not control debarker operation. Doing so could result in serious injury. Call Wood-Mizer customer service for more information.

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SECTION 2 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.

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.

2.1 Debarker Installation



DANGER! Always disengage the blade and shut off the sawmill engine before installing the debarker. Failure to do so will result in serious injury.

IMPORTANT! 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.

1. Open the blade housing cover.

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Assemble the debarker to the sawmill saw head. Align the mounting block holes and the two debarker mounting holes in the saw head. Use the provided hex head bolts, split lock and flat washers to secure in place. Make sure the debarker is square to the saw head before tightening.

See Figure 2-1.

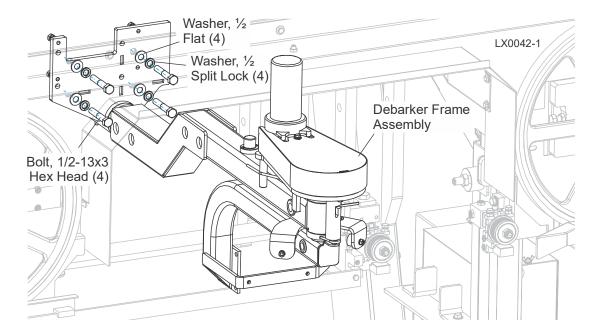


FIG. 2-1

3. Assemble the debarker cutting head to the mount plate on the frame.

Use the four provided bolts and split lock washers to mount the cutting head to the debarker frame. 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.

See Figure 2-2.

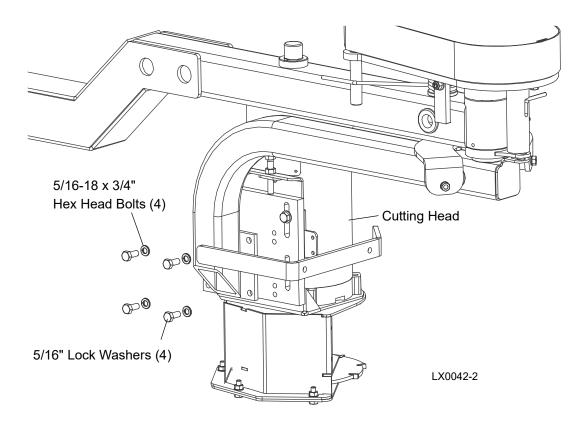


FIG. 2-2

2-3 6/5/24

4. Install the blade guard bracket and flexible debris guard to the debarker head with two flat washers, lock washers, and hex head bolts. Be sure the bottom of the debris guard is even with the bottom of the debarker blade.

See Figure 2-3.

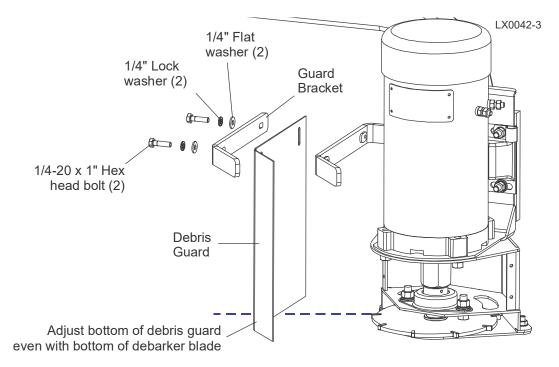


FIG. 2-3

2.2 Harness Installation



DANGER! Before performing any service to this equipment, turn the key to the OFF (0) position, remove the key, and disconnect the saw-mill 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. Route the harnesses through the saw head frame hole as shown. Continue routing the long blade motor wire harness (large wires/ring terminals) inside the debarker frame through the three holes with grommets.

See Figure 2-4.

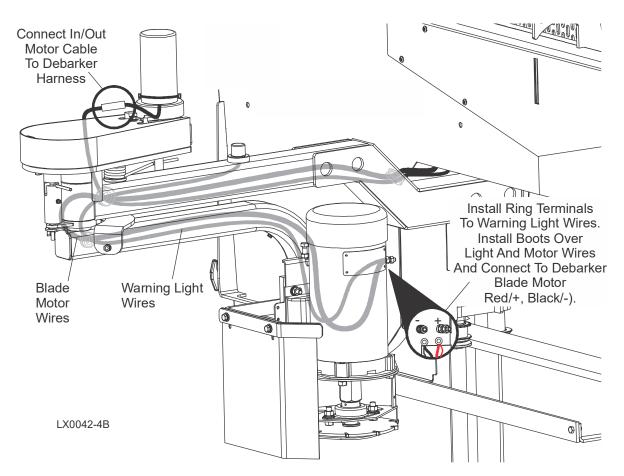


FIG. 2-4

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- 2. Cut the conduit of the in/out motor wire harness to expose the quick connect terminals. Remove the rubber cap from the in/out motor and install the removed conduit around the in/out motor wires. Route the wires down the side of the in/out motor to the quick connects. Be sure to leave slack in the harness to avoid kinking and bending as the debarker moves in and out. Replace the motor cap and secure the harness to the in/out motor by connecting two wire ties together and wrapping around the motor.
- 3. Connect the in/out motor wire harness to the in/out motor saw head harness. Secure the harness to the blade motor frame with wire ties.
- 4. Route the warning light harness on top of the blade motor pivot arm to the debarker blade motor. Secure the warning light wires to the pivot arm with wire ties as shown above.

See Figure 2-5.

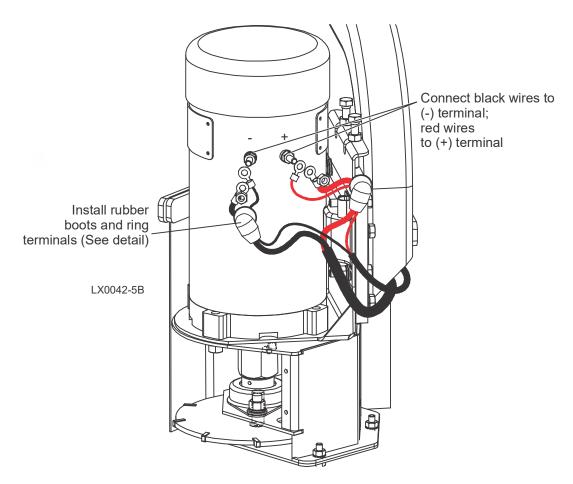


FIG. 2-5

5. Remove the top nuts from each of the motor terminals.

Harness Installation

- 6. Route the black motor wires from the motor and warning light harnesses through one of the provided rubber boots. Strip the end of the black warning light wire and install a 1/4" 14-16 gauge ring terminal. To install the 14-16 gauge ring terminal, fold the stripped end of the wire over the insulation, install the ring terminal and crimp in place.
- 7. Connect the black motor and light wires to the negative (-) motor terminal. Replace the terminal nut to secure the wires.

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

- 8. Route the red motor and light wires through one of the provided rubber boots. Strip the end of the red warning light wire and install a 1/4" 14-16 gauge ring terminal. To install the 14-16 gauge ring terminal, fold the stripped end of the wire over the insulation, install the ring terminal and crimp in place.
- 9. Connect the red motor and light wires to the positive (+) motor terminal. Replace the terminal nut to secure the wires.

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

- 10. Slide the rubber boots over the motor terminal posts to protect the connections.
- 11. Replace all removed covers and guards.

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2.3 Control Component 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.

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.

<u>See SECTION 5</u> for the appropriate wiring diagram to aid in installation.

- 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. Place the solenoid on the mounting studs and place the diode assembly ring terminal over one of the studs. Use the two 1/4-20 self-locking nuts provided to secure in place.

See Figure 2-6.

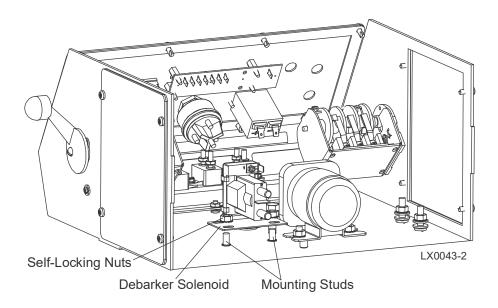


FIG. 2-6

3. Remove the two small bolts and nuts and the one large bolt and nut from the back of the control box.



- 4. Locate the bundle of wires on the floor of the sawmill control box. 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. Do not overtighten this connection. Overtightening could cause component breakage.
- 5. Install the 70 amp breaker and rubber boot to the large hole on the back of the control box. Be sure the breaker terminals do not touch any other components or wires inside the control box.
- 6. Install the provided 15 amp breaker to the two small holes in the back of the control box. Use the existing screws and nuts (removed earlier) to secure in place.

See Figure 2-7.

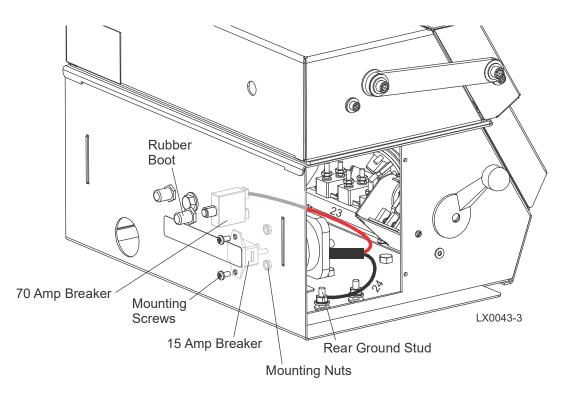


FIG. 2-7

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7. 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.

See Figure 2-8.

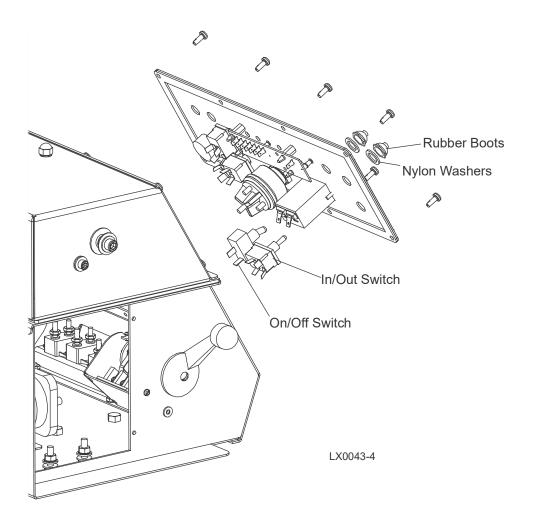


FIG. 2-8

- 8. Connect the red #205 wire from the 15 amp breaker to the ACC post on the key switch.
- 9. Make sure the red #206 wire from the 15 amp breaker to the debarker in/out switch is connected.
- 10. Connect the red #202 wire from the debarker solenoid to the DBKR terminal on the LED board.
- 11. Make sure the red #201 wire from the small terminal on the debarker solenoid to the debarker on/off switch is connected.
- 12. Connect the red #203 wire from debarker solenoid to the BAT post of the key switch.
- 13. Make sure the red #204 wire from the bottom debarker solenoid terminal to the 70 Amp breaker is connected.

See Figure 2-9. Box housing removed for clarity. Only wires referred to above are shown.

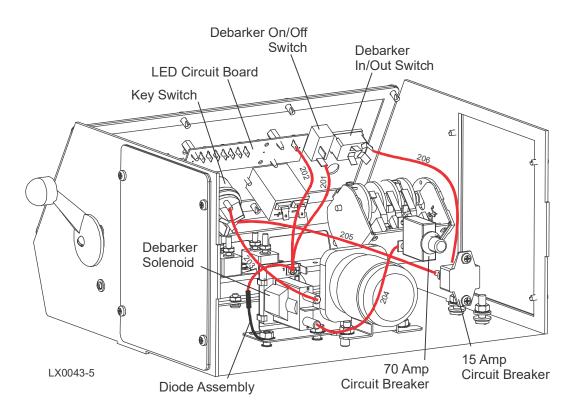


FIG. 2-9

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

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.

See Figure 2-10.

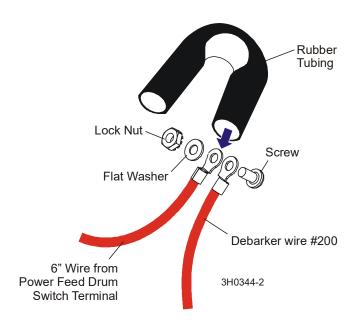


FIG. 2-10

- 15. Connect the black #207 wire from the debarker in/out switch to the rear ground stud.
- 16. 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.
- 17. Connect the small red #21 wire to the debarker in/out switch bottom left terminal.
- 18. Connect the small black #22 wire to the debarker in/out switch top left terminal.

See Figure 2-11. Box housing removed for clarity. Only wires referred to above are shown.

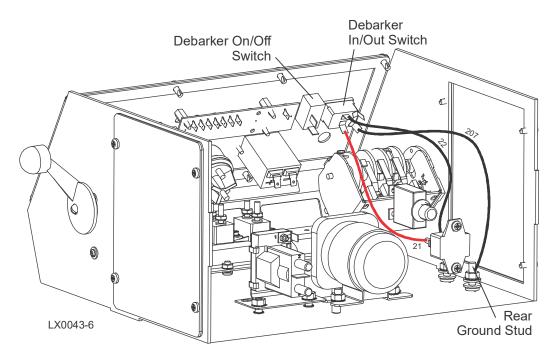


FIG. 2-11

19. Reinstall all the panels to the control box.

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2.4 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.

The debarker blade should be aligned to the sawmill blade to insure proper operation. The debarker blade should be parallel with and aligned vertically with the sawmill blade.

- 1. Turn the key 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. This will prevent the debarker from being turned on while performing alignment procedures.
- 2. Check the squareness of the debarker with the sawmill blade. Adjust the debarker mounts if necessary until the debarker is square with the sawmill blade.

Loosen the debarker upper/lower mounting bolts and loosen the jam nuts on the upper/lower adjustment bolts. Turn the adjustment bolts as necessary until the debarker is square with the sawmill blade. Retighten the jam nuts and debarker mounting bolts.

See Figure 2-12.

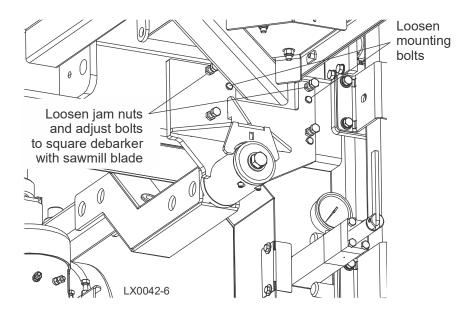


FIG. 2-12



3. Clip the blade guide alignment tool to the sawmill blade. Make sure the tool lies flat on the blade and does not contact a tooth that could cause it to angle.

See Figure 2-13.

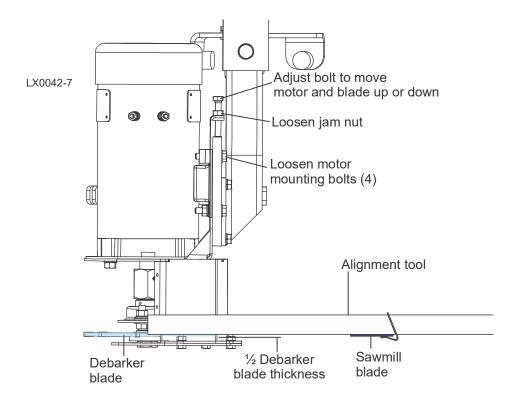


FIG. 2-13

4. 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.

To adjust the blade up or down, loosen the four blade motor mount bolts. Loosen the jam nut on the adjustment bolt. Turn the adjustment bolt clockwise to push the motor and blade down. Turn the adjustment bolt counterclockwise and slide the motor up to raise the motor and blade. Retighten the adjustment bolt jam nut and four motor mount bolts.

- 5. Insert the key and use the debarker in/out switch to move the debarker all the way out. Turn the key to OFF (0) and remove the key.
- 6. Move the blade guide alignment tool on the sawmill blade and check the position of the debarker blade against the tool. If the debarker blade is not centered with the tool, readjust the debarker mounting bolts to adjust the debarker assembly parallel to the blade.

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SECTION 3 OPERATION AND MAINTENANCE

3.1 Locking Pin Operation

See Figure 3-1. The debarker is equipped with a locking pin located where the debarker frame pivots in the mounting blocks. One hole location is provided for the locking pin. Turn the locking pin to the left to lock the debarker in place when towing the sawmill. Turn the locking pin to the right to unlock the debarker while the debarking is required during sawing.

Before operating the debarker, make sure the locking 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 locking pin. Pull the pin up and rotate so the small roll pin is aligned with the disengaged position. Release the locking pin.

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 hole aligns with the locking pin. Pull the pin up and rotate until the small roll pin is aligned with the travel position slot. Release the locking pin.

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.

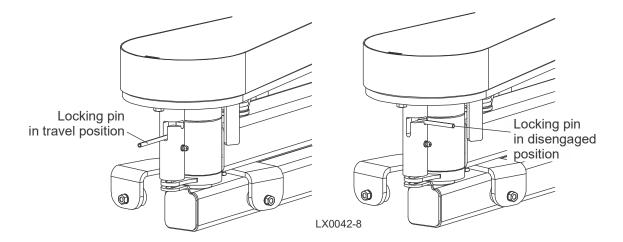


FIG. 3-1

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3.2 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 3-2. The debarker control includes two toggle switches, an indicator light, and circuit breakers with manual reset.

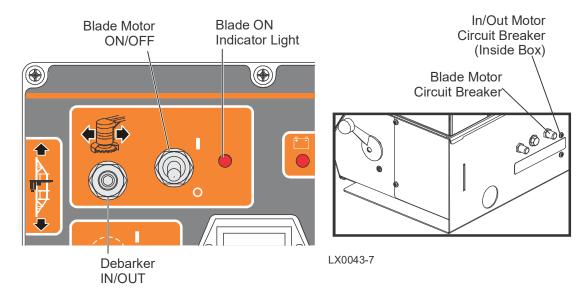


FIG. 3-2

- 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.

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3.3 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.

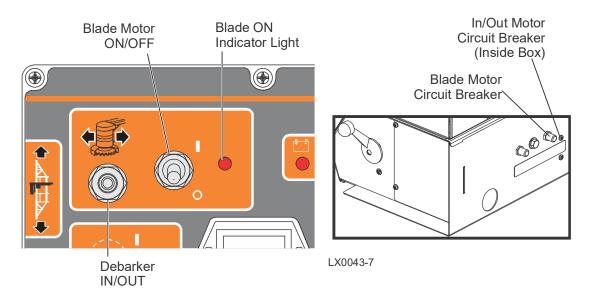


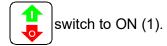
FIG. 3-2

- 3. Use the in/out switch 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.

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3 Operation

5. Turn the debarker on/off



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,

DO NOT move the carriage forward while the debarker is contacting the log without the blade spinning.

 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>).

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3.4 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.

See Figure 3-3.

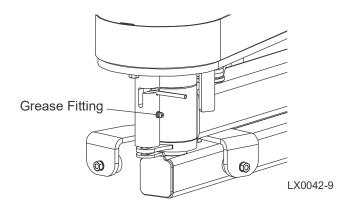


FIG. 3-3

- 2. Periodically check the flexible guard. 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 teeth. Failure to do so may result in serious injury or death.

To replace the debarker blade, remove the lower blade guard plate. Place one wrench on the blade arbor, above the blade bearing. Place the other wrench on the lower bolt and rotate clockwise (bolt has left-hand threads). Remove the bolt and washer. Remove the blade and spacer.

Reinstall the spacer with the new blade. Reinstall the bolt and washer and turn counter-clockwise to tighten to 35 foot-pounds (±5). 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.

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3.5 Troubleshooting



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

| PROBLEM | CAUSE | SOLUTION |
|---|--|---|
| 70 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 binding |
| | 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 |
| 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. |

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SECTION 4 ELECTRICAL INFORMATION

4.1 Electrical Component List

| ID | Wood-Mizer Part No. | Description |
|-------|---------------------|--|
| CB20 | 015527 | Breaker, 70 A Manual Reset Panel Mount Circuit |
| CB21 | E20430 | Breaker, 15 Amp |
| D20 | 015426 | Diode Assembly, Solenoid Coil Chassis |
| L1 | 073555 | Light Assembly, Debarker ON Warning Strobe |
| M20 | 023688 | Motor, 12 V DC 3/4HP TEFC W/Base 7/8" Dia. Shaft |
| M20 | 050292 | Motor, 3/4HP 230/460 3P 1725RPM |
| M21 | 074826 | Gearmotor Assembly, LT70 Debarker In/Out |
| SOL20 | 016372 | Solenoid, 12V 100A Cont Duty GND Coil |
| SW20 | P03027 | Switch, Toggle |
| SW21 | 024200 | Switch, DPDT Toggle |

4.2 Electrical Wiring Diagram

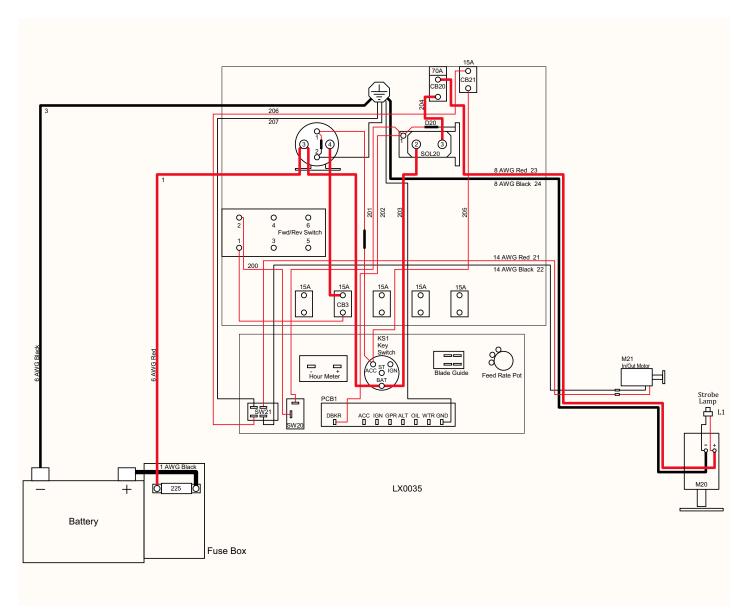
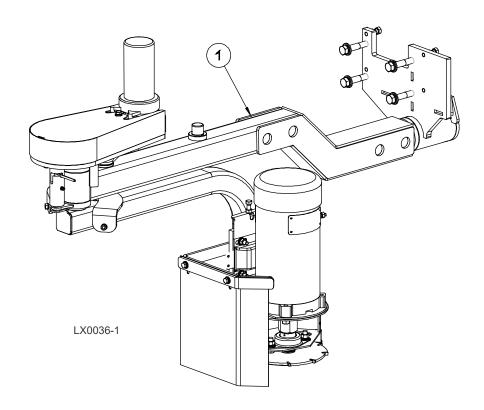


FIG. 4-0

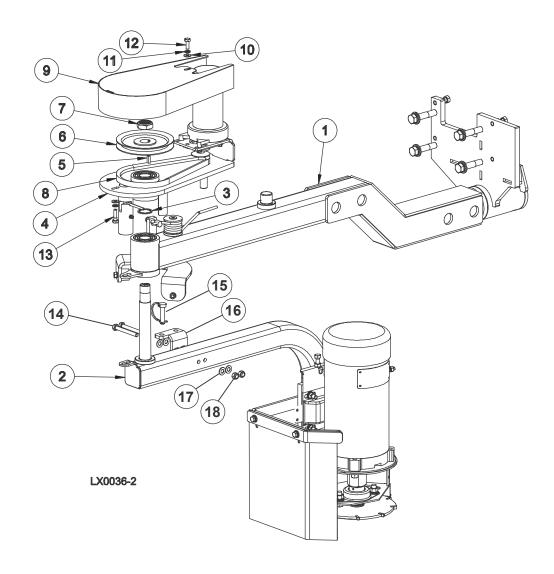
SECTION 5 DEBARKER PARTS

5.1 Mechanical Assembly



| REF | PART # | DESCRIPTION | COMMENTS | QTY. | | |
|-------|--|---|--|------|--|--|
| NOTE: | NOTE: For field installation of existing sawmills, order the mechanical assembly and the control kit | | | | | |
| | LX450DB | DEBARKER, INSTALLED LX450 | | 1 | | |
| 1 | 110902 | Assembly, LX450 Mechanical Debarker (See Section 5.2) | Assembly LX450 Mechanical Debarker 107530 was replaced by 110902 after 6/19 per ECN 35923. | 1 | | |
| | 016119 | Debarker Mk II, Installed, Control Box((See Section 6.8)) | | 1 | | |

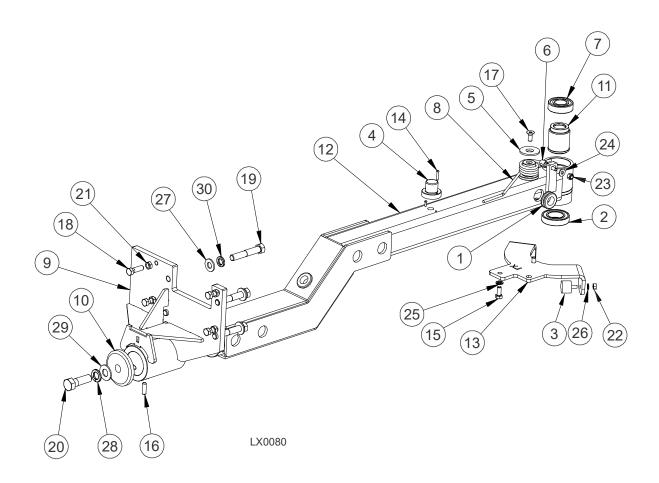
5.2 Frame Assembly



| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|--------|---|----------|------|
| | 110902 | ASSY, LX450 DEBARKER | | |
| 1 | 110900 | Assembly, LX450 Debarker Mount Arm (<u>(See Section 5.3)</u>) | | 1 |
| 2 | 110901 | Assembly, LX450 Debarker Pivot Arm (<u>(See Section 5.4)</u>) | | 1 |
| 3 | 076037 | Shim, 1 ID 1-1/4 OD | | 1 |
| 4 | 110634 | Assembly, Debarker Upper Pivot ((See Section 5.6)) | | 1 |
| 5 | 065214 | Key, 3/16 Sq x 5/8 | | 1 |

| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|------------------|------------|------------------------------------|----------|------|
| 6 | 076798 | Pulley, 5x7/8 A Groove | | 1 |
| 7 | F05010-238 | Nut, 7/8-14 Half Nylock | | 1 |
| 8 | 076689 | Belt, AX22 | | 1 |
| 9 | 076713 | Weldment, LT70 Debarker Belt Guard | | 1 |
| 10 | F05011-11 | Washer, 1/4 SAE Flat | | 2 |
| 11 | F05011-14 | Washer, 1/4 Split Lock | | 2 |
| 12 | F05005-1 | Bolt, 1/4-20x3/4 FT Hex HeadC | | 1 |
| 13 | F05005-101 | Bolt, 1/4-20 X 1 Hex Head Gr5 | | 1 |
| 14 | F05006-136 | Bolt, 5/16-18x2 3/4 FT HH Gr5 Zinc | | 2 |
| 15 | 046412 | Pin, 3/8x1 3/8 Rnd Wire Lock | | 1 |
| 16 | 128092 | Lock Bracket, Debarker Travel | | 1 |
| 17 | F05011-17 | Washer, 5/16 SAE Flat | | 4 |
| 18 | F05010-58 | Nut, 5/16-18 Nyl Lock | | 2 |
| Not Show n | 016187 | Decal, Revision | | 1 |
| | 016200 | Overlayment, Revision Decal | | 1 |
| | 015761 | Cover, 3/4HP Leeson Motor | | 1 |

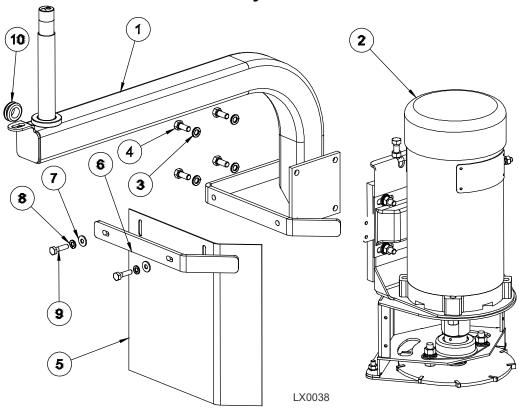
5.3 Debarker Mount Arm Assembly



| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|--------|------------------------------------|----------|------|
| | 110900 | ASSY, LX450 DEBARKER MOUNT ARM | | |
| 1 | 025247 | Grommet, Rubber 3/4 ID | | 2 |
| 2 | 036007 | Bearing, R20-2RS | | 1 |
| 3 | 065717 | Bumper, 1x3/4 Hard Silicone Rubber | | 2 |
| 4 | 073555 | Lamp Assy, 180 Degree Amber Strobe | | 1 |
| 5 | 076039 | Washer, LT35 Torsion Spring | | 1 |
| 6 | 076139 | Bushing, Debarker Spring Retaining | | 1 |
| 7 | 087353 | Bearing, SKF 6205 2RS Roller | | 1 |
| 8 | 098605 | Spring, Debarker Tension | | 1 |
| 9 | 107524 | Weldment, Debarker Mount | | 1 |
| 10 | 107539 | Retainer, Debarker Mount | | 1 |

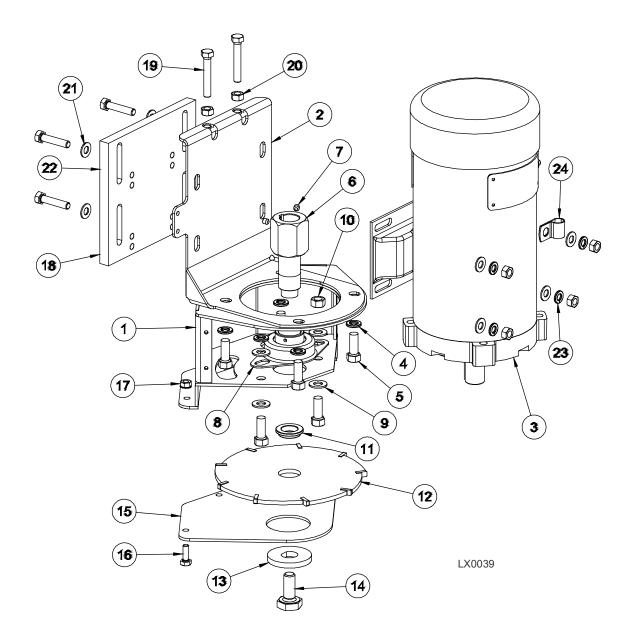
| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|------------|-------------------------------------|----------|------|
| 11 | 110588 | Tube, Long Bearing Spacer | | 1 |
| 12 | 110899 | Weldment, LX450 Debarker Mnt Arm | | 1 |
| 13 | 110903 | Plate, LX450 Debarker Pivot Stop | | 1 |
| 14 | F05004-13 | Bolt, 4-40x3/4 SI | | 2 |
| 15 | F05006-105 | Bolt, 5/16-24x3/4 HH Gr 5 FT ZNC | | 2 |
| 16 | F05006-122 | Screw, 5/16-18x1 SS Set, Flat Point | | 2 |
| 17 | F05006-95 | Bolt, 5/16-18x3/4 FHS Zinc | | 1 |
| 18 | F05007-123 | Bolt, 3/8-16x1 1/4 FT HH Gr5 | | 4 |
| 19 | F05008-23 | Bolt, 1/2-13x3 HH Gr5 | | 4 |
| 20 | F05009-2 | Bolt, 5/8-11x2 HH Gr2 | | 1 |
| 21 | F05010-29 | Nut, 3/8-16 Jam | | 4 |
| 22 | F05010-63 | Nut, 1/4-20 Free Zinc | | 2 |
| 23 | F05010-69 | Nut, 1/4-20 Nylock | | 1 |
| 24 | F05011-11 | Washer, 1/4 SAE Flat | | 1 |
| 25 | F05011-13 | Washer, 5/16 Split Lock | | 2 |
| 26 | F05011-14 | Washer, 1/4 Split Lock | | 2 |
| 27 | F05011-2 | Washer, 1/2 SAE Flat | | 4 |
| 28 | F05011-27 | Washer, 5/8 Split Lock | | 1 |
| 29 | F05011-5 | Washer, 5/8 SAE Flat | | 1 |
| 30 | F05011-9 | Washer, 1/2 Split Lock | | 4 |
| | 076799 | Decal, Debarker Light Warning | | 2 |

5.4 Debarker Pivot Arm Assembly



| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|-----------|--|---|------|
| | 110644 | ASSEMBLY, LX450 DEBARKER PIVOT ARM | Assembly, LX450 Debarker Pivot Arm 107535 changed to 110644 as of 9/14/2018 per ECN 22089. | 1 |
| 1 | 110898 | Weldment, LX450 Debarker Pivot Arm | Weldment, LX450 Debarker Pivot Arm107537 changed to 110898 as of 9/14/2018 per ECN 22089. | 1 |
| 2 | 076677 | Assembly, LT70 Debarker Cutter Head (<u>(See Section 5.5)</u>) | | 1 |
| 3 | F05011-13 | Washer, 5/16 Split Lock | | 4 |
| 4 | F05006-5 | Bolt, 5/16-18x3/4 Hex Head Gr2 | | 4 |
| 5 | 021232 | Guard, Debarker Flex | | 1 |
| 6 | 076749 | Plate, Debarker Flex Guard Retaining | | 1 |
| 7 | F05011-11 | Washer, 1/4 SAE Flat | | 2 |
| 8 | F05011-14 | Washer, 1/4 Split Lock | | 2 |
| 9 | F05005-38 | Screw, 1/4-20x1 Hex HeadC | | 2 |
| 10 | 033475 | Grommet, 5/8 ID 3/16 GW Rubber | | 1 |

5.5 Debarker Cutter Head Assembly

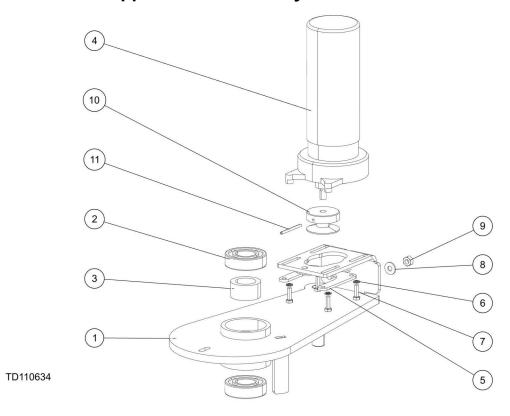


| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|----------|-------------------------------------|----------|------|
| | 076677 | ASSEMBLY, LT70 DEBARKER CUTTER HEAD | | 1 |
| 1 | 076686 | Weldment, LT70 Debarker Cutter Head | | 1 |
| 2 | 023622 | Tensioner Weldment | | 1 |
| 3 | 023688 | 3/4 HP 12UDC TEFC Leeson, MKII | | 1 |
| 4 | F05011-4 | Washer, 3/8 Split Lock | | 6 |
| 5 | F05007-7 | Bolt, 3/8-16x1 Hex Head | | 6 |



| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|------------|-------------------------------------|----------|------|
| 6 | 074832 | Mandrel, Debarker Blade | | 1 |
| 7 | F05005-105 | 1/4-28X1/4 Cup Point Set, B/O | | 2 |
| 8 | 023541 | Bearing, 1 Flanged Mount | | 1 |
| 9 | F05011-3 | Washer, 3/8 Flat SAE | | 4 |
| 10 | F05010-1 | Nut, 3/8-16 Hex | | 2 |
| 11 | 023632 | Bushing, Blade Spacer | | 1 |
| 12 | 021236 | Blade, 7in Dia (Debarker) | | 1 |
| 13 | 023737 | Washer, Blade Bolt Lock | | 1 |
| 14 | 074833 | Bolt, 1/2-20x1 1/4 Hex Head Special | | 1 |
| 15 | 023629 | Guard, Cutter Head Bottom | | 1 |
| 16 | F05005-1 | Bolt, 1/4-20x3/4 FT Hex HeadC | | 3 |
| 17 | F05010-9 | Nut, 1/4-20 Keps | | 3 |
| 18 | 023620 | Aluminum Plate, Motor Mnt | | 1 |
| 19 | F05006-13 | Bolt, 5/16-18x2 Hex Head FT | | 2 |
| 20 | F05010-17 | Nut, 5/16-18 Hex | | 6 |
| 21 | F05011-17 | Washer, 5/16 SAE Flat | | 8 |
| 22 | F05006-2 | Bolt, 5/16-18x1 1/2 Hex Head FT | | 4 |
| 23 | F05011-13 | Washer, 5/16 Split Lock | | 4 |
| 24 | P07584 | Clamp, 1/2EMT Coated | | 1 |

5.6 Debarker Upper Pivot Assembly

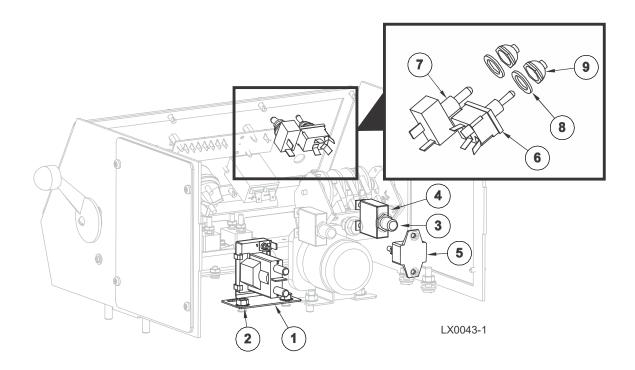


| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|------------|---|------------------------|------|
| | 110634 | ASSEMBLY, LT70 DEBARKER UPPER PIVOT | | 1 |
| 1 | 110635 | Weldment, LT70 Deb. Upper Pivot W/O Lock | | 1 |
| 2 | 087353 | Bearing, SKF 6205 2RS Roller | | 2 |
| 3 | 076741 | Tube, Short Bearing Spacer | | 1 |
| 4 | 114024 | Assy, LT70 Super Debarker In/Ou w/BR | | 1 |
| | 009695 | Shaft Kit, 53:1 ASA Gear Motor | Service kit for 114024 | 1 |
| | 110952 | Motor, 1/15HP 34RPM 12VDC 98:1 W/Brake | | 1 |
| | 133750 | Brake Kit, Gear Motor K01134-APAH | | 1 |
| | 133751 | Gear Kit, Gear Motor K01134-APAG | | 1 |
| 5 | 023637 | Tensioner Weldment, Gearmotor | | 1 |
| 6 | F05011-20 | Washer, #10 Split Lock | | 4 |
| 7 | F05004-152 | Bolt, #10-32x5/8 HH | | 4 |
| 8 | F05011-11 | Washer, 1/4 SAE Flat | | 1 |
| 9 | F05010-21 | Nut, 1/4-20 Swaged | | 1 |



| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|------------|---------------------------------|----------|------|
| 10 | 076666 | Sheave, LT70 Debarker Gearmotor | | 1 |
| 11 | F05012-102 | Pin, 1/8x1 5/8 Roll Zinc | | 1 |

5.7 Control Kit



| REF | PART # | DESCRIPTION | COMMENTS | QTY. |
|-----|----------|--|-------------------------------|------|
| | 016119 | DEBARKER MK II, INSTALLED, CONTROL BOX | | 1 |
| 1 | 024415 | Control Assy, Debarker Mk II Std & Super | | 1 |
| | P10449 | Solenoid, 100A 12V Cont. Duty GND | Available in assemblies only. | 1 |
| | 015426 | Diode Assembly, Solenoid Coil Chassis GND | | 1 |
| 2 | F05010-9 | Nut, 1/4-20 Self Locking | | 2 |
| 3 | 021253 | Boot, Circuit Breaker | | 1 |
| 4 | 015527 | Breaker, 70 Amp Manual Reset Panel Mount | | 1 |
| 5 | E20430 | Breaker, 15 Amp Manual Reset | | 1 |
| 6 | 024200 | Switch, DPDT Toggle Return Center Screw Terminal | | 1 |
| 7 | P03027 | Switch, SPST Toggle Quick Connect | | 1 |
| 8 | P05251-1 | Washer, 1/2 x 3/4 x 1/16" Nylon | | 2 |
| 9 | P02575 | Boot, Toggle Switch | | 2 |

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