AC Debarker Option

Safety, Installation, Operation, Maintenance & Parts Manual

MKII for 1997+ AC Sawmills rev. D.2



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

Form #960

abie of C	contents	Section-Page
SECTIO	N 1 SAFETY & GENERAL INFORMATION	1-1
1.1	Installation and Maintenance	1-1
1.2	Operation and Towing	
SECTIO	N 2 DEBARKER INSTALLATION	2-1
2.1	Debarker Frame Mounting Holes	2-2
2.2	Debarker Installation	
2.3	Wiring Instructions	2-8
2.4	Control Component Installation	2-12
2.5	Electric Box Installation	2-14
2.6	Alignment	2-16
SECTIO	N 3 OPERATION AND MAINTENANCE	3-1
3.1	Locking Pin Operation	3-1
3.2	Operation	
3.3	Maintenance	3-4
3.4	Troubleshooting	3-6
SECTIO	N 4 ELECTRICAL INFORMATION	4-1
4.1	Electrical Symbol Diagram (EA15)	4-2
4.2	Electrical Symbol Diagram (EA20 and EA25)	
SECTIO	N 5 DEBARKER PARTS	5-1
5.1	How To Use The Parts List	5-1
5.2	Sample Assembly	5-1
5.3	Mount/Lock Pin Assembly	5-2
5.4	Frame Assembly	5-3
5.5	In/Out Motor Drive Assembly	5-4
5.6	Blade Motor Assembly	
5.7	Blade Housing Assembly	
5.8	Debarker Control Assembly	
5.9	Spring Rod Assembly	5-11

SECTION 1 SAFETY & GENERAL INFORMATION



This symbol calls your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions. This symbol accompanies a signal word. The word **DANGER** indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. **WARNING** suggests a potentially hazardous situation which, if not avoided, could result in death or serious injury. **CAUTION** refers to potentially hazardous situations which, if not avoided, may result in minor or moderate injury to persons or equipment. Read all safety instructions before operating this equipment and observe all safety warnings!

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.

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

DANGER! Before performing any service to this equipment, turn the key to the OFF position, remove the key, and disconnect the 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.

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.

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

DANGER! 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 bell sounds. DO NOT disconnect the warning bell. Doing so may result in serious injury.

WARNING! 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.

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.

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.

See Table 2-1. 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.
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 1-800-525-8100. 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 2-1

2.1 Debarker Frame Mounting Holes

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 Debaker operation.

2.2 Debarker Installation

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.

See Figure 2-1. The debarker wiring on sawmills built after 7/98 is pre-routed and secured at the debarker mounting location with a guard. This guard must be removed before the debarker can be installed.

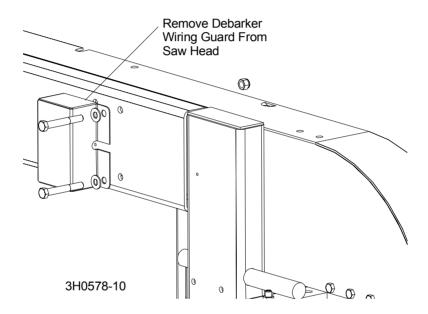


FIG. 2-1

- **1.** Open the middle blade housing cover. Remove the four pre-installed bolts and nuts from the debarker frame mounting blocks.
- 2. Assemble the debarker to the sawmill saw head. Align the mounting block holes and the holes in the saw head. Insert the bolts from the back of the saw head, through the debarker mounting block holes. Use the lock nuts to secure in place. Tighten the mounting bolts to 20 ft.-lbs. torque. Do not tighten the set screws in the mounting blocks until debarker alignment has been performed.

NOTE: When installing, make sure the blade guide motor wire harness is routed between the saw head and the pivot arm.

See Figure 2-2.

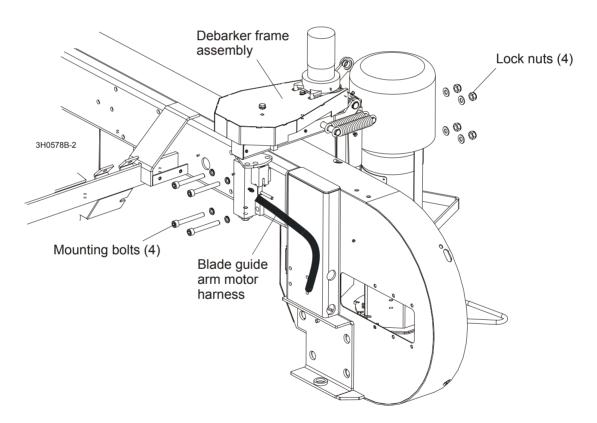


FIG. 2-2

3. Assemble the debarker cutting head to the mount plate on the frame. Use the four provided M8x35 -8.8 bolts, 8,4-Fe/Zn5 split lock washers and M8-8-B-FeZn5 nuts 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 2-3. .

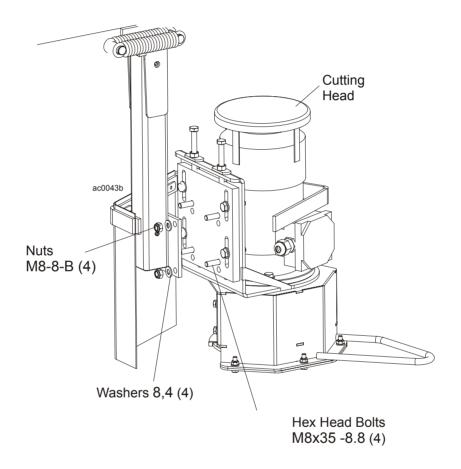


FIG. 2-3

- **4.** Install the spring arm assembly to the debarker in/out pulley using the M10x45-8.8 hex head bolt, two flat washers, and two lock nuts provided.
- 5. Remove the idle-side blade housing cover. Align the two holes in the spring arm bracket with the two holes in the top of the saw head blade housing. Use the provided M10x25-8.8 hex head bolts and M10-8 nylon lock nuts to secure the spring arm bracket saw head. Replace the blade housing cover. Close the middle blade housing cover.

See Figure 2-4.

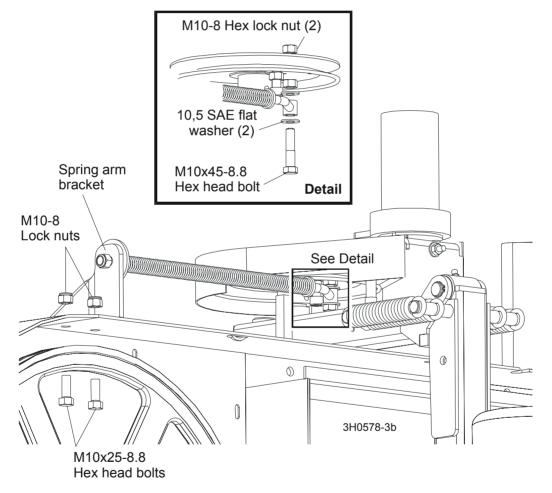


FIG. 2-4

6. Install the blade guard bracket and flexible debris guard to the debarker head with two 6,4 flat washers, lock washers, and M6x16 8.8 hex head bolts. Be sure the bottom of the debris guard is even with the bottom of the debarker blade.

See Figure 2-5.

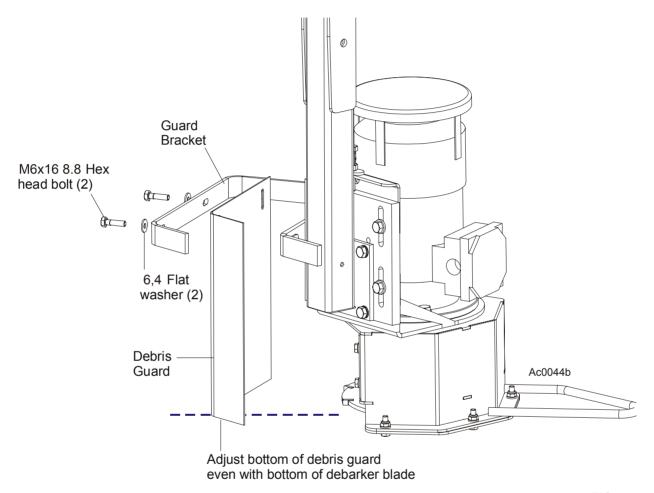


FIG. 2-5

2.3 Wiring Instructions



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.



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

- 1. The debarker wires are pre-wired for the debarker option. The debarker wires are pre-routed and stored under a guard which is removed before debarker installation (<u>See Section 2.2</u>).
- 2. Route the harness between the debarker mount and saw head as shown. Slide the harness through one of the supplied harness clamps until about 75 mm (3") of the harness protrudes past the clamp. Install the clamp at location #1 on the debarker frame with a 1/4" flat washer and 1/4-20 x 1/2" hex head bolt.

See Figure 2-6.

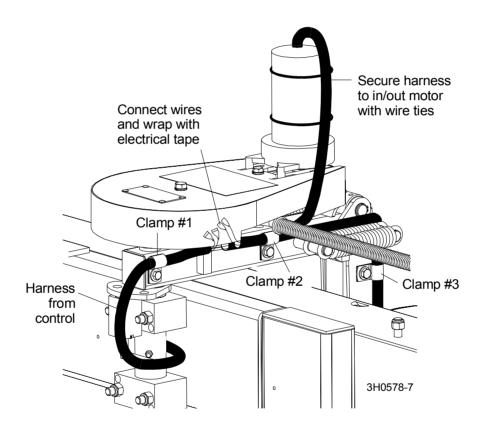
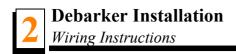


FIG. 2-6



- 3. Route the two long wires through the remaining long section of conduit. Slide the harness through two harness clamps and secure at #2 and #3 locations on the debarker frame with 1/4" flat washers and 1/4-20 x 7/8" hex head bolts. Be sure to leave enough slack in the harness to allow the debarker its full range of movement and also to prevent undue wire stress from sharply bent wires.
- 4. Install the shortest piece of conduit over the red and black debarker in/out motor wires.
- **5.** Route the cable underneath the spring arm, through harness clamp #2, to the control cable.
- **6.** Use two of the provided wire ties to secure the harness to the side of the drive motor.
- **7.** Strip the end of the black drive motor wire and install a provided 1/4" male quick connect terminal.
 - Cut the red drive motor wire so it is 25 mm (1") shorter than the black drive motor wire, strip the end, and install a provided 1/4" male quick connect terminal. This will allow the wires to be neatly bundled together and wrapped later.
- **8.** Connect the red drive motor wire to the red control harness wire. Connect the black drive motor wire to the black control harness wire. Wrap the wire connections with electrical tape.

9. Slide the blade motor harness through a harness clamp and secure at location #4 on the debarker frame with a 1/4" flat washer and 1/4-20 x 7/8" hex head bolt.

See Figure 2-7.

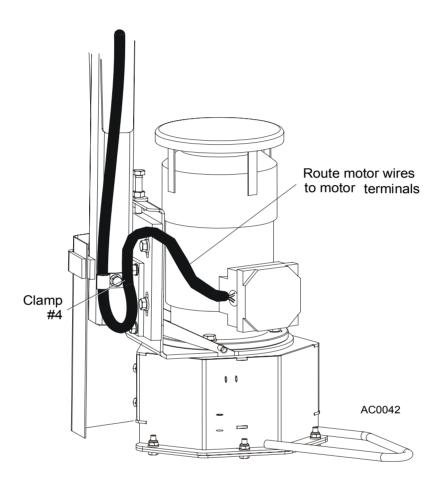
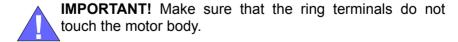


FIG. 2-7

- **10.** Open the electric box installed to the debarker motor.
- **11.** Slide the blade motor harness through a harness hole in the small electric box and connect wires as shown in the electrical diagrams (See Section 4).



12. Replace all removed covers and guards.

2.4 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.

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.

- 1. Remove the front panel (leave wire connections) from the control box.
- 2. Locate the small red #21and black #22 wires on the bottom of the control box.

3. 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, the control lamp, 1/16" nylon washers, and rubber boots in place as shown.

See Figure 2-8.

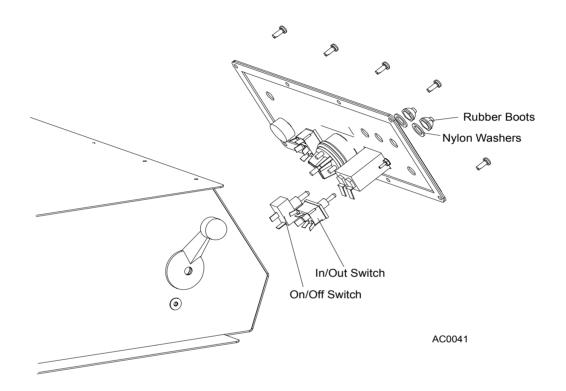


FIG. 2-8

- **4.** 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.
- **5.** Connect the red wire from the debarker on/off switch to terminal #3 of the power feed drum switch.
- **6.** Connect the black wire from the debarker in/out switch to the rear -12V white strip.
- 7. Connect the small red #21 wire to the debarker in/out switch bottom left terminal.
- 8. Connect the small black #22 wire to the debarker in/out switch top middle terminal.

See Figure 2-9. Box housing removed for clarity. .

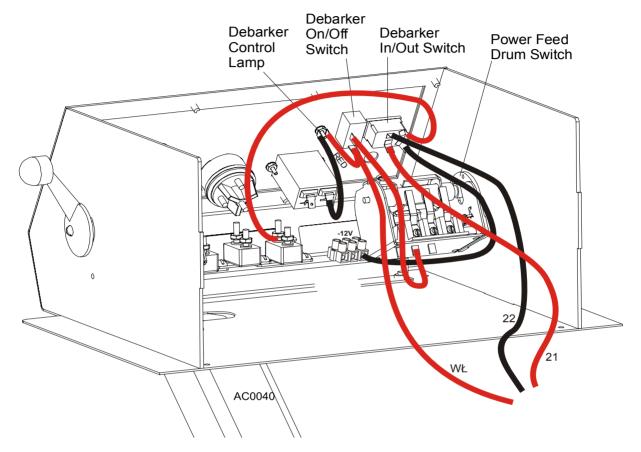


FIG. 2-9

- 9. Connect WŁ wire to the on/off switch.
- **10.** Connect red wire from the debarker on/off switch WŁ connector to the debraker control lamp + connector.
- **11.** Connect red wire (not marked) to the debarker in/out switch terminal.
- 12. Connect black wire from the ground connector (-12V) to the Debarker In/Out Switch
- **13.** Reinstall the front and rear panels, side panel, and control box top cover to the control box.

2.5 Electric Box Installation

1. Locate the debarker motor wire inside the electric box.

- **2.** Connect the debarker motor wires to T1, T2 and T3 studs of the F5S thermal relay inside the electric box (<u>See Electrical Information</u>).
- 3. Any other debarker wires are pre-routed and proper connectiions are already made.

2.6 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.

Two adjustments are required for proper debarker operation:

- The debarker blade should be centered with the sawmill blade.
- The debarker blade should remain parallel to the sawmill blade throughout the debarker's range of motion.
- 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. 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 2-10.

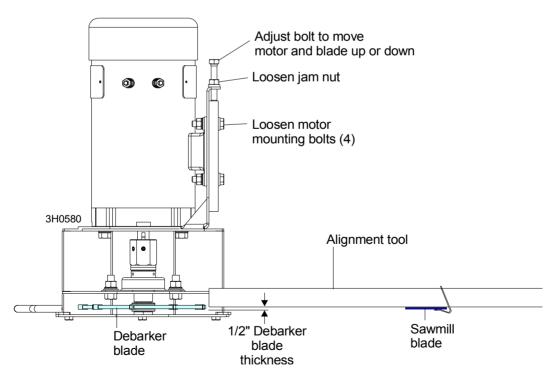


FIG. 2-10

3. 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 nuts on the adjustment bolts. Turn the adjustment bolts clockwise to push the motor and blade down. Turn the adjustment bolts counterclockwise and slide the motor up to raise the motor and blade. Retighten the jam nuts on the adjustment bolt and four motor mount bolts.

4. 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.

See Figure 2-11.

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. Two hole locations are provided for the locking pin. The inner hole should be used to lock the debarker in place when towing the sawmill. The outer position can be used to hold the debarker out of the way when debarking is not required during sawing.

Before operating the debarker, make sure the locking pin is secured in its disengaged 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 down and rotate so the small roll pin is aligned with the disengaged position slot. 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 down and rotate until the small roll pin is aligned with the engaged 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. Turn the key to OFF (0) and remove the key. Push the debarker out until the outer hole is aligned with the locking pin. Pull the pin down and rotate until the small roll pin is aligned with the engaged position slot. Release the locking pin.

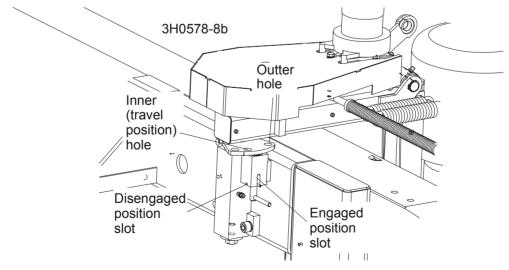


FIG. 3-1

3.2 Operation

The Debarker Option allows you to remove bark from logs before cutting.

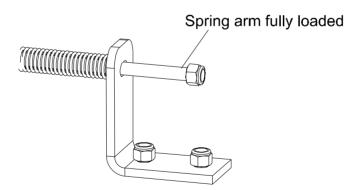


DANGER! Make sure all guards and covers are in place and secured before operating the debarker option. Failure to do so may result in serious injury.

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. Use the in/out switch on the control box to pivot the debarker all the way out.
- 3. Move the sawmill carriage forward and pivot the debarker in until the front fence engages with the end/side of the log. Continue to pivot the debarker in until the spring arm is fully loaded and the spring rod will not extend any further through the mounting bracket.

See Figure 3-2.



3H0208

FIG. 3-2

- **4.** Turn the debarker on/off switch to ON (1).
- Proceed with cutting. The spring 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 25 mm (1") of material from the log; no motor cool down time is required. Slower feed rates may be required for optimal debarker operation.

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



IMPORTANT! 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.

 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>).

3.3 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 two pivot joints with a NLGI #2 grade lithium grease every 40 hours of operation.

See Figure 3-3.

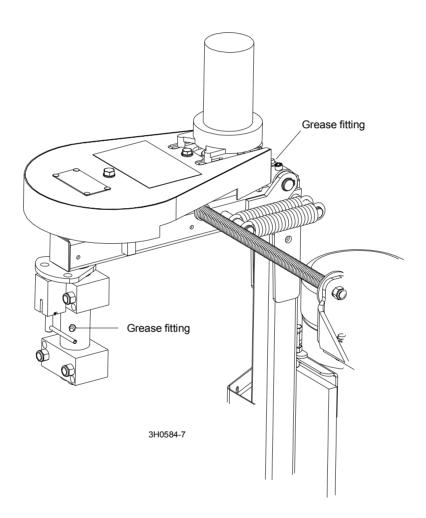


FIG. 3-3

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. Reinstall the blade guard plate.

4. Periodically check belt for tension and wear. Adjust or replace as necessary. To tighten the belt, turn the key switch to OFF (0) and remove the key. Remove the belt guard and loosen the four motor mount screws. Turn the adjustment nut clockwise to move the motor out and tighten the belt. The belt should be tensioned to allow 9.5 mm (3/8") deflection measured halfway between the pulleys with 1.3-2.2 kg (3-5 lbs). of force. Retighten the motor mount screws and replace the belt guard.

See Figure 3-4.

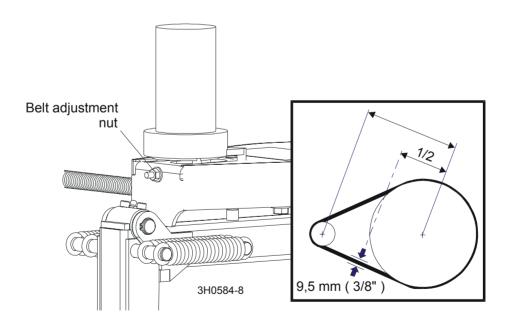


FIG. 3-4

5. Apply a dry lubricant such as Teflon spray or silicon to the spring rod and spring every 40 hours of operation.

3.4 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
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 horn 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.



SECTION 4 ELECTRICAL INFORMATION

4.1 Electrical Symbol Diagram (EA15)

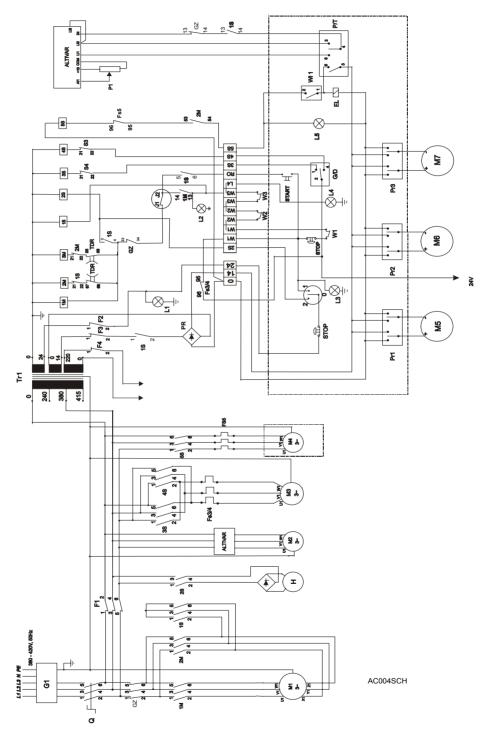


FIG. 4-1



4.2 Electrical Symbol Diagram (EA20 and EA25)

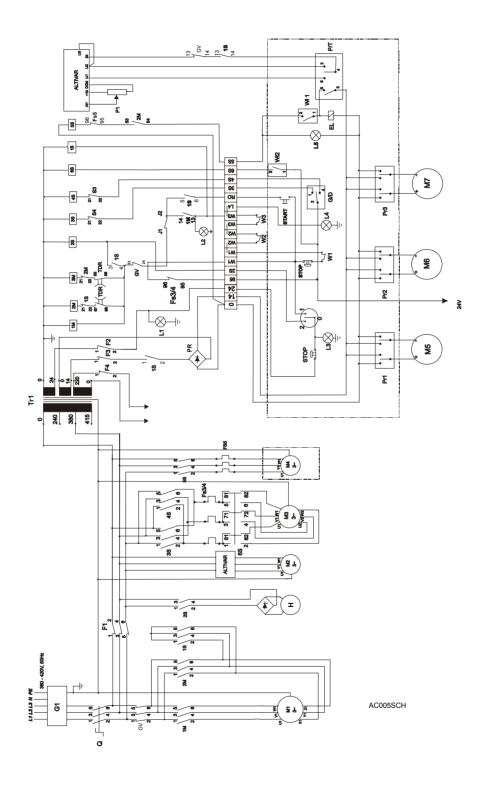


FIG. 4-2

Description (See Figures above):

G1- Socket 32A 380V Q - Main Switch

1M - Soft Start Switch ContactorF1M - Blade Motor Safety Switch

2S - Inventer Contactor

3S, 4S - Up/Down Switch Contactor Up/Down Motor Thermal Relay

6S - Up/Down Motor Speed Control Contactor

5S - Debarker Contactor **FS5 -** Thermal Debarker Relay

F1 - Autoswitch S193
M1 - Blade Motor
M2 - Power Feed Motor
M3 - Up/Down Motor

M4 - Debarker Motor (Optional)

M5 - Blade Cover Motor
M6 - Board Return Motor
M7 - Debarker Arm Motor
L1 - White Lamp (Power On)

L2 - Green Lamp (Ready To Operate) **L3 -** Lamp on the Control Box (Power On)

L4 - Lamp on the Control Box (Ready To Operate)

Pr - Bridge-Rectifire

W1 - Loading Position Limit Switch W2, W3 - Blade Cover Limit Switch

P12 - Debarker Relay
P24 - Limit Switch Relay
SS - Motor Starter
F2, F3, F4 - Autoswitch S193
Tr1 - Transformer
WŠ1 - Debarker Switch

W\$2 - Speed Control Switch
Pr1 - Blade Cover Motor Switch
Pr2 - Board Return Switch

Pr3 - Debarker Arm Motor Switch

G/D - Up/Down Switch **P/T -** Power Feed Switch

ALTIVAR - Up/Down Motor Speed Controller

H - Electric Motor Brake

PrH - Electric Motor Bridge-Rectifire (inside the motor)

SECTION 5 DEBARKER PARTS

5.1 How To Use The Parts List

- Use the table of contents or index to locate the assembly that contains the part you need.
- Go to the appropriate section and locate the part in the illustration.
- Use the number pointing to the part to locate the correct part number and description in the table.
- Parts shown indented under another part are included with that part.
- Parts marked with a diamond (◆) are only available in the assembly listed above the part.

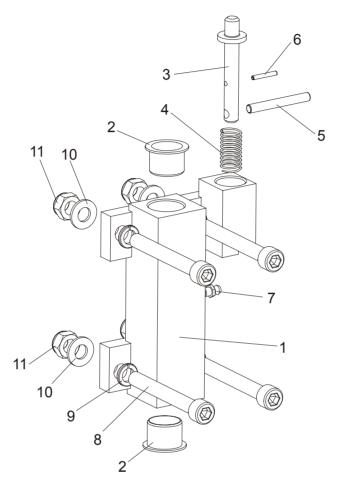
See the sample table below. Sample Part #A01111 includes part F02222-2 and subassembly A03333. Subassembly A03333 includes part S04444-4 and subassembly K05555. The diamond (♦) indicates that S04444-4 is not available except in subassembly A03333. Subassembly K05555 includes parts M06666 and F07777-77. The diamond (♦) indicates M06666 is not available except in subassembly K05555.

5.2	Sample Assembly			
REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART#	QTY.	
	SAMPLE ASSEMBLY, COMPLETE (INCLUDES ALL INDENTED PARTS BELOW)	A01111	1	
6	Sample Part	F02222-22	1	
	Sample Subassembly (Includes All Indented Parts Below)	A03333	1	
7	Sample Part (◆ Indicates Part Is Only Available With A03333)	S04444-4	1	•
	Sample Subassembly (Includes All Indented Parts Below)	K05555	1	
8	Sample Part (◆ Indicates Part Is Only Available With K05555)	M06666	2	•
9	Sample Part	F07777-77	1	

To Order Parts:

- From Europe call our European Headquarters and Manufacturing Facility in Kolo, Poland at +48-63-2626000 or +48-3912-1319. From the continental U.S., call 1-800-448-7881 to order parts. Have your customer number, vehicle identification number, and part numbers ready when you call.
- From other international locations, contact the Wood-Mizer distributor in your area for parts.

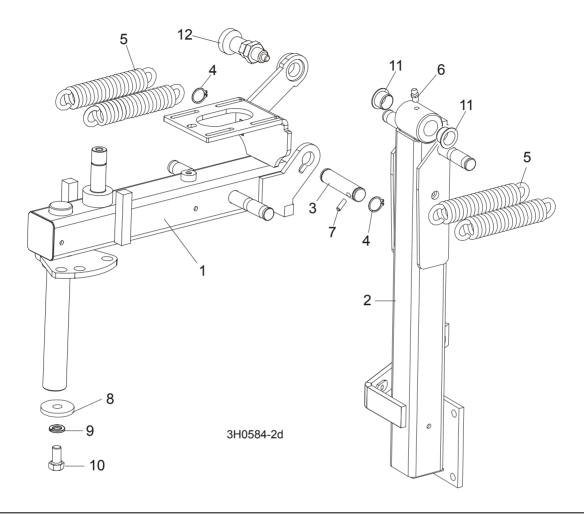
5.3 Mount/Lock Pin Assembly



3H0584-1c

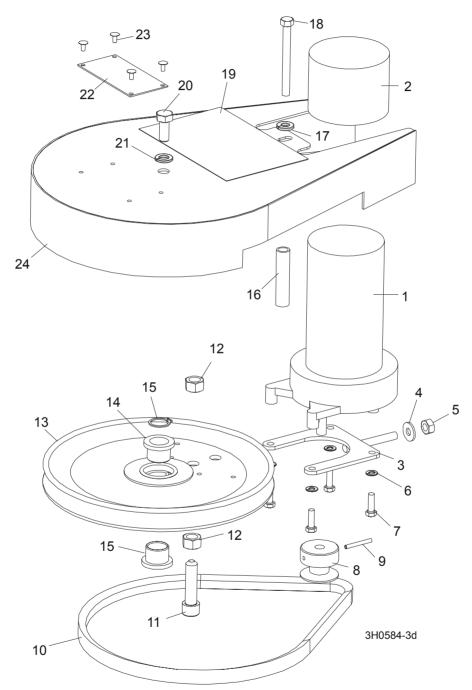
REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART#	QTY.	
	PIVOT ARM WELDMENT, DEBARKER MOUNT	089984	1	
1	Arm, Debarker Frame Pivot	089947-1	1	
	Arm, Debarker Frame Pivot	091008	1	
2	Bushing, GFM - 2528 - 21	091009	2	
3	Pin, Debarker Locking	089972-1	1	
4	Spring, .58" OD x 1 1/8"	021243	1	
5	Pin, 6x50 ROLL ZINC	F81045-1	1	
6	Pin, 3X20 ROLL ZINC	F81044-5	1	
7	Fitting, M6 Straight Grease	086280	1	
8	SCREW, M10X80-8.8 HEX SOCKET HEAD CAP ZINC	F81003-69	4	
9	WASHER, 10.2 ZINC SPLIT LOCK	F81055-2	4	
10	WASHER, 10.5 ZINC FLAT	F81055-1	4	
11	NUT, M10-8-B HEX NYLON ZINC LOCK	F81033-1	4	

5.4 Frame Assembly

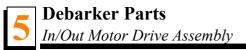


REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART#	QTY.	
1	ARM WELDMENT, DEBARKER HORIZONTAL	090264-1	1	
2	ARM WELDMENT, DEBARKER VERTICAL	090262-1	1	
3	PIN, VERTICAL ARM PIVOT	089588-1	1	
4	RING, 5/8" 5100-62 OUTER RETAINING	F81090-11	2	
5	SPRING, DEBARKER ARM	021185	4	
6	FITTING, 1/4-28 GREASE	086280	1	
7	PIN, H 5X12-B ROLL ZINC	F81044-8	1	
8	WASHER, .40 X 1.44 X .18	089973-1	1	
9	WASHER, 3/8" SPLIT LOCK	F81055-2	1	
10	BOLT, 3/8-16 X 3/4" HEX HEAD GRADE 2	F81003-1	1	
11	BUSHING, GFM - 1618-12	091455	2	
12	PIN, 45308DNW DETENT	089939	1	

5.5 In/Out Motor Drive Assembly

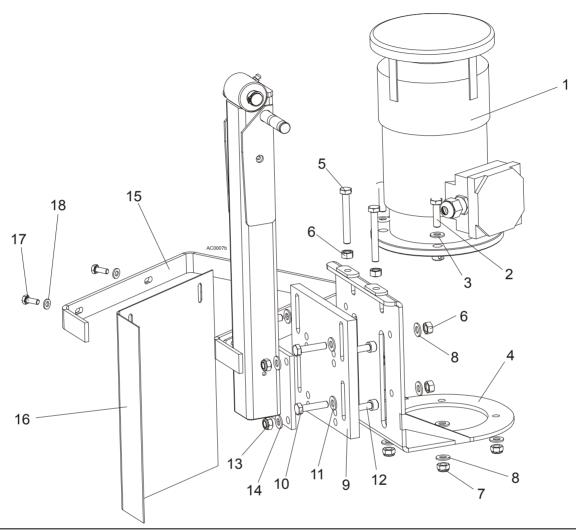


REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART#	QTY.	
1	MOTOR, 53:1 GEAR	P09698-1	1	
	Gear Kit, Klauber Motor Replacement	P12569	1	
	Shaft Kit, Klauber Motor Replacement	009695	1	

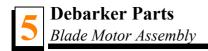


2 CAP, IN/OUT MOTOR WEATHER RUBBER 023720 1 3 TENSIONER WELDMENT, DEBARKER IN/OUT MOTOR PAINTED 089969-1 1 4 WASHER, 6.5 ZINC FLAT F81053-11 1 5 NUT, M6-8 ZINC HEX F81031-1 1 6 WASHER, 5.1 ZINC SPLIT LOCK F81052-2 4 7 BOLT, #10-32X1/2" HEX HEAD ZINC F05004-60 4 8 SHEAVE, DEBARKER MOTOR ZINC-PLATED 089954-1 1 9 PIN, 1/8X3/4" ROLL F05012-6 1 10 BELT, 4L280V P04031 1 11 SCREW, M10X40 8.8 HEX SOCKET HEAD CAP ZINC F81003-22 1 12 NUT, M10-8-B ZINC HEX F81003-22 1 13 PULLEY, DEBARKER MOTOR 091154-1 1 14 BUSHING, FLANGED BRONZE 089948 2 15 RING, Z16 SPRING RETAINING F81090-11 1 16 SPACER, ZINC-PLATED 089949-1 1 17 WASHER, Z 6.1 ZINC SPLIT LOCK F81053-3 1 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61					
4 WASHER, 6.5 ZINC FLAT 5 NUT, M6-8 ZINC HEX 6 WASHER, 5.1 ZINC SPLIT LOCK 7 BOLT, #10-32X1/2" HEX HEAD ZINC 8 SHEAVE, DEBARKER MOTOR ZINC-PLATED 9 PIN, 1/8X3/4" ROLL 10 BELT, 4L280V P04031 11 SCREW, M10X40 8.8 HEX SOCKET HEAD CAP ZINC 12 NUT, M10-8-B ZINC HEX 13 PULLEY, DEBARKER MOTOR 14 BUSHING, FLANGED BRONZE 15 RING, Z16 SPRING RETAINING 16 SPACER, ZINC-PLATED 17 WASHER, Z 6.1 ZINC SPLIT LOCK 18 S1003-22 19 DECAL, WARNING 10 R81053-3 10 R81053-3 11 PULLEY, DEBARKER MOTOR 11 SPACER, ZINC-PLATED 12 NUT, M10-8-B ZINC HEX 15 RING, Z16 SPRING RETAINING 16 SPACER, ZINC-PLATED 17 WASHER, Z 6.1 ZINC SPLIT LOCK 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC 19 DECAL, WARNING 10 Z1172 11 WASHER, 8.2 ZINC SPLIT LOCK 19 DECAL, WARNING 10 Z1172 11 WASHER, 8.2 ZINC SPLIT LOCK 19 DECAL, WARNING 10 Z1172 11 WASHER, 8.2 ZINC SPLIT LOCK 19 PLATE, DEBARKER REVISION 10 Z1053-2 11 WASHER, 8.2 ZINC SPLIT LOCK 12 PLATE, DEBARKER REVISION 10 Z1072-2 11 WASHER, 8.2 ZINC SPLIT LOCK 12 PLATE, DEBARKER REVISION 10 Z1072-2 10 Z1 RIVET, 1/8" X 1/4" ALUMINIUM POP 10 F04203-2 14 Z1 RIVET, 1/8" X 1/4" ALUMINIUM POP 10 F04203-2 14 Z1 RIVET, 1/8" X 1/4" ALUMINIUM POP 10 Z1073-2 20 RIVET, 1/8" X 1/4" ALUMINIUM POP 10 Z1073-2 21 Z1 RIVET, 1/8" X 1/4" ALUMINIUM POP 21 Z1 RIVET, 1/8" X 1/4" ALUMINIUM POP 22 Z1	2	CAP, IN/OUT MOTOR WEATHER RUBBER	023720	1	
5 NUT, M6-8 ZINC HEX F81031-1 1 6 WASHER, 5.1 ZINC SPLIT LOCK F81052-2 4 7 BOLT, #10-32X1/2" HEX HEAD ZINC F05004-60 4 8 SHEAVE, DEBARKER MOTOR ZINC-PLATED 089954-1 1 9 PIN, 1/8X3/4" ROLL F05012-6 1 10 BELT, 4L280V P04031 1 11 SCREW, M10X40 8.8 HEX SOCKET HEAD CAP ZINC F81003-22 1 12 NUT, M10-8-B ZINC HEX F81003-22 1 13 PULLEY, DEBARKER MOTOR 091154-1 1 14 BUSHING, FLANGED BRONZE 089948 2 15 RING, Z16 SPRING RETAINING F81090-11 1 16 SPACER, ZINC-PLATED 089949-1 1 17 WASHER, Z 6.1 ZINC SPLIT LOCK F81053-3 1 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61 1 19 DECAL, WARNING 021172 1 20 BOLT, M8X16-8.8 HEX HEAD FULL THREAD ZINC F81002-20 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 </td <td>3</td> <td>TENSIONER WELDMENT, DEBARKER IN/OUT MOTOR PAINTED</td> <td>089969-1</td> <td>1</td> <td></td>	3	TENSIONER WELDMENT, DEBARKER IN/OUT MOTOR PAINTED	089969-1	1	
6 WASHER, 5.1 ZINC SPLIT LOCK 7 BOLT, #10-32X1/2" HEX HEAD ZINC 8 SHEAVE, DEBARKER MOTOR ZINC-PLATED 9 PIN, 1/8X3/4" ROLL 10 BELT, 4L280V P04031 11 SCREW, M10X40 8.8 HEX SOCKET HEAD CAP ZINC 11 SCREW, M10X40 8.8 HEX SOCKET HEAD CAP ZINC 12 NUT, M10-8-B ZINC HEX 13 PULLEY, DEBARKER MOTOR 14 BUSHING, FLANGED BRONZE 15 RING, Z16 SPRING RETAINING 16 SPACER, ZINC-PLATED 17 WASHER, Z 6.1 ZINC SPLIT LOCK 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC 19 DECAL, WARNING 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC 21 WASHER, 8.2 ZINC SPLIT LOCK 22 PLATE, DEBARKER REVISION 23 RIVET, 1/8" X 1/4" ALUMINIUM POP 4 P0403-2 4 PLATE, DEBARKER REVISION 26 P505004-60 4 P605004-60 4 P05004-60 4 P05004	4	WASHER, 6.5 ZINC FLAT	F81053-11	1	
7 BOLT, #10-32X1/2" HEX HEAD ZINC F05004-60 4 8 SHEAVE, DEBARKER MOTOR ZINC-PLATED 089954-1 1 9 PIN, 1/8X3/4" ROLL F05012-6 1 10 BELT, 4L280V P04031 1 11 SCREW, M10X40 8.8 HEX SOCKET HEAD CAP ZINC F81003-22 1 12 NUT, M10-8-B ZINC HEX F81033-3 2 13 PULLEY, DEBARKER MOTOR 091154-1 1 14 BUSHING, FLANGED BRONZE 089948 2 15 RING, Z16 SPRING RETAINING F81090-11 1 16 SPACER, ZINC-PLATED 089949-1 1 17 WASHER, Z 6.1 ZINC SPLIT LOCK F81053-3 1 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61 1 19 DECAL, WARNING 021172 1 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC F81002-20 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 <	5	NUT, M6-8 ZINC HEX	F81031-1	1	
8 SHEAVE, DEBARKER MOTOR ZINC-PLATED 089954-1 1 9 PIN, 1/8X3/4" ROLL F05012-6 1 10 BELT, 4L280V P04031 1 11 SCREW, M10X40 8.8 HEX SOCKET HEAD CAP ZINC F81003-22 1 12 NUT, M10-8-B ZINC HEX F81033-3 2 13 PULLEY, DEBARKER MOTOR 091154-1 1 14 BUSHING, FLANGED BRONZE 089948 2 15 RING, Z16 SPRING RETAINING F81090-11 1 16 SPACER, ZINC-PLATED 089949-1 1 17 WASHER, Z 6.1 ZINC SPLIT LOCK F81053-3 1 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61 1 19 DECAL, WARNING 021172 1 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC F81054-4 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	6	WASHER, 5.1 ZINC SPLIT LOCK	F81052-2	4	
9 PIN, 1/8X3/4" ROLL 10 BELT, 4L280V P04031 11 SCREW, M10X40 8.8 HEX SOCKET HEAD CAP ZINC F81003-22 11 PULLEY, DEBARKER MOTOR 13 PULLEY, DEBARKER MOTOR 14 BUSHING, FLANGED BRONZE 15 RING, Z16 SPRING RETAINING F81090-11 16 SPACER, ZINC-PLATED T17 WASHER, Z 6.1 ZINC SPLIT LOCK F81053-3 1 WASHER, Z 6.1 ZINC SPLIT LOCK F81051-3 1 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61 1 DECAL, WARNING T81002-20 1 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 PLATE, DEBARKER REVISION TO SENDE TO SEND	7	BOLT, #10-32X1/2" HEX HEAD ZINC	F05004-60	4	
10 BELT, 4L280V P04031 1 11 SCREW, M10X40 8.8 HEX SOCKET HEAD CAP ZINC F81003-22 1 12 NUT, M10-8-B ZINC HEX F81033-3 2 13 PULLEY, DEBARKER MOTOR 091154-1 1 14 BUSHING, FLANGED BRONZE 089948 2 15 RING, Z16 SPRING RETAINING F81090-11 1 16 SPACER, ZINC-PLATED 089949-1 1 17 WASHER, Z 6.1 ZINC SPLIT LOCK F81053-3 1 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61 1 19 DECAL, WARNING 021172 1 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC F81002-20 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	8	SHEAVE, DEBARKER MOTOR ZINC-PLATED	089954-1	1	
11 SCREW, M10X40 8.8 HEX SOCKET HEAD CAP ZINC F81003-22 1 12 NUT, M10-8-B ZINC HEX F81033-3 2 13 PULLEY, DEBARKER MOTOR 091154-1 1 14 BUSHING, FLANGED BRONZE 089948 2 15 RING, Z16 SPRING RETAINING F81090-11 1 16 SPACER, ZINC-PLATED 089949-1 1 17 WASHER, Z 6.1 ZINC SPLIT LOCK F81053-3 1 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61 1 19 DECAL, WARNING 021172 1 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC F81002-20 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	9	PIN, 1/8X3/4" ROLL	F05012-6	1	
12 NUT, M10-8-B ZINC HEX 13 PULLEY, DEBARKER MOTOR 14 BUSHING, FLANGED BRONZE 15 RING, Z16 SPRING RETAINING 16 SPACER, ZINC-PLATED 17 WASHER, Z 6.1 ZINC SPLIT LOCK 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC 19 DECAL, WARNING 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC 21 WASHER, 8.2 ZINC SPLIT LOCK 22 PLATE, DEBARKER REVISION 23 RIVET, 1/8" X 1/4" ALUMINIUM POP 25 RESULTS 1 PS103-3 2 D9915-1 1 D99948 2 D99948 2 D89948 2 D89948 2 D89948 2 D89949-1 1 D899	10	BELT, 4L280V	P04031	1	
13 PULLEY, DEBARKER MOTOR 091154-1 1 14 BUSHING, FLANGED BRONZE 089948 2 15 RING, Z16 SPRING RETAINING F81090-11 1 16 SPACER, ZINC-PLATED 089949-1 1 17 WASHER, Z 6.1 ZINC SPLIT LOCK F81053-3 1 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61 1 19 DECAL, WARNING 021172 1 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC F81002-20 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	11	SCREW, M10X40 8.8 HEX SOCKET HEAD CAP ZINC	F81003-22	1	
14 BUSHING, FLANGED BRONZE 089948 2 15 RING, Z16 SPRING RETAINING F81090-11 1 16 SPACER, ZINC-PLATED 089949-1 1 17 WASHER, Z 6.1 ZINC SPLIT LOCK F81053-3 1 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61 1 19 DECAL, WARNING 021172 1 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC F81002-20 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	12	NUT, M10-8-B ZINC HEX	F81033-3	2	
15 RING, Z16 SPRING RETAINING F81090-11 1 16 SPACER, ZINC-PLATED 089949-1 1 17 WASHER, Z 6.1 ZINC SPLIT LOCK F81053-3 1 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61 1 19 DECAL, WARNING 021172 1 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC F81002-20 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	13	PULLEY, DEBARKER MOTOR	091154-1	1	
16 SPACER, ZINC-PLATED 089949-1 1 17 WASHER, Z 6.1 ZINC SPLIT LOCK F81053-3 1 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61 1 19 DECAL, WARNING 021172 1 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC F81002-20 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	14	BUSHING, FLANGED BRONZE	089948	2	
17 WASHER, Z 6.1 ZINC SPLIT LOCK F81053-3 1 18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61 1 19 DECAL, WARNING 021172 1 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC F81002-20 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	15	RING, Z16 SPRING RETAINING	F81090-11	1	
18 BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC F81001-61 1 19 DECAL, WARNING 021172 1 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC F81002-20 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	16	SPACER, ZINC-PLATED	089949-1	1	
19 DECAL, WARNING 021172 1 20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC F81002-20 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	17	WASHER, Z 6.1 ZINC SPLIT LOCK	F81053-3	1	
20 BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC F81002-20 1 21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	18	BOLT, M6X80 5.8 HEX HEAD FULL THREAD ZINC	F81001-61	1	
21 WASHER, 8.2 ZINC SPLIT LOCK F81054-4 1 22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	19	DECAL, WARNING	021172	1	
22 PLATE, DEBARKER REVISION 005801-293 1 23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	20	BOLT, M8X16-8.8-B HEX HEAD FULL THREAD ZINC	F81002-20	1	
23 RIVET, 1/8" X 1/4" ALUMINIUM POP F04203-2 4	21	WASHER, 8.2 ZINC SPLIT LOCK	F81054-4	1	
· ·	22	PLATE, DEBARKER REVISION	005801-293	1	
24 GUARD WELDMENT, DEBARKER V-BELT PAINTED 090519-1 1	23	RIVET, 1/8" X 1/4" ALUMINIUM POP	F04203-2	4	
	24	GUARD WELDMENT, DEBARKER V-BELT PAINTED	090519-1	1	

5.6 Blade Motor Assembly

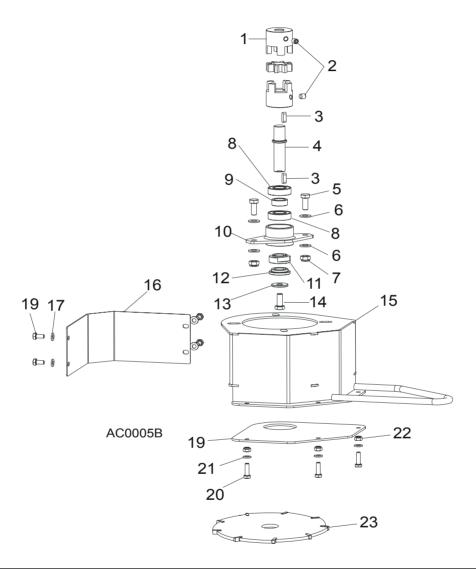


REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART#	QTY.	
	HEAD ASSEMBLY, AC DEBARKER	086565	1	
	Debarker Blade Motor Assembly, AC	086504	1	
1	Motor, AC Debarker Electric	086389	1	
2	Bolt, M8 x 30 8.8 B Hex Head Zinc	F81002-7	4	
3	Washer, 8.4 Zinc Flat	F81054-1	4	
4	Bracket, AC Debarker Motor Mount Painted	086500-1	1	
5	Bolt, M8X65 8.8 Hex Head Full Thread Zinc	F81002-9	2	
6	Nut, M8-8-B Hex Zinc	F81032-1	4	
7	Nut, M8-8-B Hex Nylon Zinc Lock	F81032-2	4	
8	Washer, 8.4 Zinc Flat	F81054-1	6	
9	Plate, Debarker Motor Mounting	089551	1	
10	Bolt, M8x35-8.8 Hex Head Full Thread Zinc	F81002-13	4	



11	Washer, 8.4 Zinc Flat	F81054-1	4	
12	Bolt, M8x30 -8.8 Socket Head	F81002-31	4	
13	Nut, M8-8-B Hex Nylon Zinc Loc	F81032-2	4	
14	Washer, 8.4 Zinc Flat	F81054-1	4	
15	Guard, Debarker Wrap-Around Painted	089561-1	1	
16	Guard, Debarker Flexible Debris	089562	1	
17	Bolt, M6 x 16 8.8 Hex Head Full Thread Zinc	F81001-15	2	
18	Washer, 6.4 Zinc Flat	F81053-1	2	

5.7 Blade Housing Assembly

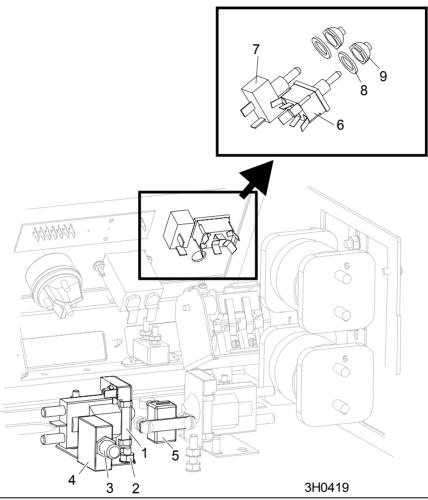


REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART#	QTY.	
1	ROTEX CLUTCH, AC DEBARKER	086525	1	
2	SCREW M8 X 8-33H	F81014-1	2	
3	KEY 5H9 X 5 X 17	086279	2	
4	SHAFT, AC DEBARKER CLUTCH	086507	1	
5	BOLT, M8 X 20 8.8 B HEX HEAD	F81002-4	2	
6	WASHER, 8.4 FLAT	F81054-1	2	
7	NUT, M8 8 HEX	F81032-2	2	
8	BEARING 6003-2RS-P66	086116	2	



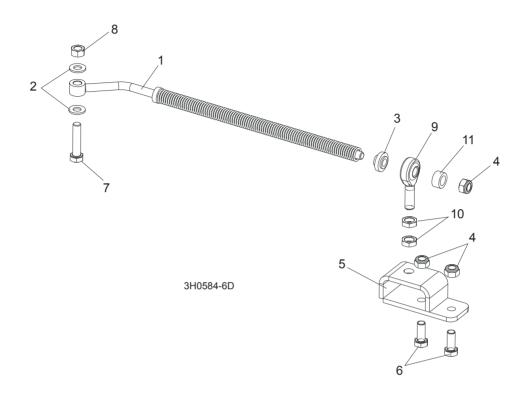
9	SPACER, AC DEBARKER CLUTCH	086357	1	
10	BUSHING, AC DEBARKER CLUTCH BEARING	086354	1	
11	BUSHING, AC DEBARKER CLUTCH CLAMP	086355	1	
12	BUSHING, AC DEBARKER CLUTCH	086356	1	
13	WASHER, 8.5 MM	086363	1	
14	BOLT, M8 X 20 - 8.8 HEX HEAD	F81002-4	1	
15	HOUSING WELDMENT, DEBARKER BLADE	086366-1	1	
16	GUARD, DEBARKER CLUTCH	086372-1	1	
17	WASHER, 6.4 SPLIT LOCK	F81053-1	4	
18	BOLT, M6 X 12 8.8 HEX HEAD	F81001-7	4	
19	GUARD, AC DEBARKER LOWER	086371-1	1	
20	BOLT, M6 X 20 - 8.8 HEX HEAD	F81001-2	3	
21	WASHER, 6.4 SPLIT LOCK	F81053-1	3	
22	NUT, M6 8.8 HEX	F81031-2	3	
23	BLADE, DEBARKER 7" DIA.	021236	1	

5.8 Debarker Control Assembly



REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	CONTROL ASSEMBLY, DEBARKER (NON-REMOTE)	023676	1	
	CONTROL ASSEMBLY, DEBARKER (REMOTE)	023677	1	
1	Solenoid, 12V 100A Continuous Duty GND Coil	P10449	1	
	Diode Assembly, Solenoid GND Coil Chassis	015426	1	
2	Nut, 1/4-20 Self Locking	F05010-9	2	
3	Boot, Circuit Breaker	021253	1	
4	Breaker, 70 Amp Manual Reset Panel Mount	015527	1	
5	Breaker, 15 Amp Manual Reset	E20430	1	
6	Switch, DPDT Toggle Return Center Screw Terminal	024200	1	
7	Switch, SPST Toggle Quick Connect	P03027	1	
8	Washer, 1/2 x 3/4 x 1/16" Nylon	P05251-1	2	
9	Boot, Toggle Switch	P02575	2	

5.9 Spring Rod Assembly



REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART#	QTY.	
	ROD, ZINC-PLATED	090369	1	
1	Rod, Debarker Spring Zinc-plated	089979-1	1	
2	Washer, 10.5 Zinc Flat	F81055-1	2	
3	Washer, Fender Zinc	089982-1	1	
4	Nut, M10-8-B Hex Nylon Zinc Lock	F81033-1	3	
5	Bracket, Dbk Spring Rod Mounting Painted	092238-1	1	
6	Bolt, M10x25-8.8 Hex Head Full Thread Zinc	F81003-11	2	
7	Bolt, M10x45-8.8 Hex Head Full Thread Zinc	F81003-3	1	
8	Nut, M10-8-B-FE	F81033-3	1	
9	Rod End, SA12 CX Right-hand	087035	1	
10	Nut, M12-04-A Thin Zinc-plated	F81034-6	2	
11	Spacer, Debarker Spring Zinc-plated	090936-1	1	