

FORM 1220

MECHANICAL BOARD RETURN RETROFIT

See Table 1. This optional mechanical board return can be installed to any 1997 and newer model LT30, LT40, LT30HD or LT40HD. Use the appropriate kit depending on model, manufacturing date and clutch configuration as shown below.

Model	Model Year	Revision Range	Clutch	MBR Kit
LT30	1997-06	F7.00 - J9.00	Manual	036667
			Auto	036668
	2007+	J9.01+	Manual	003266
			Auto	003267
LT30HD	1997-06	G1.00 - K1.00	Manual	036667
			Auto	036668
	2007+	K1.01+	Manual	003266
			Auto	003267
LT40	1997-06	F8.00 - K1.00	Manual	036667
			Auto	036668
	2007+	K1.01+	Manual	003268
			Auto	003269
LT40HD	1997-06	G1.00 - K2.00	Manual	036667
			Auto	036668
	2007+	K2.01+	Manual	003268
			Auto	003269

Board Return Arm Installation

1. Raise the saw head so the area under the engine/motor can easily be accessed. Turn the key to the OFF (#0) position and remove the key. Remove the blade from the sawmill if applicable before proceeding.



WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, first turn the key switch to the OFF (#0) position and remove the key. If the key is turned on and moving parts activated, serious injury may result.

WARNING! Remove the blade before performing any service to the engine or sawmill. Failure to do so may result in serious injury.

2. **Autoclutch Option only:** Remove the lower belt auxiliary guard plate from the saw head.
3. **Manual Clutch only:** Remove the lower drive belt guard from the saw head.

4. Open the middle blade housing cover. Locate the four holes in the horizontal saw head tube (near the motor mount plate).

See Figure 1. Position the board return arm assembly on the saw head, aligning the four mounting holes. Be sure the arm is oriented pointing toward the front of the sawmill as shown. Secure the board return arm to the saw head with the provided hex head bolts, flat washers and lock nuts.

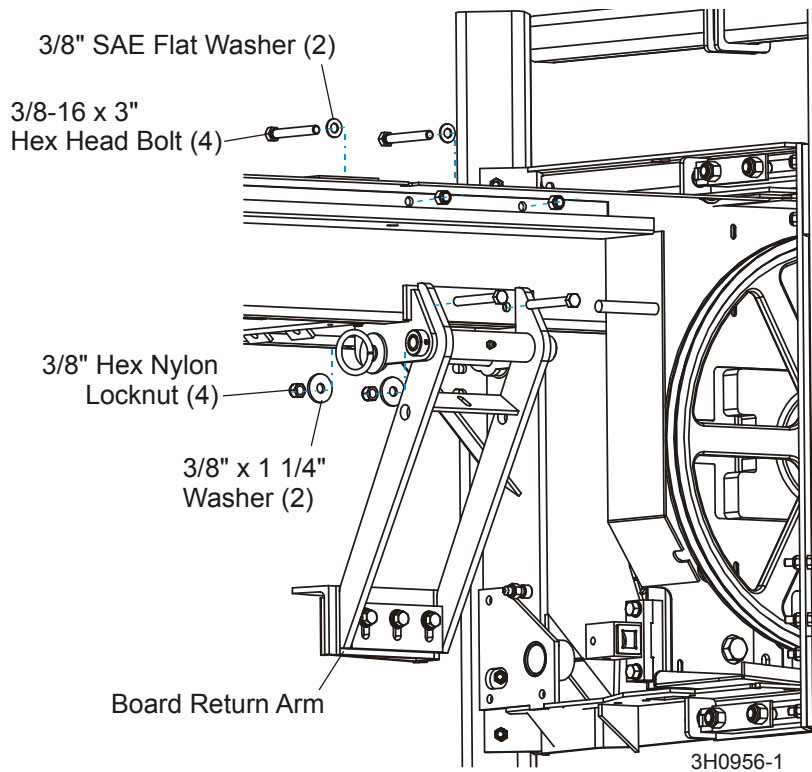


FIGURE 1

5. **Manual Clutch only:** Assemble the replacement lower belt guard parts with the provided hex head bolts and flat washers.

See Figure 2. Install the guard assembly with the hardware removed with the old belt guard.

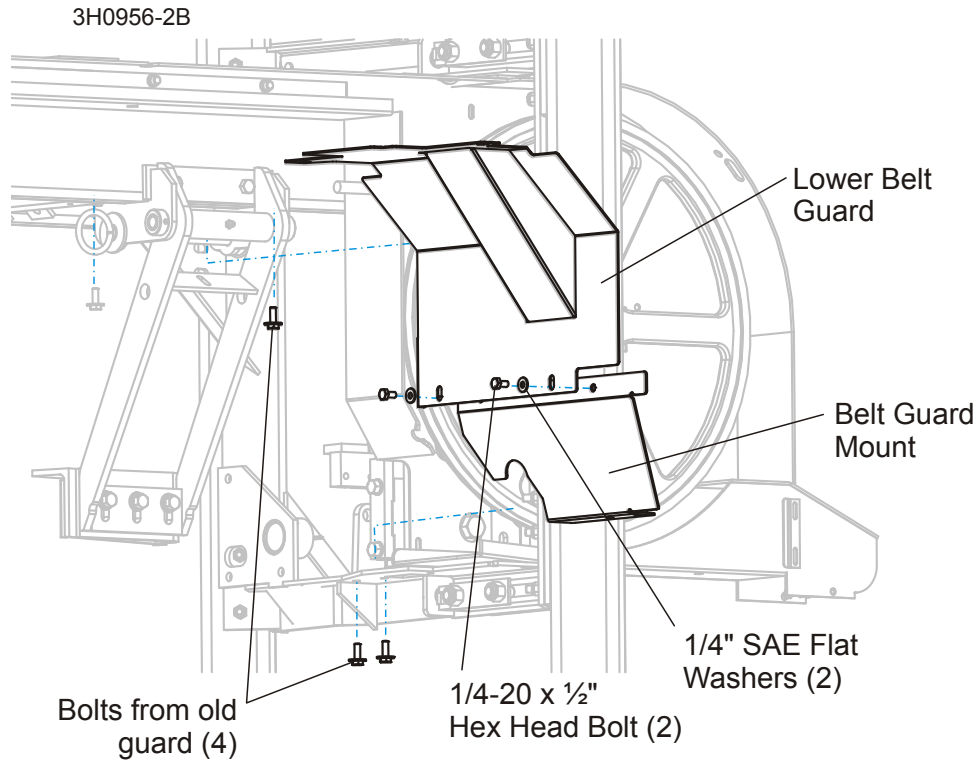


FIGURE 2

Board Return Table Installation (2007+ Sawmills)

1. Install the table at the front of the sawmill bed and secure with the hardware provided.

See Figure 3. Place the table assembly in position on the table mounting bracket at the front of the sawmill bed. Secure with the hex head bolt, U-bolts, flat washers and lock nuts provided.

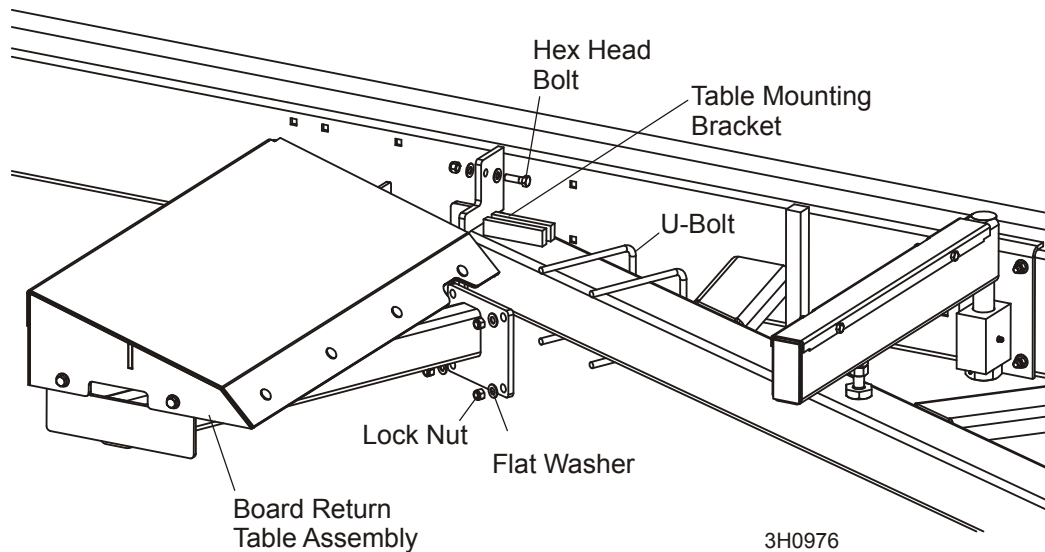


FIGURE 3

2. Install the provided safety decal on the control box cover where it can easily be seen during sawmill operation.

Board Return Table Installation (1997 - 06 Sawmills)

1. Install the table at the front of the sawmill bed with the outrigger toward the loading side of the sawmill.

See Figure 4. Be sure the edge of the table seats in the slot on the bed frame and the table tab seats in the leg bracket. Lower the outrigger and adjust it until it is firmly planted on the ground.

Store the pins by placing one pin in the hole under the table. Loop the second pin through the retainer of the first pin and lock.

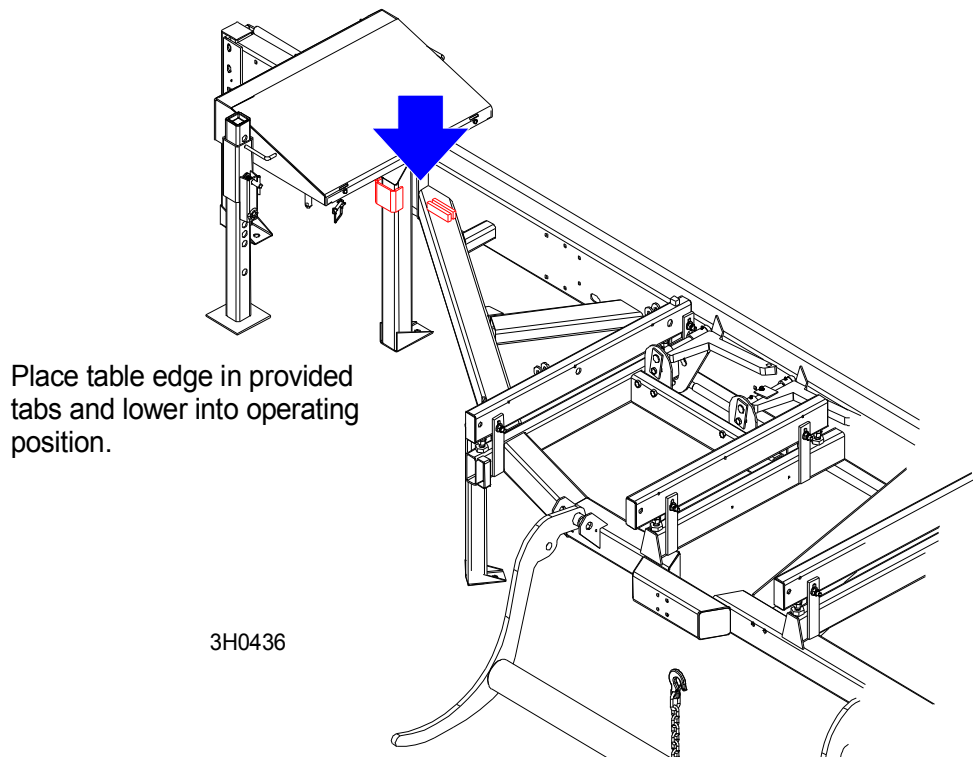


FIGURE 4

2. Install the provided safety decal on the control box cover where it can easily be seen during sawmill operation.

Board Return Operation



DANGER! Keep all persons out of the path of returning boards. Failure to do so will result in serious injury.



WARNING! The board return is intended to assist a second operator in removing boards quickly. Do not use the board return when operating the sawmill alone. Serious injury, death or damage to the equipment may result.

WARNING! Never use the board return table as a platform to stand on. This table is designed and intended to assist in the removal of boards only. Standing on the table may result in serious injury.



CAUTION! Do not use the board return to remove boards thicker than 4/4 (1 1/8"). Damage to the feed motor may occur.

To activate the board return, remove the retaining pin from the board return storage pin. Remove the pin to allow the arm to drop into its operating position. Return the storage pin to its original location and secure with the retaining pin.

See Figure 5.

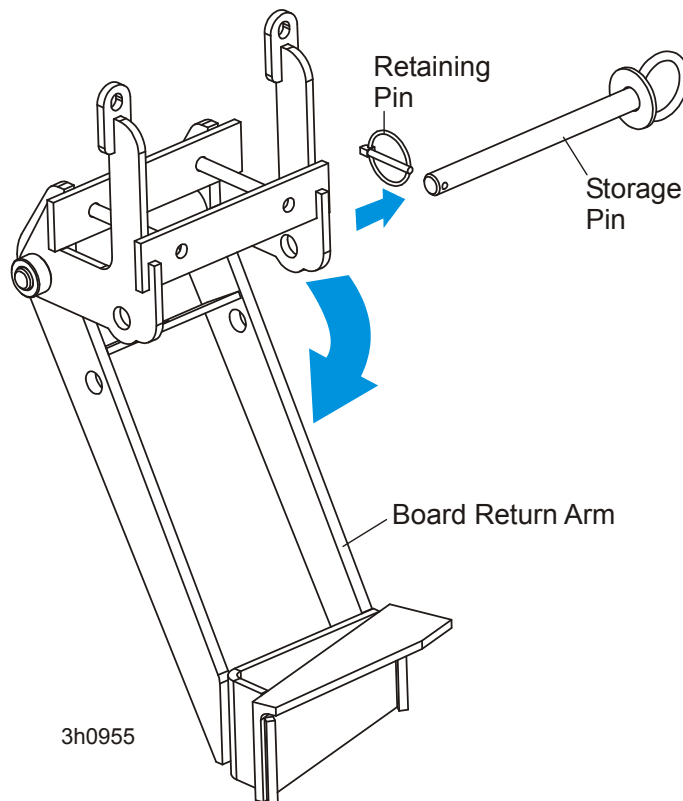


FIGURE 5

When the blade reaches the end of the log, the arm will drop down to catch the board and drag it back toward the operator as the saw head is returned.

Boards may not always return in the same path or location. If a board returns in a manner that does not allow the sawyer or off-bearer to maintain control, it may be necessary to stop the reverse motion of the saw head.

When the board return is to be used, a second person is required to remove the board as it is returned. DO NOT attempt to use the board return feature when sawing alone. Use of the board return not recommended with material shorter than 8 foot.

To bypass the board return feature, remove the retaining pin from the board return storage pin. Remove the storage pin and lift the board return arm to its storage position (hole in arm aligned with holes in mounting bracket). Replace the storage pin and secure with the retaining pin.

1997 - 06 Sawmills Only: Before towing the sawmill, place the board return table in its storage position at the rear of the sawmill and secure with both locking pins. Adjust the outrigger leg up to provide proper ground clearance when towing the sawmill.



CAUTION! To avoid damage to the board return table, secure it in its storage location before towing the sawmill.

See Figure 6.

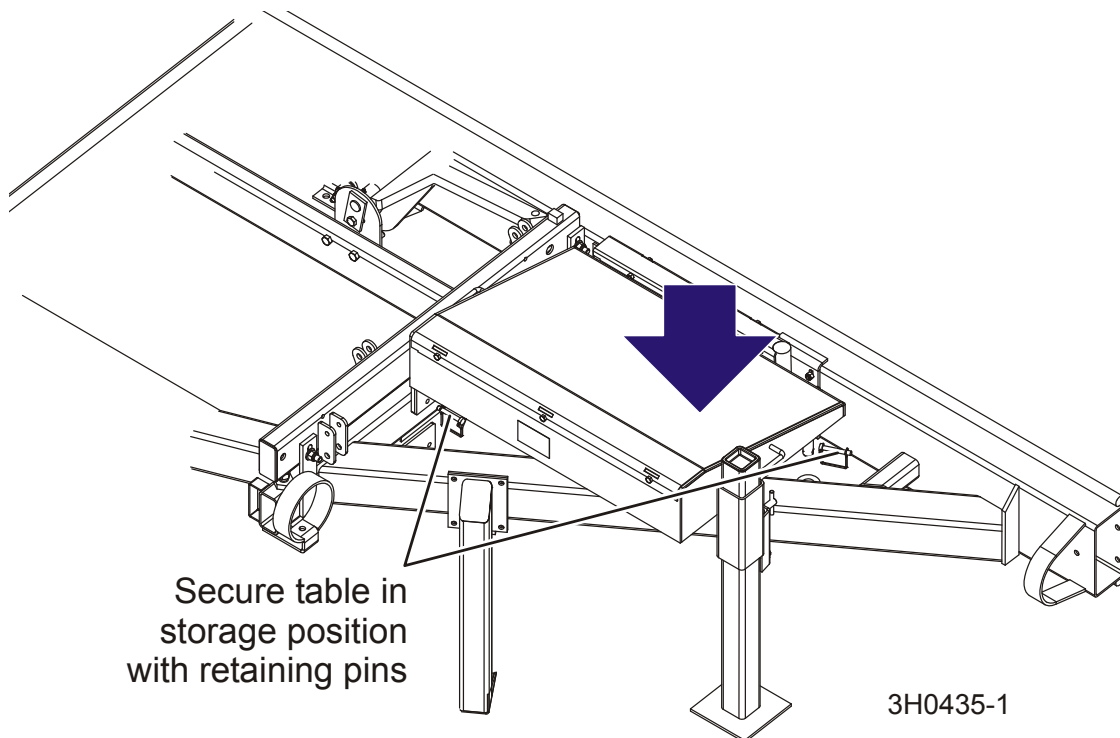


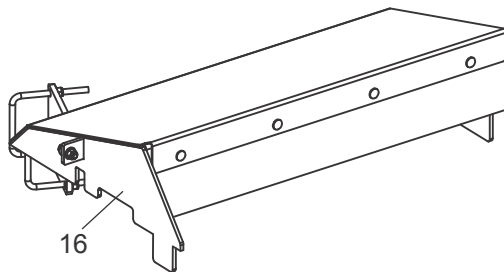
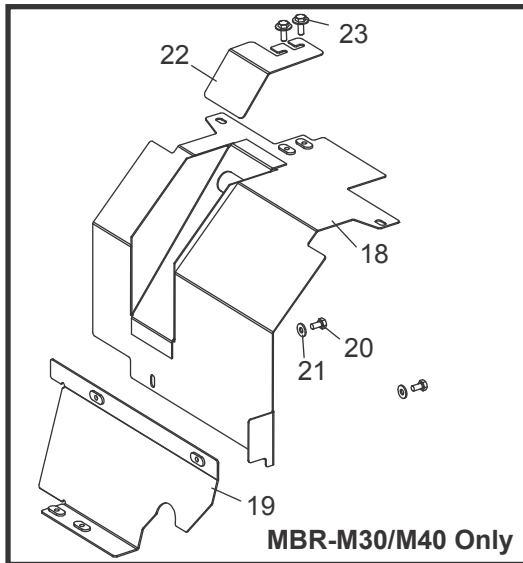
FIGURE 6

Board Return Maintenance

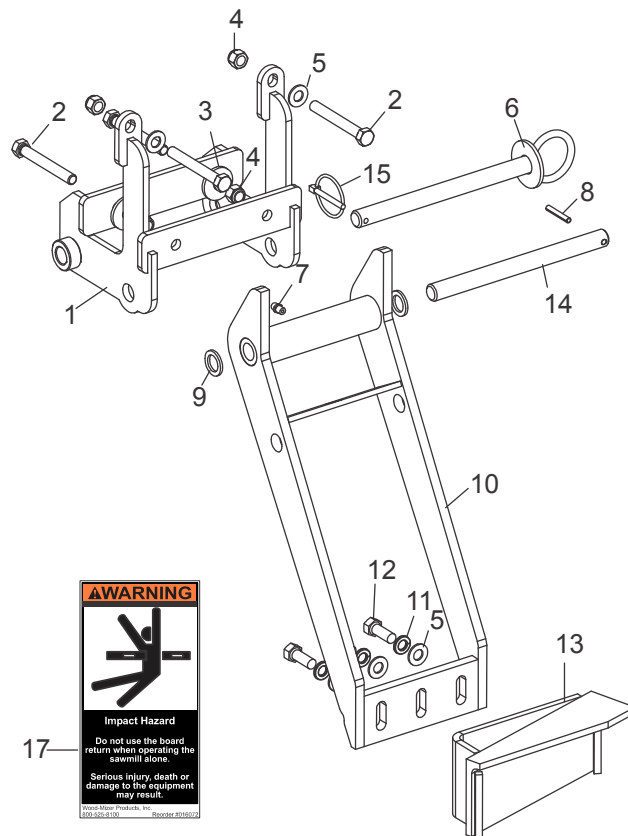
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Lubricate the optional board return pivot every fifty hours of operation with a NLGI No. 2 grade lithium grease. Apply grease to the grease fitting on the board return pivot tube.

Board Return Replacement Parts (2007+ Sawmills)



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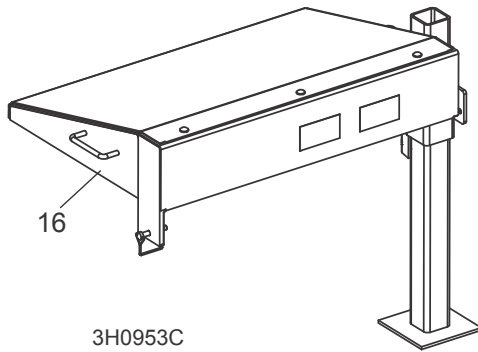
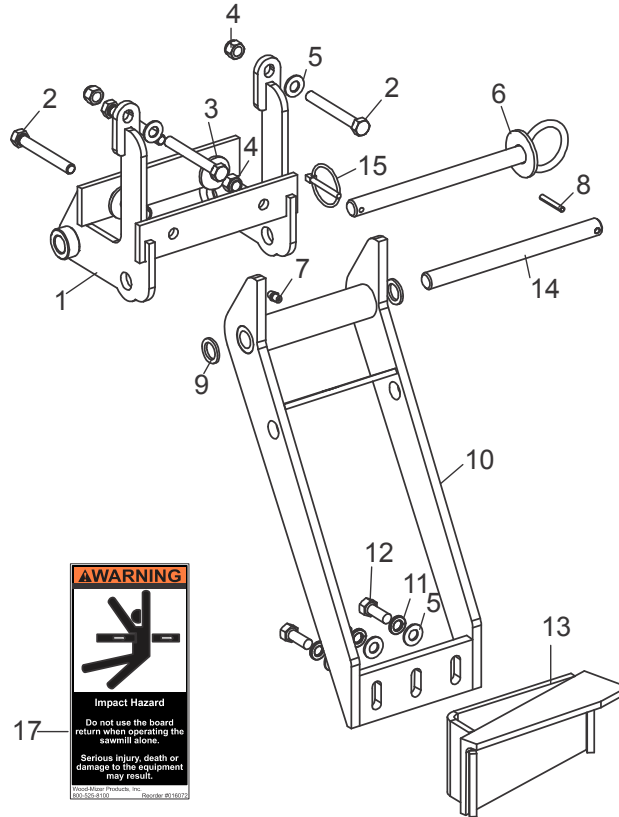
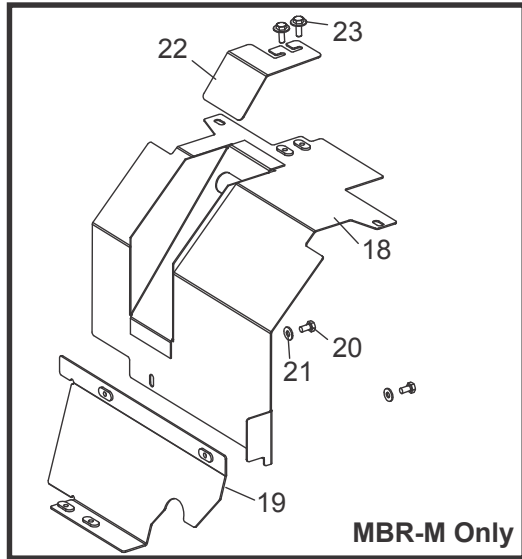
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	RETURN RETROFIT, NON-SUPER BOARD (MANUAL CLUTCH, LT30)	003266 ¹	1
	RETURN RETROFIT, NON-SUPER BOARD (MANUAL CLUTCH, LT40)	003268 ¹	1
	RETURN RETROFIT, NON-SUPER BOARD (AUTOCLUTCH, LT30)	003267	1
	RETURN RETROFIT, NON-SUPER BOARD (AUTOCLUTCH, LT40)	003269	1
	Return Assembly, Optional Non-Super Board	036693	1
1	Mount Weldment, Board Return	036691	1
2	Bolt, 3/8-16 x 3" Full Thread Hex Head	F05007-1	4
3	Washer, 1/8" x 1 1/4"	015336	2
4	Nut, 3/8-16 Hex Nylon Lock	F05010-10	4

5	Washer, 3/8" Flat	F05011-3	5	
6	Pin Weldment, Board Return Arm Support	036692	1	
7	Fitting, 1/4-28 Grease	P05060	1	
8	Pin, 3/16 x 1 1/4" Roll	F05012-16	1	
9	Washer, 5/8" x 15/16" x .094 Nylon	F05011-19	2	
10	Arm Weldment, Board Return	015210	1	
11	Washer, 3/8" Split	F05011-4	3	
12	Bolt, 3/8-16 x 1" Hex Head	F05007-7	3	
13	Bracket Weldment, Board Return	015652	1	
14	Rod Kit, Board Return Replacement Pivot	016272	1	
	Rod, 5/8" x 7 5/8"	015225	1	◆
15	Pin, 3/16" Retaining w/Chain	017604	1	
16	Board Return Table Parts (SEE BOARD RETURN TABLE REPLACEMENT PARTS (2007+ SAWMILLS))			
17	Decal, Board Return Warning	016072	1	
Parts Listed Below Included in kits for Sawmills with Manual Clutch Lever Only:				
18	Guard Weldment, Clutch Handle	006026 ¹	1	
19	Mount Weldment, Clutch Handle Guard	006025 ¹	1	
20	Bolt, 1/4-20 x 1/2" Hex Head	F05005-15	2	
21	Washer, 1/4" SAE Flat	F05011-11	2	
22	Plate, LT40 Belt Guard Cover	074752 ²	1	
23	Bolt, 1/4-20 x 3/4" Hex Head w/Conical Washer	F05005-134	2	

¹ Kits for sawmills with manual clutch handle updated with new guard and guard mount to accommodate new blade guide design available 2/08. 006026 Guard Weldment & 006025 Guard Mount Weldment replace 015657 & 015678.

² Added to cover access opening cut in guard weldment to check belt tension (9/15).

Board Return Replacement Parts (1997 - 06 Sawmills)



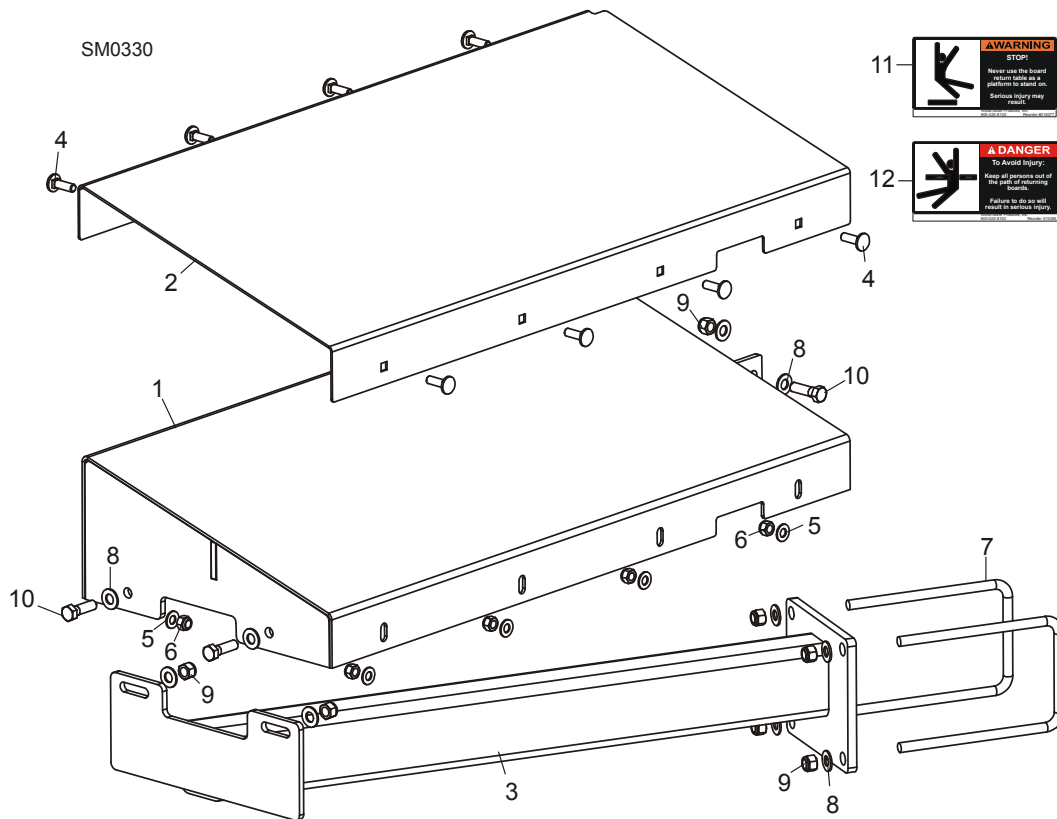
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	RETURN RETROFIT, NON-SUPER BOARD (MANUAL CLUTCH)	036667 ¹	1
	RETURN RETROFIT, NON-SUPER BOARD (AUTOCLUTCH)	036668	1
	Return Assembly, Optional Non-Super Board	036693	1
1	Mount Weldment, Board Return	036691	1
2	Bolt, 3/8-16 x 3" Full Thread Hex Head	F05007-1	4
3	Washer, 1/8" x 1 1/4"	015336	2
4	Nut, 3/8-16 Hex Nylon Lock	F05010-10	4
5	Washer, 3/8" Flat	F05011-3	5
6	Pin Weldment, Board Return Arm Support	036692	1
7	Fitting, 1/4-28 Grease	P05060	1
8	Pin, 3/16 x 1 1/4" Roll	F05012-16	1
9	Washer, 5/8" x 15/16" x .094 Nylon	F05011-19	2
10	Arm Weldment, Board Return	015210	1
11	Washer, 3/8" Split	F05011-4	3
12	Bolt, 3/8-16 x 1" Hex Head	F05007-7	3

13	Bracket Weldment, Board Return	015652	1	
14	Rod Kit, Board Return Replacement Pivot	016272	1	
	Rod, 5/8" x 7 5/8"	015225	1	◆
15	Pin, 3/16" Retaining w/Chain	017604	1	
16	Board Return Table Parts (SEE BOARD RETURN TABLE REPLACEMENT PARTS (1997 - 06 SAWMILLS))			
17	Decal, Board Return Warning	016072	1	
Parts Listed Below Included in 036667 for Sawmills with Manual Clutch Lever Only:				
18	Guard Weldment, Clutch Handle	006026 ¹	1	
19	Mount Weldment, Clutch Handle Guard	006025 ¹	1	
20	Bolt, 1/4-20 x 1/2" Hex Head	F05005-15	2	
21	Washer, 1/4" SAE Flat	F05011-11	2	
22	Plate, LT40 Belt Guard Cover	074752 ²	1	
23	Bolt, 1/4-20 x 3/4" Hex Head w/Conical Washer	F05005-134	2	

¹ Kits for sawmills with manual clutch handle updated with new guard and guard mount to accommodate new blade guide design available 2/08. 006026 Guard Weldment & 006025 Guard Mount Weldment replace 015657 & 015678.

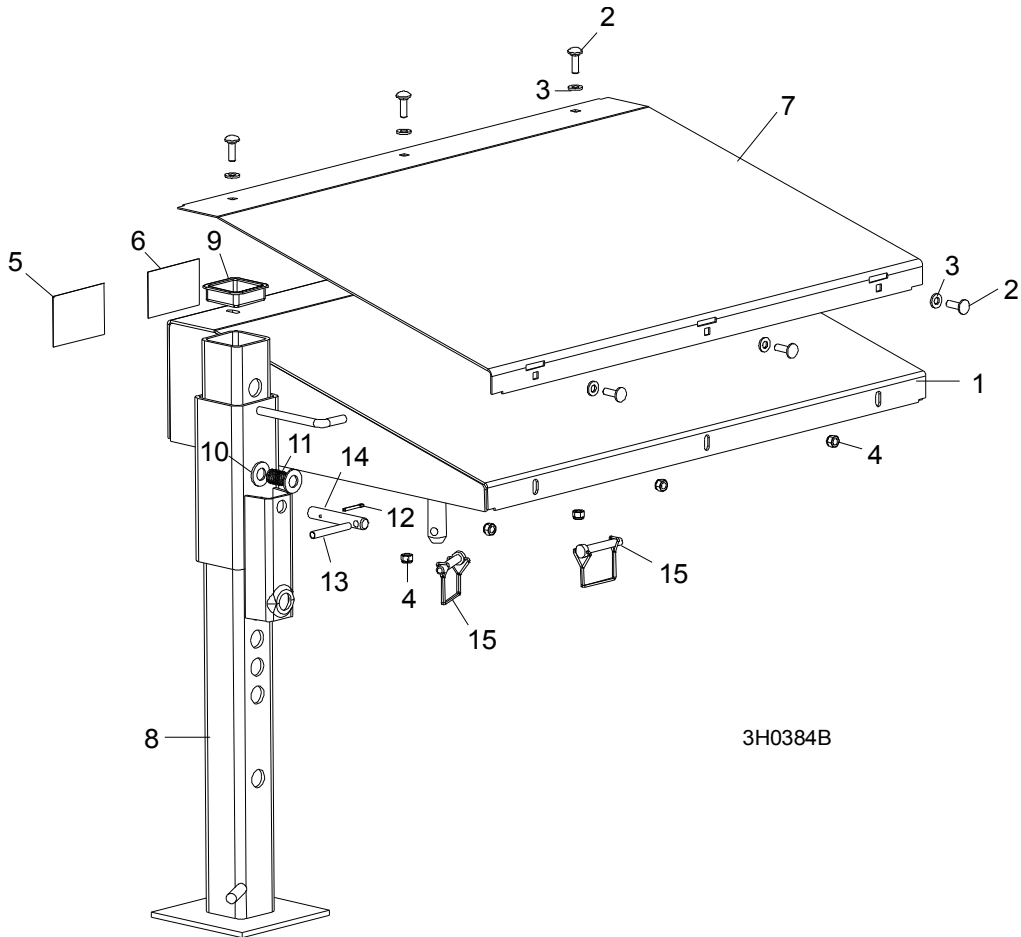
² Added to cover access opening cut in guard weldment to check belt tension (9/15).

Board Return Table Replacement Parts (2007+ Sawmills)



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	TABLE ASSEMBLY, BOARD RETURN (LT40)	003264	1	
	TABLE ASSEMBLY, BOARD RETURN (LT30)	003270	1	
1	Table Weldment, Board Return	055515	1	
2	Cover, Board Return Table	003259	1	
3	Mount Weldment, Board Return Table (LT40)	055533	1	
	Mount Weldment, Board Return Table (LT30)	038992	1	
4	Bolt, 5/16-18 x 1" Carriage Head	F05006-9	8	
5	Washer, 5/16" SAE Flat	F05011-17	8	
6	Nut, 5/16-18 Nylon Lock	F05010-58	8	
7	Bolt, 3/8-16 x 4" x 5" 'U'	003207	2	
8	Washer, 3/8" SAE Flat	F05011-3	10	
9	Nut, 3/8-16 Hex Nylon Lock	F05010-10	7	
10	Bolt, 3/8-16 x 1 1/4" Hex Head Grade 5	F05007-123	3	
11	Decal, Board Return Table Warning	016077	1	
12	Decal, Board Return Danger	015365	1	

Board Return Table Replacement Parts (1997 - 06 Sawmills)



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	TABLE ASSEMBLY, BOARD RETURN	015792	1	
1	Table Weldment, Board Return	015790	1	◆
2	Bolt, 5/16-18 x 1" Carriage Head	F05006-9	6	
3	Washer, 5/16" SAE Flat	F05011-17	6	
4	Nut, 5/16-18 Nylon Lock	F05010-58	6	
5	Decal, Board Return Danger	015365	1	
6	Decal, Board Return Table Warning	016077	1	
7	Plate, Return Table Stainless Steel	015791	1	
8	Leg Weldment, Painted Outrigger	W07537	1	
9	Cap, Outrigger Leg	P09926	1	
10	Washer, 3/4" SAE Flat	F05011-62	2	
11	Spring, Outrigger Pin	016145	1	
12	Pin, 1/8" X 1 1/4" Cotter	F05012-59	1	
	Pin Kit, 3/4" Outrigger Pull	016148	1	
13	Pin, 5/16" X 2 1/2" Roll	F05012-47	1	
14	Pin, 3/4" Outrigger Pull	016147	1	◆
15	Pin, 3/8 X 2 1/4" Square Wire Lock	014151	2	