Electric Brake Trailer

Safety, Operation, Maintenance & Parts Manual

LT30HD	rev. F8.00 - F9.01
LT40HD	rev. F8.00 - F9.01
LT30HD Super	rev. F8.00 - F9.01
LT40HD Super	rev. F8.00 - F9.01

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

January 1996

Form #667

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SECTION 1 SAFETY & GENERAL INFORMATION

IMPORTANT! This manual is provided as a supplement to the equipment manufacturer's manuals. This manual takes into account the specific use of trailers on the Wood-Mizer sawmill. Only safety, maintenance, and operating procedures that are not provided by the manufacturer are supplied in this manual. Refer to the manufacturer's manual before attempting to operate this equipment.

1.1 Safety Procedures

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 avoid, may result in minor or moderate injury to persons or equipment.

Read and observe all safety instructions before operating this equipment! Also read any additional manufacturer's manuals and observe any applicable safety instructions including dangers, warnings, and cautions.

Always be sure that all safety decals are clean and readable. Replace all damaged safety decals to prevent personal injury or damage to the equipment. Contact your local distributor, or call your Customer Service Representative to order more decals.

IMPORTANT! It is always the owner's responsibility to comply with all applicable federal, state and local laws, rules and regulations regarding the ownership, operation and towing of your Wood-Mizer sawmill. All Wood-Mizer mill owners are encouraged to become thoroughly familiar with these applicable laws and comply with them fully while using or towing the mill.

DANGER! Make sure hitch bracket is securely fastened around ball before towing the sawmill. Ball should be completely engaged by the hitch bracket and securely locked in place. Failure to do so may result in serious personal injury and/or severe machine damage. Safety Procedures

DANGER! Make sure your hitch has adequate safety chain hookups. Do not use eyebolts for safety chain hook-up. Safety chains should be hooked to bumper of vehicle so that each chain would pull the trailer equally in the event the hitch became disengaged. Failure to do so may result in serious personal injury and/or severe machine damage.

DANGER! Be sure that the hitch and safety chains are secure before towing the sawmill. Always connect the break-away cable to the vehicle when towing the sawmill. Failure to do so may result in serious personal injury and/or severe machine damage.

DANGER! Make sure all brake and light connections have been made and are working properly before towing the sawmill. Failure to do so may result in serious personal injury and/or severe machine damage.

DANGER! Make sure the electric brake wire is secured as close to the trailer axle as possible to prevent wire disconnection during towing. Failure to do so may result in serious personal injury and/or severe machine damage.

DANGER! Be sure electric brake battery is charged and is working properly before towing the sawmill. Failure to do so may result in serious personal injury and/or severe machine damage.

DANGER! Do not use the electric brake system as an "emergency brake" while the sawmill is not being towed. Extended use of the electric brakes while the sawmill is stationary will drain the brake battery.

DANGER! Chock the mill to prevent movement before unhitching it from the towing vehicle. Failure to do so may result in serious injury or death.

DANGER! Stay clear of the area between the trailer axle and saw carriage. Failure to do so will result in serious injury.



CAUTION! Always check trailer tires for proper inflation before towing sawmill. Failure to do so may result in machine damage.

CAUTION! To prevent fender damage, remove fenders before operating sawmill or loading logs.



1.2 Wiring Diagram

See Figure 1-1. An electric brake trailer system diagram is provided below.

The brake wiring was modified 2/96. Be sure to refer to the proper diagram below.

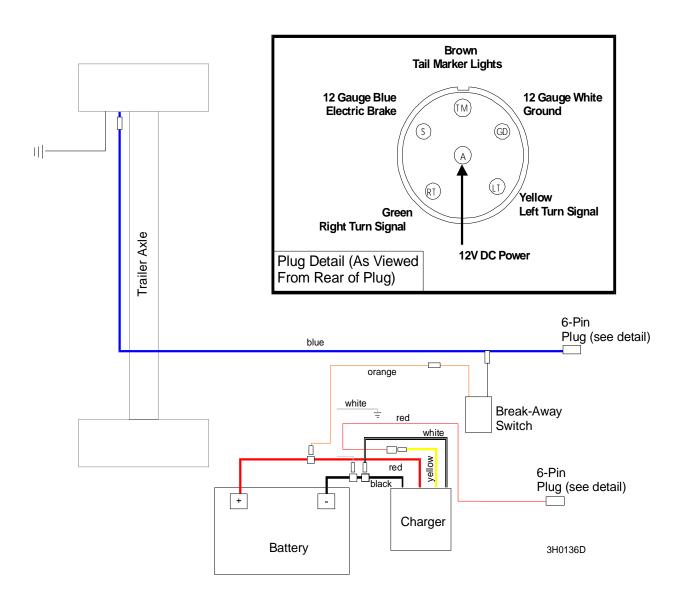


FIG. 1-1 LT30 F4732+, LT40 F5615+, ALL LT30 SUPER, ALL LT40 SUPER, LT30HD F8002+, LT40HD F8026+

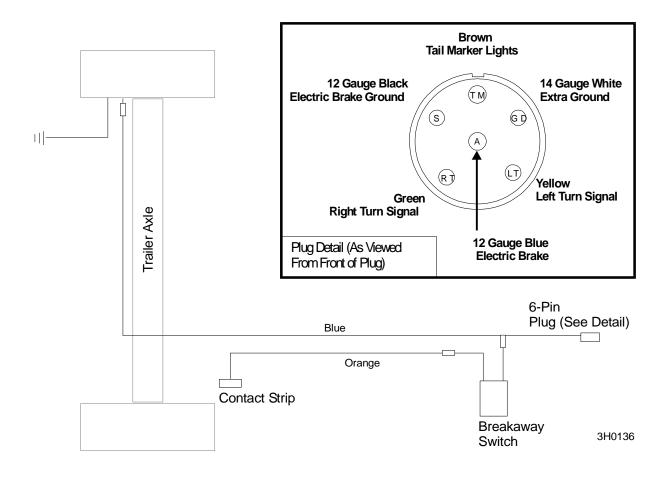


FIG. 1-1 (ALL OTHERS)

SECTION 2 ELECTRIC BRAKE HITCH OPERATION

1. Pull the mill behind the towing vehicle and place the hitch over the ball coupling on your vehicle. Your vehicle should be equipped with a Class 2 hitch with a solid 2" ball (not two-piece) and rated for at least 3500 pounds (1588 kg). The hitch should be correctly mounted to the towing vehicle so that it will be able to pull this type of load.

See Figure 2-1.

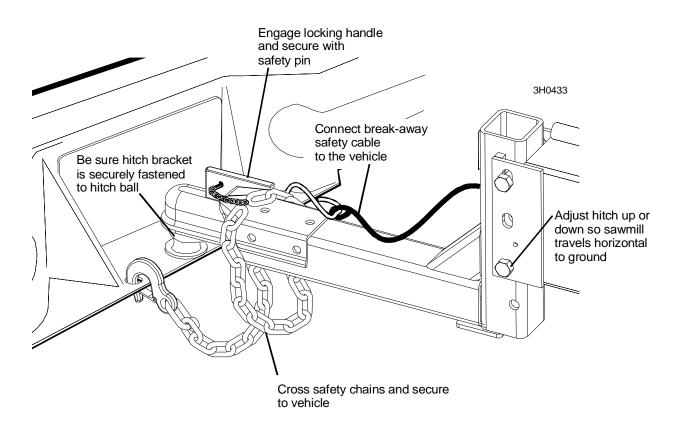


FIG. 2-1

2. Flip the locking handle downward, being sure the bracket underneath firmly clamps around the ball. Secure the locking handle with the safety pin.

DANGER! Make sure hitch bracket is securely fastened around ball before towing the sawmill. Ball should be completely engaged by the hitch bracket and securely locked in place. Failure to do so may result in serious personal injury and/or severe machine damage.



3. Cross the safety chains underneath the hitch and hook to the vehicle. The chains should be connected so that there is still slack in the chains when the vehicle is turned sharply in either direction.

DANGER! Make sure your hitch has adequate safety chain hookups. Do not use eyebolts for safety chain hook-up. Safety chains should be hooked to bumper of vehicle so that each chain would pull the trailer equally in the event the hitch became disengaged. Failure to do so may result in serious personal injury and/or severe machine damage.

- 4. Connect the break-away safety cable to the vehicle. This cable is designed to activate the brakes in the event the hitch coupling and safety chains fail. The cable should have slightly more slack than the safety chains.
- **5.** Connect the 6-pin plug from the sawmill to the receptacle on your vehicle. Check signals and brake lights.
- **6.** Raise the front outrigger. Recheck that all loose items are removed or secured (such as Resaw Option, Shingle/Lapsiding Option, cant hooks, etc.).
- 7. The hitch on the mill is adjustable. It should be raised or lowered to let the mill travel horizontal to ground level. Adjust by removing the two mounting bolts. Then slide the hitch tube up or down to new set of holes. Replace bolts and nuts.

DANGER! Be sure that the hitch and safety chains are secure before towing the sawmill. Always connect the break-away cable to the vehicle when towing the sawmill. Failure to do so may result in serious personal injury and/or severe machine damage.

DANGER! Make sure all brake and light connections have been made and are working properly before towing the sawmill. Failure to do so may result in serious personal injury and/or severe machine damage. **DANGER!** Be sure electric brake battery is charged and is working properly before towing the sawmill. Failure to do so may result in serious personal injury and/or severe machine damage.

Make sure you have complied with all applicable Federal, State and Local motor vehicle safety laws.

DANGER! Chock the mill to prevent movement before unhitching it from the towing vehicle. Failure to do so may result in serious injury or death.

DANGER! Do not use the electric brake system as an "emergency brake" while the sawmill is not being towed. Extended use of the electric brakes while the sawmill is stationary will drain the brake battery.

SECTION 3 ELECTRIC BRAKE MAINTENANCE

- 1. Clean and repack the trailer axle wheel bearings with lithium grease every 12 months or 12,000 miles (19,308 km), whichever comes first.
- 2. Make sure that the trailer tires are correctly inflated to the pressure shown on the tire.



WARNING! Always check trailer tires for proper inflation before towing sawmill.

3. Electric Brakes

Check the brakes before towing the sawmill.

Also check that the brake wire is secured as close to the trailer axle as possible. Three UV resistant tie wraps should secure the wire to the middle of the axle and to each end.



DANGER! Make sure all brake and light connections have been made and are working properly.

DANGER! Be sure brake battery is charged and is working properly.

Make sure you have complied with all applicable Federal, State and Local motor vehicle safety laws.

Adjust brakes after the first 200 miles of operation and every 3000 miles of operation thereafter. See the Dexter Axle Operation Maintenance Service Manuals for more information.



CAUTION! Brake wire must be secured as close to the trailer axle as possible to prevent wire disconnection during towing.



SECTION 4 PARTS LISTS



4.1	Trailer Hitch Assembly		
REF	DESCRIPTION (Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	HITCH, STANDARD TRAILER	W04258	1
2	Chain, Hitch Latch Safety	M05058	1
3	BOLT, 5/8-11 X 5 1/2" HEX HEAD GRADE 5	F05009-11	2
4	NUT, 5/8-11 HEX LOCK	F05010-4	2
	TOWING EXTENSION KIT (NOT SHOWN, OPTIONAL)	K12571	1
	Bolt, 5/8-11 x 2 1/2" Hex Head Grade 5	F05009-20	2
	Washer, 5/8" Split Lock	F05011-27	2
	Washer, 5/8" SAE Flat	F05011-5	2
	Bracket, Safety Chain Bumper	S12289-N	2
	Nut, 5/8-11 Free Hex	F05010-5	2
	BATTERY/CHARGER ASSEMBLY, ELECTRIC BRAKE	014357 ¹	1
5	Box, Trailer Battery (Box Not Included in 014357 Battery Kit)	014473	1
6	Charger, Trailer Brake Battery	014471	1
7	Battery, Trailer Brake	014472	1
8	Switch, Electric Brake Breakaway	014082	1
	Pin Assy, Brake Switch Activator	024518 ²	1
9	BOLT, 1/4-20 X 1/2" SLOT HEX HEAD	F05015-1	1
10	PLATE, BATTERY BOX MOUNT (OPTIONAL FOR HYDRAULIC SAWMILLS)	014388	1
11	BOLT, 1/4-20 X 1" HEX HEAD GRADE 2	F05005-38	4
12	WASHER, 1/4" LOCK	F05011-14	4
13	NUT, 1/4-20 SELF LOCKING	F05010-9	4

¹ Electric brake activation system replaced with independent battery/charger (LT30 Rev. F4753, LT30 Super Rev. F4004, LT40 Rev. F5640, LT40 Super Rev. F5001, LT30HD F8525, LT30HD Super Rev. F8004, LT40HD Rev. F8574, LT40HD Super Rev. F8005). All customers with previous models supplied 014387 Retrofit kit.

² Pin Assembly will only service newer switches with cylinder-shaped pins. Switches with flat-style pins must be replaced with new switch 014082.

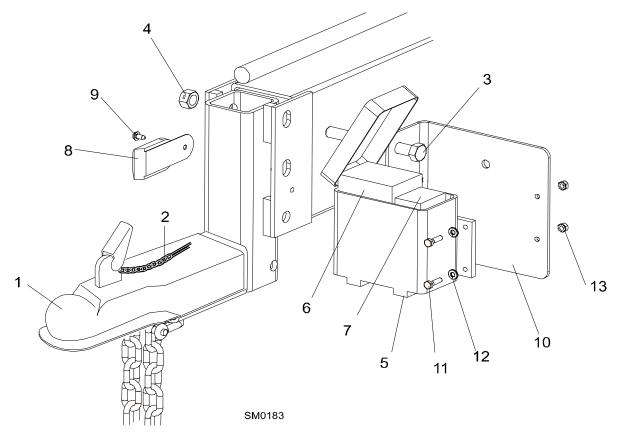


FIG. 4-1



4.2	Trailer Axle Assembly			
REF	DESCRIPTION (Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	AXLE FRAME ASSEMBLY, ELECTRIC BRAKE	A09802	1	
1	Frame, Trailer Axle	W09751	1	٠
2	Axle, 3500 Lb. Electric Brake With Springs	012975	1	
3	Spring, 2000 Lb. Dexter Leaf Idle Side Replacement	P09612 ¹	1	
4	Spring, 2500 Lb. Dexter Leaf Drive Side Replacement	014586 ²	1	
	Bearing Kit, Sawmill Axle Spindle	K07549	1	
5	Bearing, Dexter #L44649	P22573-1	1	٠
6	Bearing, Dexter #L68149	P22572-1	1	•
7	Race, Inner Dexter #L68111	P22572-2	1	٠
8	Race, Outer Dexter #L44610	P22573-2	1	٠
9	Seal, 13" Wheel Bearing Dust	P07554	1	
10	Cap, Wheel Bearing Dust	P04493	2	
11	Wheel Assembly, LT185R14 D (Silver Rim)	014677 ³	2	
	Wheel Assembly, ST205/75 D14 (White Rim)	P04468-2 ⁴	2	
12	PLATE, TRAILER AXLE SHACKLE	M07528	4	
13	BOLT, 9/16-8 X 3" SHACKLE	P04644	6	
14	NUT, 9/16-8 SHACKLE	P04643	6	
15	NUT, 1/2-20 WHEEL LUG	P04646	10	
16	BOLT, 1/2-13 X 4" HEX HEAD GRADE 2	F05008-26	4	
17	WASHER, 1/2" EXTERIOR STAR	F05011-39	4	
18	WASHER, 1/2" SAE FLAT	F05011-2	4	
19	NUT, 1/2-13 HEX NYLON LOCK	F05010-8	4	
20	FENDER, TRAILER WHEEL	W11452 ⁵	2	
21	DECAL, FENDER DAMAGE CAUTION	S11761	2	
22	PIN, 5/16" X 1" DETAINING	F05012-45 ⁶	2	
	CONTACT ASSEMBLY, BREAK-AWAY (NOT SHOWN)	014064 ⁷	1	
	GUARD, ELECTRIC BRAKE SWITCH (NOT SHOWN)	014144 7	1	

¹ Directly replaces 009613 1750 Lb. Dexter Leaf Spring (LT30 Super F6023+, LT40 Super F7010+, LT30HD Super F9536+, LT40HD Super F9470+) Also applies to all non-super mills (10/96+).

² Directly replaces P09612 2000 Lb. Dexter Leaf Spring (LT30 Super F6023+, LT40 Super F7010+, LT30HD Super F9536+, LT40HD Super F9470+) Also applies to all non-super mills (10/96+).

³ Replaces 014495 ST205/75D14C wheel assembly originally supplied after 6/96. Optional: Upgrade *both* wheels with Goodyear wheel assemblies 015987 to ensure proper mill tracking. (The wheel types have slightly different diameters.)

⁴ White rims supplied until 6/96. Optional: Upgrade *both* wheels with Goodyear wheel assemblies 015987 to ensure proper mill tracking. (The wheel types have slightly different diameters.)

⁵ Added hole for detaining pin to fender and fender mounting bracket (LT30/LT30 Super F6.01+, LT40/LT40 Super F7.01+, LT30HD/LT40HD/LT30HD Super/LT40HD Super F9.01+).

⁶ Added to secure fender to fender mounting bracket (applies to LT30/LT30 Super F6.01+, LT40/LT40 Super F7.01+, LT30HD/LT40HD/LT30HD Super/LT40HD Super F9.01+).

⁷ Contact strip and guard obsolete 3/96. Brake system should be retrofitted with Battery/Charger kit 014387. <u>See Section 4.1</u>.

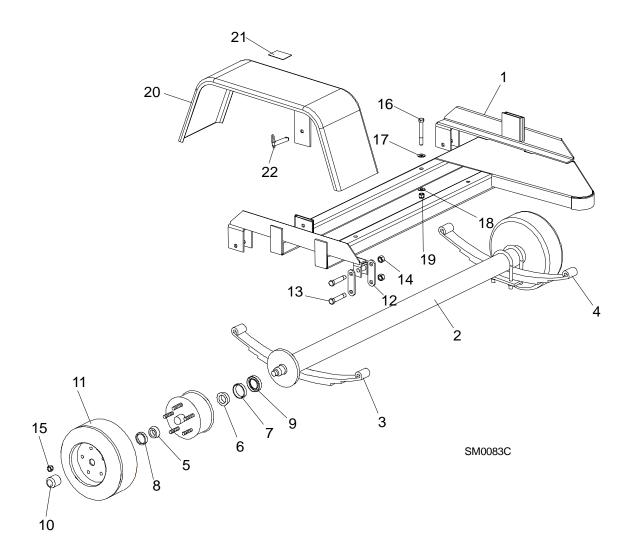


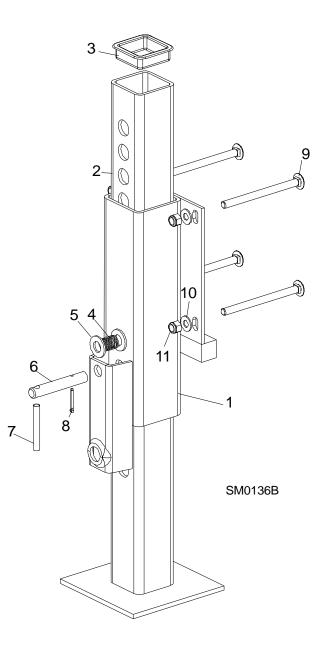
FIG. 4-2



4.3	Outrigger Assembly (Long)			
REF	DESCRIPTION (Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	OUTRIGGER ASSEMBLY, LONG	012997	2/3	
1	Guide, Long Outrigger Guide	012996	1	
2	Leg, Outrigger	W07537	1	
3	Cap, Outrigger Leg	P09926	1	
4	Spring, Outrigger Pin	P04282 ¹	1	
5	Washer, 9/16" SAE Flat	F05011-8 ¹	2	
	Pin Kit, Outrigger Pull	A12232 ¹	1	
6	Pin, Outrigger Pull	S12261 ¹	1	•
7	Pin, 5/16" x 2 1/2" Roll	F05012-47 ¹	1	
8	Pin, 1/8" x 1" Cotter	F05012-1 ¹	1	
9	BOLT, 3/8-16 X 5" CARRIAGE HEAD	F05007-113 ²	8/12	
	BOLT, 3/8-16 X 5" HEX HEAD GRADE 2	F05007-5 ²	8/12	
10	WASHER, 3/8" SAE FLAT	F05011-3	8/12	
11	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	8/12	

¹ Outrigger pin and hardware replaced with 3/4" diameter pin and hardware 10/98. Outrigger assembly includes updated outrigger pin parts (See Section 4.9).

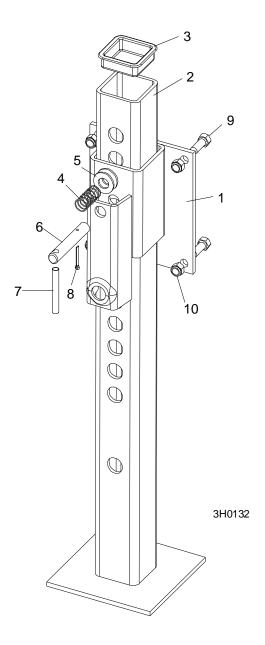
² Carriage bolts F05007-113 used on LT25 Rev. C1596+, LT30 Rev. F6822+, LT30 Super Rev. F9040+, LT40 Rev. F7749+, LT40 Super Rev. F7010, LT30HD Rev. F9535+, LT30HD Super Rev. F9040+, LT40HD Rev. F9824+, LT40HD Super Rev. F9437+. Use hex head bolts F05007-5 on prior revisions.





4.4	Outrigger Assembly (LT25L/LT40 /LT40HD	Rear)		
REF	DESCRIPTION (Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	OUTRIGGER ASSEMBLY, LT40 REAR	A12083	1	
1	Guide, Short Rear Outrigger Guide	W12082	1	
2	Leg, Outrigger	W07537	1	
3	Cap, Outrigger Leg	P09926	1	
4	Spring, Outrigger Pin	P04282 ¹	1	
5	Washer, 9/16" SAE Flat	F05011-8 ¹	2	
	Pin Kit, Outrigger Pull	A12232 ¹	1	
6	Pin, Outrigger Pull	S12261 ¹	1	•
7	Pin, 5/16" x 2 1/2" Roll	F05012-47 ¹	1	
8	Pin, 1/8" x 1" Cotter	F05012-1 ¹	1	
9	BOLT, 3/8-16 X 1" HEX HEAD GRADE 2	F05007-7	4	
10	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	4	

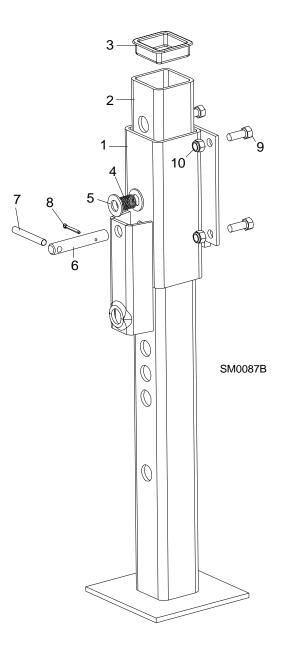
¹ Outrigger pin and hardware replaced with 3/4" diameter pin and hardware 10/98. Outrigger assembly includes updated outrigger pin parts (<u>See Section 4.9</u>).





4.5	Outrigger Assembly (Short Front)			
REF	DESCRIPTION (Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	OUTRIGGER ASSEMBLY, SHORT FRONT	A04278	1	
1	Guide, Short Front Outrigger Guide	W09012	1	
2	Leg, Outrigger	W07537	1	
3	Cap, Outrigger Leg	P09926	1	
4	Spring, Outrigger Pin	P04282 ¹	1	
5	Washer, 9/16" SAE Flat	F05011-8 ¹	2	
	Pin Kit, Outrigger Pull	A12232 ¹	1	
6	Pin, Outrigger Pull	S12261 ¹	1	٠
7	Pin, 5/16" x 2 1/2" Roll	F05012-47 ¹	1	
8	Pin, 1/8" x 1" Cotter	F05012-1 ¹	1	
9	BOLT, 3/8-16 X 1" HEX HEAD GRADE 2	F05007-7	4	
10	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	4	

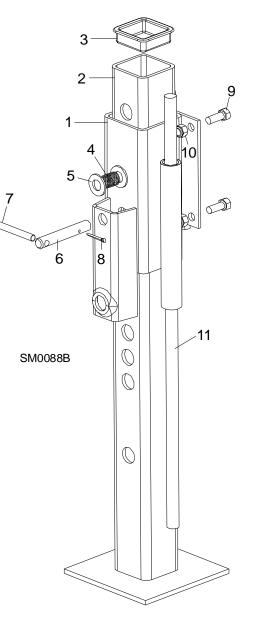
¹ Outrigger pin and hardware replaced with 3/4" diameter pin and hardware 10/98. Outrigger assembly includes updated outrigger pin parts (<u>See Section 4.9</u>).





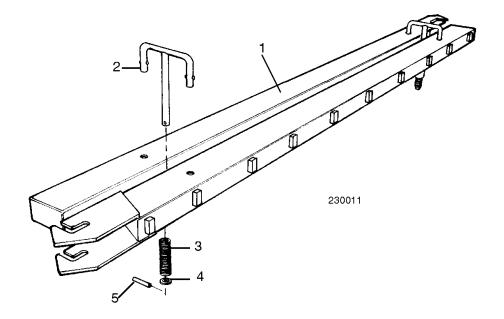
4.6	Outrigger Assembly (Short Rear)			
REF	DESCRIPTION (Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	OUTRIGGER ASSEMBLY, SHORT REAR	A09475	1	
1	Guide, Short Rear Outrigger Guide	W09474	1	
2	Leg, Outrigger	W07537	1	
3	Cap, Outrigger Leg	P09926	1	
4	Spring, Outrigger Pin	P04282 ¹	1	
5	Washer, 9/16" SAE Flat	F05011-8 ¹	2	
	Pin Kit, Outrigger Pull	A12232 ¹	1	
6	Pin, Outrigger Pull	S12261 ¹	1	٠
7	Pin, 5/16" x 2 1/2" Roll	F05012-47 ¹	1	
8	Pin, 1/8" x 1" Cotter	F05012-1 ¹	1	
9	BOLT, 3/8-16 X 1" HEX HEAD GRADE 2	F05007-7	4	
10	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	4	
11	HANDLE, OUTRIGGER LIFT	S04827	1	

¹ Outrigger pin and hardware replaced with 3/4" diameter pin and hardware 10/98. Outrigger assembly includes updated outrigger pin parts (<u>See Section 4.9</u>).

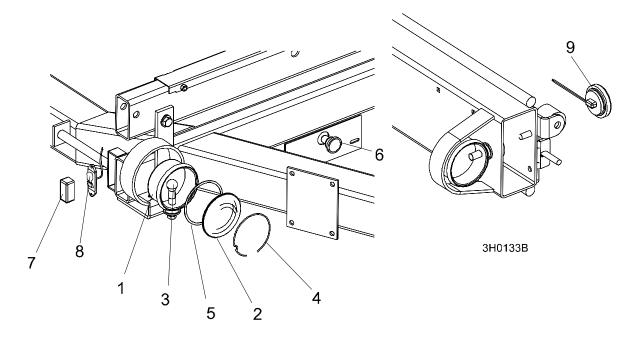




4.7	Log Loading Ramps (LT25/LT30/LT40)			
REF	DESCRIPTION (Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	RAMP KIT, LOG LOADING WITH RETAINERS	K09466	1	
1	Ramp, Log Loading	W09014	2	
	Retainer Kit, Log Ramp	K09810	2	
2	Retainer, Log Ramp	W09413	1	•
3	Spring, Log Ram Retainer	P09335	1	
4	Washer, 5/8" I.D. x .100" Thick Nylon	F05011-19	1	
5	Pin, 3/16" x 1" Roll	F05012-11	1	



4.8	Trailer Lights		
REF	DESCRIPTION (Indicates Parts Available In Assemblies Only)	PART #	QTY.
	CONNECTOR, 6-PIN ELECTRIC BRAKE TRAILER (NOT SHOWN)	014080	1
1	LIGHT ASSEMBLY, TRAILER TAIL	P04294	2
2	Lens, Grote Tail Light #90012	P12509	1
3	Bulb, #1157 Trailer Light	P04481	1
4	Clip, Grote Tail Light Retainer	P12510	1
5	Gasket, Grote Tail Light Lens	P12511	1
6	LIGHT, LICENSE PLATE	P09928	1
	LIGHT, RECTANGLE RED RUNNING	P12905	1
	LIGHT, RECTANGLE AMBER RUNNING (NOT SHOWN)	P12906	1
7	Lens, Rectangle Red Running Light	P12921	1
	Lens, Rectangle Amber Running Light	P12922	1
8	Bulb, Rectangle Running Light Replacement	P12923	1
9	LIGHT, ROUND RED RUNNING	P12913	1
	LIGHT, ROUND AMBER RUNNING (NOT SHOWN)	P12914	1
	Light, Round Red Running Replacement	P12917	1
	Light, Round Amber Running Replacement	P12918	1
	Pigtail, Round Running Light Replacement	P12920	1
	Grommet, Round Running Light Replacement	P12919	1





4.9	Outrigger Pin Hardware (3/4" Dia.)			
REF	DESCRIPTION (Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	SPRING, OUTRIGGER PIN	016145	1	
2	WASHER, 3/4" SAE FLAT	F05011-62	2	
	PIN KIT, 3/4" OUTRIGGER PULL	016148 ¹	1	
3	Pin, 3/4" Outrigger Pull	016147	1	٠
4	Pin, 5/16" X 2 1/2" Roll	F05012-47	1	
5	PIN, 1/8" X 1 1/4" COTTER	F05012-59	1	

¹ 3/4" diameter outrigger pin and hardware used with outrigger assemblies supplied after 10/98. See outrigger and hitch assemblies for original 9/16" outrigger pins and parts.

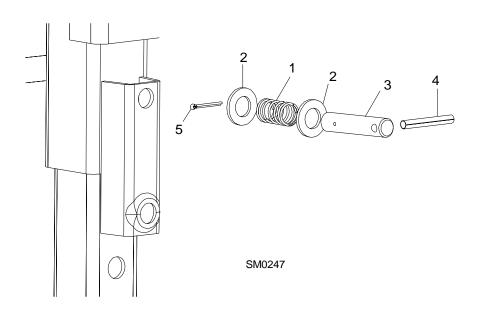


FIG. 4-9