Electric Brake Trailer

Safety, Operation, Maintenance & Parts Manual

70STRB-DCS LT70HD-RD Diesel Sawmills



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

September 2010

Form #1711



WARNING! Read and understand this manual before using this machine.

California

Proposition 65 Warning



WARNING: Breathing gas/diesel engine exhaust exposes you to chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

Always	start and	operate	the	engine	in a	well-v	/entilated	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: <u>woodmizer.com/patents</u>

©2022 Wood-Mizer LLC

Printed in the United States of America, all rights reserved. No part of this manual may be reproduced in any form by any photographic, electronic, mechanical or other means or used in any information storage and retrieval system without written permission from

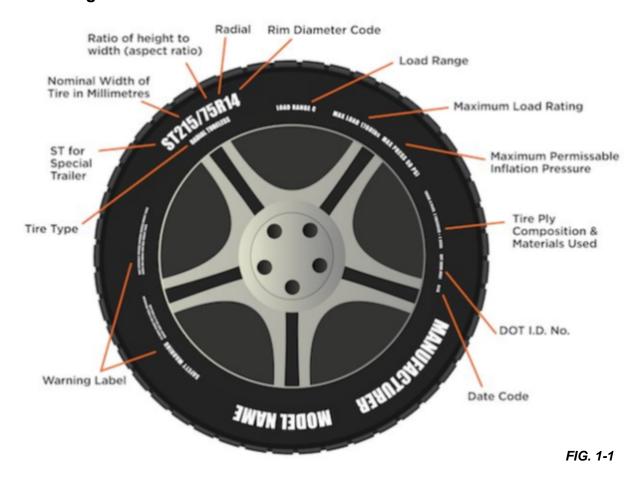
Wood-Mizer, LLC 8180 West 10th Street Indianapolis, Indiana 46214

SECTIO	N 1 TIRE SAFETY	
1.1	Tire labeling	1-1
	Tire markings1-1	
	Identifying tires1-2	
	Tire Identification Number1-2	
1.2	Recommended tire inflation pressure	1-2
	Recommended cold tire inflation pressure1-2	
	The vehicle tire inflation pressure label and location 1-3	
	Consequences of tire under-inflation1-4	
	Proper inflation1-4	
1.3	Glossary	1-5
1.4	Tire care, maintenance, and safety practices	
1.5	Vehicle load limits	1-8
SECTIO	N 2 ELECTRIC BRAKE HITCH	
2.1	Operation	2-1
SECTIO	N 3 MAINTENANCE	
3.1	Brake adjustment	3-1
3.2	Lubrication	
SECTIO	N 4 PARTS LISTS	
4.1	Trailer Hitch Assembly, Electric Brake	4-1
4.2	Trailer Axle Assembly, Electric Brake	4-2
4.3	Outriggers	
4.4	Outrigger Assembly, Offset	
4.5	Outrigger Assembly, Loading-Side	
4.6	Outrigger Assembly, Front	
4.7	Outrigger Assembly, Rear (DCS)	
4.8	Trailer Lights	
4.9	Wrench Bracket Assembly	
SECTIO	N 5 ELECTRICAL INFORMATION	
5.1	Electric Brake Wiring Diagram	5 1
$\mathcal{I}.1$	LICCUIC DIAKE WITHING DIAGRAM	J-1



SECTION 1 TIRE SAFETY

1.1 Tire labeling



Tire markings

TIRE CLASS AND SIZE: (Example: ST215/75R14)

- ST stands for Special Trailer tire. ST trailer tires are built to tow heavy loads, withstand excessive heat, and reduce sway.
- **215** is tire width in millimeters;
- **75** is the aspect ratio, or ratio of height to width;
- **R** is type of construction (radial, in the example)
- 14 is rim diameter in inches.

TIRE TYPE Below the tire size is either 'radial' or 'bias.' Radial tires (or 'radial-ply tires') are constructed with polyester and/or nylon plies that run across the tire perpendicularly, and sometimes include steel belts that run under the tread. Bias-ply tires Bias-ply cords layer in a criss-cross pattern from sidewall to sidewall, and they are also sometimes reinforced with a steel belt.

LOAD RANGE Load range indicates the type of load a tire is designed to support at a specific inflation pressure. Trailer tires typically have C, D, or E load ranges. A load range 'C' tire, for example, is at its peak load capacity—possibly 1600 pounds—when it's inflated to its maximum pressure of 50 PSI. A load range 'C' tire at 25 PSI might be able to support a load of 990 pounds, while at 40 PSI, that capacity could be 1300 pounds.

MAXIMUM LOAD RATING Load rating or load index indicates the weight a tire can safely carry at its maximum air pressure. In the example, at its maximum air pressure of 50 PSI (cold), a load range 'C' tire might have a load rating of 1760 pounds.

MAXIMUM PRESSURE Maximum pressure (when the tires are cold) needed for the tires to carry the maximum load; measured in PSI.

Identifying tires

Tires are required to have a Tire Identification Number (TIN) begin with the letters "DOT," followed by eight to thirteen characters that can be used to identify the manufacturing location, tire size, and manufacturer's specifications, along with the week and year the tire was manufactured. DOT Tire Identification Numbers are commonly but erroneously referred to as the tire's serial number, but it actually identifies production *batches*, not individual items.

Regulations also require the entire DOT Tire Identification Number to be branded on one sidewall, while only the letters "DOT" and the first digits of the Tire Identification Number must be branded onto the opposite sidewall. Therefore it is possible to see a Tire Identification Number that appears incomplete, yet simply requires looking at the tire's other sidewall to find the complete Tire Identification Number.

Tire Identification Number

DOT AND DATE CODES Department of Transportation identifier will include 10-12 numbers following 'DOT.' The first six to eight numbers indicate the manufacturer's code, where the tire was manufactured and the tire size.

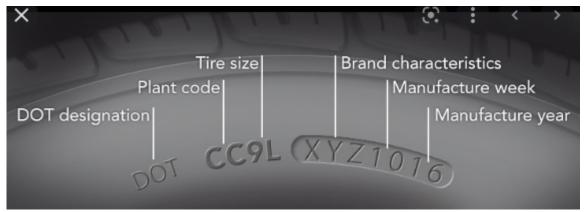


FIG. 1-2

1.2 Recommended tire inflation pressure

Recommended cold tire inflation pressure

The cold inflation pressure is the contained air pressure of a tire that would occur at an indexed temperature of 68°F or 20°C. This indexed temperature is based on the ideal ambient operating conditions for the tire.

TABLE 1-1 AMBIENT AIR TEMPERATURE PRESSURE ADJUSTMENT

	Pressure F (20°C)	10 psi	20 psi	30 psi	40 psi	50 psi	60 psi	70 psi	80 psi	90 psi	100 psi
104°F	40°C	11.7 psi	22.4 psi	33.1 psi	43.7 psi	54.4 psi	65.1 psi	75.8 psi	86.5 psi	97.1 psi	107.8 psi
86°F	30°C	10.8 psi	21.2 psi	31.5 psi	41.9 psi	52.2 psi	62.5 psi	72.9 psi	83.2 psi	93.6 psi	103.9 psi
68°F	20°C	10.0 psi	20.0 psi	30.0 psi	40.0 psi	50.0 psi	60.0 psi	70.0 psi	80.0 psi	90.0 psi	100.0 psi
50°F	10°C	9.2 psi	18.8 psi	28.5 psi	38.1 psi	47.8 psi	57.5 psi	67.1 psi	76.8 psi	86.4 psi	96.1 psi
32°F	0°C	8.3 psi	17.6 psi	26.9 psi	36.3 psi	45.6 psi	54.9 psi	64.2 psi	73.5 psi	82.9 psi	92.2 psi
14°F	−10°C	7.5 psi	16.4 psi	25.4 psi	34.4 psi	43.4 psi	52.4 psi	61.3 psi	70.3 psi	79.3 psi	88.3 psi
−4°F	-20°C	6.6 psi	15.3 psi	23.9 psi	32.5 psi	41.2 psi	49.8 psi	58.4 psi	67.1 psi	75.7 psi	84.3 psi
−22°F	-30°C	5.8 psi	14.1 psi	22.4 psi	30.7 psi	39.0 psi	47.3 psi	55.5 psi	63.8 psi	72.1 psi	80.4 psi
-40°F	-40°C	4.9 psi	12.9 psi	20.8 psi	28.8 psi	36.8 psi	44.7 psi	52.7 psi	60.6 psi	68.6 psi	76.5 psi

Tire Safety WM doc 5/4/221-2

	Pressure F (20°C)	69 kPa	138 kPa	207 kPa	276 kPa	345 kPa	414 kPa	483 kPa	551 kPa	620 kPa	689 kPa
104°F	40°C	81 kPa	154 kPa	228 kPa	301 kPa	375 kPa	449 kPa	522 kPa	596 kPa	670 kPa	743 kPa
86°F	30°C	75 kPa	146 kPa	217 kPa	289 kPa	360 kPa	431 kPa	502 kPa	574 kPa	645 kPa	716 kPa
68°F	20°C	69 kPa	138 kPa	207 kPa	276 kPa	345 kPa	414 kPa	483 kPa	551 kPa	620 kPa	689 kPa
50°F	10°C	63 kPa	130 kPa	196 kPa	263 kPa	329 kPa	396 kPa	463 kPa	529 kPa	596 kPa	662 kPa
32°F	0°C	57 kPa	122 kPa	186 kPa	250 kPa	314 kPa	378 kPa	443 kPa	507 kPa	571 kPa	635 kPa
14°F	−10°C	52 kPa	113 kPa	175 kPa	237 kPa	299 kPa	361 kPa	423 kPa	485 kPa	546 kPa	608 kPa
−4°F	-20°C	46 kPa	105 kPa	165 kPa	224 kPa	284 kPa	343 kPa	403 kPa	462 kPa	522 kPa	581 kPa
−22°F	-30°C	40 kPa	97 kPa	154 kPa	211 kPa	269 kPa	326 kPa	383 kPa	440 kPa	497 kPa	554 kPa
−40°F	-40°C	34 kPa	89 kPa	144 kPa	199 kPa	253 kPa	308 kPa	363 kPa	418 kPa	473 kPa	527 kPa

The vehicle tire inflation pressure label and location

The generic bilingual tire pressure label appears as in FIG. 1-3. The label on the vehicle has information specific to the trailer filled in

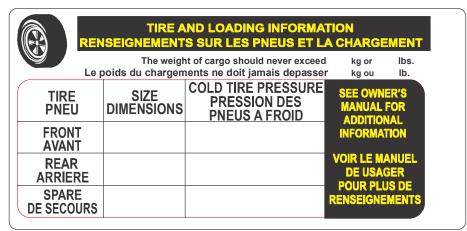


FIG. 1-3

The label is placed near the VIN placard, toward the **front left side** of the trailer.



FIG. 1-4

Consequences of tire under-inflation

Underinflated tires and overloaded vehicles are a major cause of tire failure. Tire inflation effects a vehicle's

- steering,
- stopping,
- traction, and
- load-carrying capability.

To avoid flat tires and other types of tire failure, you should

- maintain proper tire pressure,
- observe tire and vehicle load limits,
- avoid road hazards, and
- regularly inspect your tires.

Proper inflation

CHECK TIRE PRESSURE

Use a tire pressure gauge, which you can be purchased at most service stations or auto parts stores. Check the pressure when the tires are **COLD**, as the friction from driving affects the pressure. If driven recently, wait at least three hours for the tires to cool down.







COMMON TIRE PRESSURE GAUGES

FIG. 1-5

- 1. Remove the cap from the air valve on the tire, and put it somewhere you won't lose it.
- 2. Press the tire gauge against the open valve stem momentarily.
- Read the air pressure gauge.
- **4.** Compare this number with the recommended tire pressure.

Tire Safety WM doc 5/4/221-4



- 5. Inflate/release air as needed.
- 6. Replace the tire's air valve cap.
- 7. Repeat this process for each tire.

INFLATE YOUR TRAILER'S TIRES

- 1. Park close enough to the air compressor so you can reach all tires with the hose.
- 2. If the valve caps are still on, remove them.
- **3.** Press the hose nozzle down on the valve stem.

NOTE: You should notice the tire inflating and feel air flowing through the hose. If not, check to ensure the hose is securely placed on the valve stem.

- Remove the hose fitting.
- **5.** Check the air pressure as described above.
- **6.** Repeat steps 3- 5 as needed until the tire is inflated to the correct psi.
- 7. Repeats steps 2-5 for the vehicle's other tires.
- 8. Once the tires are inflated properly, replace the valve caps.

RELEASE AIR FROM TIRES

Overinflated tires can lead to poor handling, such as skidding and hydroplaning.

1. Briefly press the small dot or bead on the back of the tire pressure gauge into the center of the valve stem on the tire.

NOTE: You should hear the air escaping the tire.

- Use the gauge to check the tire pressure.
- 3. Repeat these steps until you've released enough air to reach the correct psi.

WHEN TO CHECK TIRE PRESSURE

Use Table 1-1 to adjust the recommended cold tire pressure to the ambient temperature. Check tire pressure monthly.

- Most tires may naturally lose air over time.
- Tires can lose air suddenly if you drive over a potholeor other object or if you strike the curb when parking.
- With radial tires, it is usually not possible to determine underinflation by visual inspection.

1.3 Glossary

ALPHA CHARACTER A single alphabetical character from A to Z.

BEAD SEPARATION A breakdown of bond between components in the bead area.

BEAD That part of the tire made of steel wires, wrapped or reinforced by ply cords, that is shaped to fit the rim.

CARCASS PLY A ply that extends to the beads.

CARCASS The tire structure, except tread and sidewall rubber.

CHUNKING The breaking away of pieces of the tread or sidewall.

COLD TIRE PRESSURE The air pressure in a tire at ambient temperature, **not having been driven for the at least 3 hours**.

CORD SEPARATION Cord parting away from adjacent rubber compounds.

CORD The strands that form the plies in the tire.

CRACKING Any parting within the tread, sidewall, or innerliner of the tire extending to cord material.

CURB WEIGHT The weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil, and coolant, and, if so equipped, air conditioning and additional weight of optional engine.

DEEP TREAD RADIAL A deep tread radial tire is one having a minimum tread depth of 14.3 mm (18/32 inch or 0.5625 inch) or greater.

DOT SYMBOL The letters "DOT" are part of the DOT serial number. This is the manufacturer's certification that the tire or rim meets or exceeds the requirements of FMVSS Nos. 110 and 139.

DOT TIRE IDENTIFICATION NUMBER Number appearing on the sidewall of the tire near the rim required by 49 CFR Part 574.5 which identifies the manufacturer's identification mark, tire size, tire type code and date of manufacture. See Fig. 1-2.

EXTRA LOAD TIRE A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

FIELDS Any group of letters and numbers that have significance or meaning.

GAWR The Gross Axle Weight Rating (GAWR) means the value specified by the vehicle manufacturer as the load-carrying capacity of a single axle system, as measured at the tire-ground interfaces.

GROOVE The space between two adjacent tread ribs.

GVWR The Gross Vehicle Weight Rating (GVWR) means the value specified by the manufacturer as the loaded weight of a single vehicle.

INNERLINER SEPARATION The parting of the innerliner from cord material in the carcass.

INNERLINER The layer(s) forming the inside surface of a tubeless tire that contains the inflating medium within the tire.

INTENDED OUTBOARD SIDEWALL (1) The sidewall that contains a whitewall, bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire; or (2) The outward facing sidewall of an asymmetrical tire having a particular side that must always face outward when mounted on a vehicle.

LIGHT VEHICLE TIRE A new, pneumatic, radial tire intended for use on motor vehicles (other than motorcycles and low speed vehicles) that have a gross vehicle weight rating (GVWR) of 10,000 pounds or less and were manufactured after 1975.

LOAD RATING The maximum load a tire is rated to carry for a given inflation pressure.

MAXIMUM LOAD RATING The load rating at the maximum permissible inflation pressure for that tire.

MAXIMUM INFLATION PRESSURE The maximum cold inflation pressure needed for your tire to support the weight of its *maximum load-carrying capacity*.

MEASURING RIM The rim on which a tire is fitted for physical dimension requirements.

NHTSA/OVSC National Highway Traffic Safety Administration, Office of Vehicle Safety Compliance (Canada).

OPEN SPLICE Any parting at any junction of tread, sidewalls, or innerliner that extends to cord material.

OUTER DIAMETER The overall diameter of an inflated new tire.

OVERALL WIDTH The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to marking, decorations, or protective bands or ribs.

PLY A layer of rubber-coated parallel cords.

PLY SEPARATION A parting or rubber compound between adjacent plies.

PNEUMATIC TIRE A mechanical device made of rubber, chemicals, fabric, steel, or other materials, which, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.

RADIAL PLY TIRE A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90° to the centerline of the tread.

RECOMMENDED INFLATION PRESSURE The cold inflation pressure provided on the Tire Information label and on the VIN tag.

Tire Safety WM doc 5/4/221-6

REINFORCED TIRE A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

RESPONSIVE TEST A special test initiated through a complaint, field inspection, failed standard test, or COTR discretion. RIM A metal support for a tire or a tire and tube assembly upon which the tire beads are seated.

RIM DIAMETER Nominal diameter of the bead seat.

RIM SIZE DESIGNATION Rim diameter and width.

RIM TYPE DESIGNATION The industry or manufacturer's designation for a rim by style or code. RIM WIDTH Nominal distance between rim flanges.

SECTION WIDTH The linear distance between the exteriors of an inflated tire's sidewalls, excluding elevations due to marking, decoration, or protective bands.

SIDEWALL That portion of a tire between the tread and the bead.

SIDEWALL SEPARATION The parting of the rubber compound from the cord material in the sidewall.

SIZE FACTOR The sum of the section width and the outer diameter of a tire determined on the test rim.

SNOW TIRE A snow tire means a tire that attains a traction index equal to or greater than 110, compared to the ASTM E-1136 Standard Reference Test Tire, when using the snow traction test as described in ASTM F-1805-00, Standard Test Method for Single Wheel Driving Traction in a Straight Line on Snow- and Ice-Covered Surfaces, and which is marked with an Alpine Symbol specified in S5.5(i) of FMVSS No. 139 on at least one sidewall.

TREAD That portion of a tire that comes into contact with the road.

TREAD RIB A tread section running circumferentially around a tire.

TREAD SEPARATION Pulling away of the tread from the tire carcass.

TREADWEAR INDICATORS (TWI) Projections within the principal grooves designed to give a visual indication of the degree of wear of the tread.

UVW The Unloaded Vehicle Weight (UVW) is the weight of a vehicle with maximum capacity of all fluids necessary for vehicle operation, but without cargo, occupants, or accessories that are ordinarily removed from the vehicle when they are not in use.

VEHICLE NORMAL LOAD ON THE TIRE The vehicle normal load on the tire means that load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight and dividing by 2.

1.4 Tire care, maintenance, and safety practices

- 1. Check your cold tire pressure at least once a month (See Proper inflation)
- Visually inspect your tires
 - 1). Check the tread at least once a month for excessive or uneven wear.
 - 2). Measure tread depth in three locations across the tire's tread: (1)outer edge, (2) center, and (3) inside edge.

NOTE: Accurate tread depth measurements are made with a simple tread depth gauge available at any parts store. --Or you can use the quarter (coin) method.

Insert a quarter into a tread groove with the top of Washington's head facing down.

If the top of his head is not visible, your tires have at least 4/32" of tread and are fine for continued use. If you can see above the top of Washington's head, replace the tire.

- 3). Inspect for over inflation: wear primarily in the center of the tread, with less wear at the tire's edges.
- 4). Inspect for under inflation: wear primarily on both edges of the tire tread, with less wear in the center.
- 5). Inspect for tread wear on one edge of the tire which occurs when the wheels are out of alignment.
- **6).** Inspect for erratic tread wear, "cupping," caused by the wheel out of balance, or suspension components need to be replaced.

- 7). Inspect for raised portion of the tread or sidewall which may indicate that one of the belts in the tire carcass has separated from those next to it.
- 3. Have your alignment checked every year.
- 4. Check and correct your tire balance.

1.5 Vehicle load limits

NOTICE Wood-Mizer trailers are not intended to carry any occupants or cargo.

Tire Safety WM doc 5/4/221-8

SECTION 2 ELECTRIC BRAKE HITCH



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.



WARNING! The hitch and safety chains must be secure before towing the sawmill; connect the break-away cable to the vehicle when towing the sawmill.

WARNING! Brake and light connections must be working properly before towing the sawmill.

WARNING! Chock the mill to prevent movement before unhitching it from the towing vehicle.

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



CAUTION! 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.

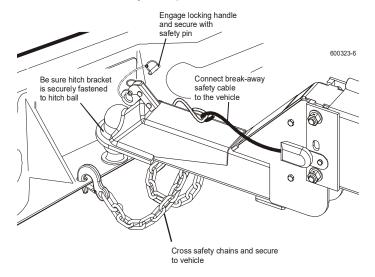
CAUTION! Ensure you have complied with all applicable Federal, State and Local motor vehicle safety laws.

2.1 Operation

NOTICE Your vehicle must be equipped with a Class 4 hitch with a solid 2 5/16" ball (not two-piece) and rated for at least 6000 pounds (2722 kg). The hitch must be correctly mounted to the towing vehicle so that it will be able to pull this type of load.

- Pull the mill behind the towing vehicle and place the hitch over the ball coupling on your vehicle. See Fig. 2-1.
- Adjust the coupler so it is as tight as possible on the ball and the locking lever can still be opened and closed.

3. Flip the locking handle downward, ensuring the bracket underneath firmly clamps around the ball.



4. Secure the locking handle with the safety pin.



WARNING! Hitch bracket must be securely fastened around ball before towing the sawmill. Ball must be completely engaged by the hitch bracket and securely locked in place. Use the hitch only with the specified ball size.

Cross the safety chains underneath the hitch and hook to the vehicle.

The chains must be connected so that there is still slack in the chains when the vehicle is turned sharply in either direction.



WARNING! 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.

6. Connect the break-away safety cable to the vehicle.

This cable activates the brakes in the event the hitch coupling and safety chains fail. The cable must have slightly more slack than the safety chains.

- Connect the light wiring harness plug from the sawmill to the receptacle on your vehicle.
- 8. Check signals and brake lights.
- 9. Raise the front outrigger.
- **10.** Recheck that all loose items are removed or secured (such as Resaw Option, Shingle/Lapsiding Option, cant hooks, etc.).

2-1 WM doc 5/4/22 Electric Brake Hitch

SECTION 3 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.
- Ensure that the trailer tires are correctly inflated to the pressure shown on the tire.



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

- 3. Check the adjustment of the trailer hitch coupler bracket frequently and adjust if necessary.
- Replace any bent or otherwise damaged parts before using the hitch using only parts provided by the hitch manufacturer for this hitch model.

3.1 Brake adjustment

Adjust the trailer brakes:

- after the first 200 miles of operation when the brake shoes and drums have "seated,"
- at 3.000 mile intervals.
- or as use and performance requires.



CAUTION! Do not lift or support trailer on any part of the axle or the suspension system. Never crawl under your trailer unless it is resting on properly placed jack stands.

Jack up the trailer and secure on adequate capacity jack stands.

> NOTE: Follow the trailer manufacturer's recommendations for lifting and supporting the unit. Make sure the wheel and drum rotates freely.

- Remove the adjusting hole cover from the adjusting slot on the bottom of the brake backing plate.
- Rotate the star wheel of the adjuster assembly to expand the brake shoes.
- Adjust the brake shoes out until the pressure of the linings against the drum makes the wheel very difficult to turn.

NOTE: For drop spindle axles, a modified adjusting tool may be necessary.

- 5. Rotate the star wheel in the opposite direction until the wheel turns freely with a slight lining drag.
- 6. Replace the adjusting hole cover and lower the wheel to the ground.
- Repeat the above procedure on all brakes.

NOTE: For best results, the brakes should all be set at the same clearance.

Torque the wheel nut to 90lbs.-ft. Tighten in 3 stages as shown in Table .

5 BOLT FIG. 3-1

Wheel torque requirements.

	Wheel Torque Sequence						
Size	1st Stage	2nd Stage	3rd Stage				
14"	25	50	90				

TABLE 3-1

Tighten bolts or nuts in the sequence shown for Wheel Torque Requirements.

3.2 Lubrication

1. Grease the Fine Adjust Outriggers (FAOs) every 200 hours of operation or once a month, whichever comes first.

2. Use one squeeze of a NLGI No. 2 grade lithium grease from a grease gun to lubricate the outrigger and remove any sawdust.

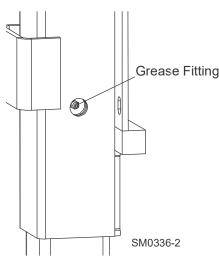
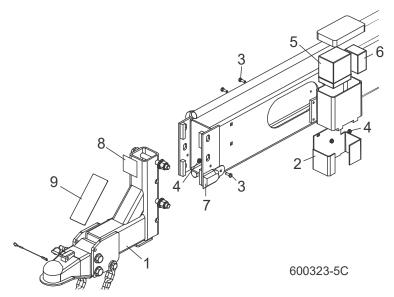


FIG. 3-2

WM doc 5/4/22 3-1 Maintenance

SECTION 4 PARTS LISTS

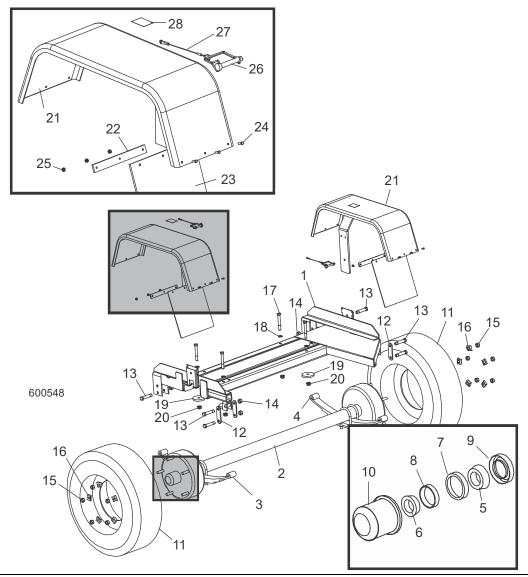
4.1 Trailer Hitch Assembly, Electric Brake



REF	DESCRIPTION (* Indicates Parts Available in Assemblies Only)	PART #	QTY.	
1	HITCH PARTS (See DCS Trolley Parts in Sawmill Parts Manual)			
	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	
2	BOX, BRAKE BATTERY	015161 ¹	1	
3	BOLT, 1/4-20 X 3/4" HEX HEAD FULL THREAD	F05005-1	3	
4	NUT, 1/4-20 SELF-LOCKING HEX	F05010-9	3	
	BATTERY/CHARGER ASSEMBLY, ELECTRIC BRAKE	014357	1	
5	Battery, Trailer Brake	014472	1	
6	Charger, Trailer Brake Battery	014471	1	
7	Switch, Electric Brake Breakaway	014082	1	
	Pin Assy, Brake Switch Activator	024518	1	
8	DECAL, BEFORE TOWING CAUTION (HYDRAULIC MILLS ONLY)	P11809	1	
9	DECAL, ELECTRIC BRAKE DANGER	014106	1	

 $^{^{1}\,\}mathrm{Replaced}$ 059610 per ECN 20056 4/14/2014.

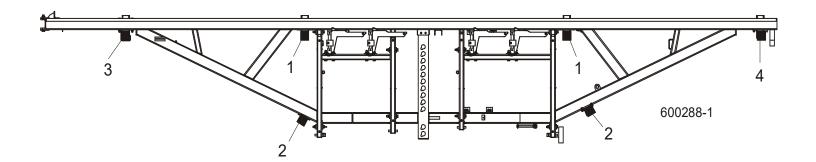
4.2 Trailer Axle Assembly, Electric Brake



REF	DESCRIPTION (♦ Indicates Parts Available in Assemblies Only)	PART #	QTY.	
	AXLE FRAME ASSEMBLY, ELECTRIC BRAKE (LT70SUPER/LT70-R)	N/A	1	
1	Frame Weldment, Axle HD	128254	1	•
2	Axle, 6000 Lb. Electric Brake Drop Super Dexter #52895	046062	1	
3	Spring, 3000 Lb. Dexter Leaf Idle Side Dexter #72-73	015694	1	
4	Spring, 3000 Lb. Dexter Leaf Idle Side Dexter #72-73	015694	1	
	Bearing Kit, 6000 lb Axle Spindle	036298	1	
5	Bearing, Dexter #25580	015697	1	•
6	Bearing, Dexter #15123	036296	1	•
7	Race, Inner Dexter #25520	015698	1	•
8	Race, Outer Dexter #15245	036297	1	•
9	Seal, Wheel Bearing Dust Dexter #10-1	015701	1	
10	Cap, Wheel Bearing Dust (Super) Dexter #21-1	015702	2	
11	Tire/Wheel Assy 8.00-14.5, 14 Ply	128251	2	

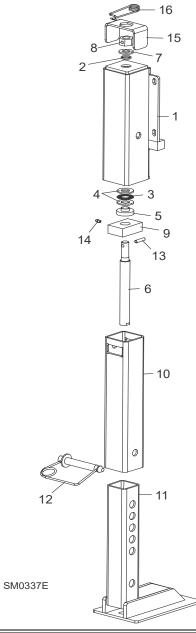
REF	DESCRIPTION (* Indicates Parts Available in Assemblies Only)	PART #	QTY.
12	Plate, Trailer Axle Shackle	M07528	4
13	Bolt, 9/16-8 X 3" Shackle	P04644	6
14	Nut, 9/16-8 Shackle	P04643	6
15	Nut, 9/16-18 Lug #006-005-00	036279	10
16	Clamp, Rim #015-002-00	036280	10
17	BOLT, 1/2-13 X 4" HEX HEAD GRADE 2	F05008-26	4
18	WASHER, 1/2" EXTERIOR STAR	F05011-39	4
19	WASHER, 1/2IDX3ODX3/8	074111	4
20	NUT, 1/2-13 FLANGED HEX NYLOCK	F05010-223	4
21	Fender Weldment, Trailer Wheel (Super Electric Brake)	015788	1
22	Plate, Mud Flap Retaining	015787	1
23	Flap, Mud	015758	1
24	Screw, #10-24 x 5/8" Hex Head	F05004-18	3
25	Nut, #10-24 Self-Locking Hex	F05010-14	3
26	Pin, 3/8x2 1/4 Sq Wire Lock	0141501	2
27	Lanyard, 3/64 x 6	016030	2
28	DECAL, FENDER DAMAGE CAUTION	S11761	2
	DECAL, PINCH POINT DANGER	P10287	1
	DECAL, REMOVE FENDERS (CONTROL BOX)	076607	1

4.3 Outriggers



REF	DESCRIPTION (* Indicates Parts Available in Assemblies Only)	PART #	QTY.	
1	OUTRIGGER ASSEMBLY, OFFSET ADJUSTABLE (See Section 2.5)	056787	2	
2	OUTRIGGER ASSEMBLY, LOADING-SIDE ADJUSTABLE (See Section 2.9)	056781	2	
3	OUTRIGGER ASSEMBLY, FRONT ADJUSTABLE (See Section 2.5)	003944	1	
4	OUTRIGGER ASSEMBLY, REAR ADJUSTABLE (See Section 2.11)	056791	1	

4.4 Outrigger Assembly, Offset

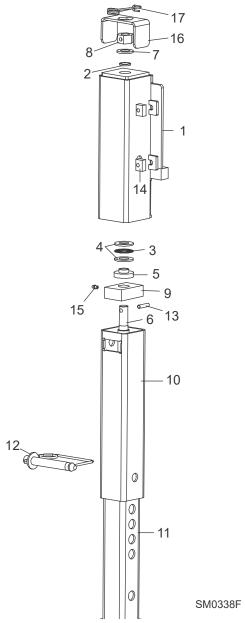


REF	DESCRIPTION (* Indicates Parts Available in Assemblies Only)	PART #	QTY.	
	OUTRIGGER ASSEMBLY, OFFSET ADJUSTABLE	056787	2	
1	Mount Weldment, Offset Adjustable Outrigger	003945	1	
2	Seal, Outrigger Acme Screw	039641	1	
	Bearing Assembly, Adjustable Outrigger Thrust	039639	1	
3	Bearing, Needle-Roller Thrust	039637	1	
4	Washer, Thrust Bearing	039638	2	
5	Sleeve, Outrigger Acme Screw	039645	1	
6	Screw, 1-5 Adjustable Outrigger Long Acme	039642	1	
7	Washer, 3/4" SAE Flat	F05011-62	1	
8	Nut, Adjustable Outrigger Hex	056774	1	
9	Nut, 1-5 Long Acme	039636	1	
10	Tube, Front Adjustable Outrigger Slide	003981	1	

REF	DESCRIPTION (* Indicates Parts Available in Assemblies Only)	PART #	QTY.	
11	Base Weldment, Offset Adjustable Outrigger	056788	1	
12	Pin, Adjustable Outrigger Locking	056817	1	
13	Pin 5/16" x 1 1/4" Roll	F05012-127	1	
14	Fitting, 1/4-28 Grease	P05060	1	
	Inst. Sheet, Adjustable Outrigger	FAO-1524	1	
15	BRACKET, ADJUSTABLE OUTRIGGER LOCK (OPTIONAL)	059577 ¹	1	

¹ Prevents downward creep during sawing.

4.5 Outrigger Assembly, Loading-Side

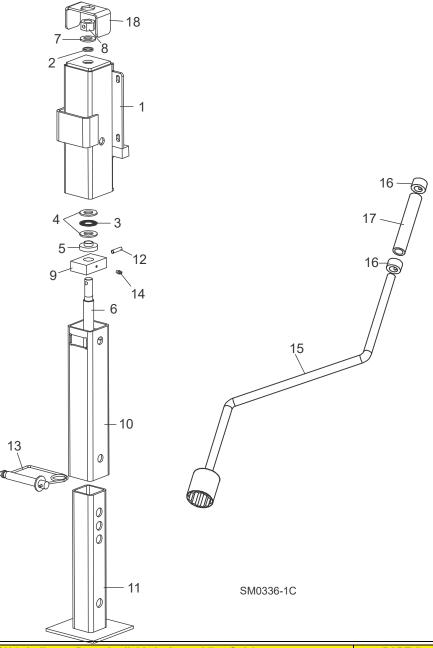


REF	DESCRIPTION (* Indicates Parts Available in Assemblies Only)	PART #	QTY.	
	OUTRIGGER ASSEMBLY, LOADING SIDE ADJUSTABLE	056781	2	
1	Mount Weldment, Loading Side Adjustable Outrigger	056780	1	
2	Seal, Outrigger Acme Screw	039641	1	
	Bearing Assembly, Adjustable Outrigger Thrust	039639	1	
3	Bearing, Needle-Roller Thrust	039637	1	
4	Washer, Thrust Bearing	039638	2	
5	Sleeve, Outrigger Acme Screw	039645	1	
6	Screw, 1-5 Adjustable Outrigger Long Acme	039642	1	
7	Washer, 3/4" SAE Flat	F05011-62	1	
8	Nut, Adjustable Outrigger Hex	056774	1	
9	Nut, 1-5 Long Acme	039636	1	
10	Tube, Adjustable Outrigger Slide	003981	1	

REF	DESCRIPTION (* Indicates Parts Available in Assemblies Only)	PART #	QTY.	
11	Base Weldment, Loading Side Adjustable Outrigger	056783	1	
12	Pin, Adjustable Outrigger Locking	056817	1	
13	Pin 5/16" x 1 1/4" Roll	F05012-127	1	
14	Nut, Adjustable Outrigger Mounting	056826	4	
15	Fitting, 1/4-28 Grease	P05060	1	
	Inst. Sheet, Adjustable Outrigger	FAO-1524	1	
16	BRACKET, ADJUSTABLE OUTRIGGER LOCK (OPTIONAL)	059577 ¹	1	

¹ Prevents downward creep during sawing

4.6 Outrigger Assembly, Front

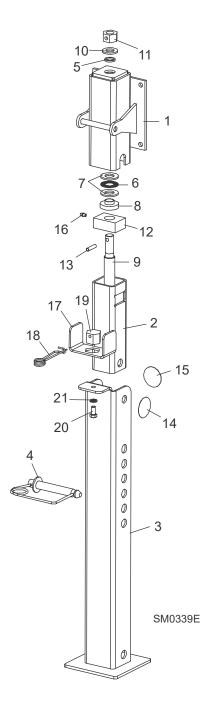


REF	DESCRIPTION (+ Indicates Parts Available in Assemblies Only)	PART #	QTY.	
	OUTRIGGER ASSEMBLY, FRONT ADJUSTABLE	003944	1	
1	Mount Weldment, Front Adjustable Outrigger	003943	1	
2	Seal, Outrigger Acme Screw	039641	1	
	Bearing Assembly, Adjustable Outrigger Thrust	039639	1	
3	Bearing, Needle-Roller Thrust	039637	1	
4	Washer, Thrust Bearing	039638	2	
5	Sleeve, Outrigger Acme Screw	039645	1	•
6	Screw, 1-5 Adjustable Outrigger Long Acme	039642	1	
7	Washer, 3/4" SAE Flat	F05011-62	1	
8	Nut, Adjustable Outrigger Hex	056774	1	
9	Nut, 1-5 Long Acme	039636	1	
10	Tube, Front Adjustable Outrigger Slide	003981	1	

REF	DESCRIPTION (* Indicates Parts Available in Assemblies Only)	PART #	QTY.	
11	Base Weldment, Adjustable Outrigger	056783	1	
12	Pin 5/16" x 1 1/4" Roll	F05012-127	1	
13	Pin, Adjustable Outrigger Locking	056817	1	
	Fitting, 1/4-28 Grease	P05060	1	
	Inst. Sheet, Adjustable Outrigger	FAO-1524	1	
	HANDLE ASSEMBLY, ADJUSTABLE OUTRIGGER CRANK	056831	1	
14	Handle Weldment, Adjustable Outrigger Crank	056827	1	
15	Collar, 1/2" ID x 7/8" OD Lock	014820	2	
16	Tube, Outrigger Crank Handle	056830	1	
17	BRACKET, ADJUSTABLE OUTRIGGER LOCK (OPTIONAL)	059577 ¹	1	

¹ Prevents downward creep during sawing

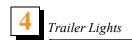
4.7 Outrigger Assembly, Rear (DCS)



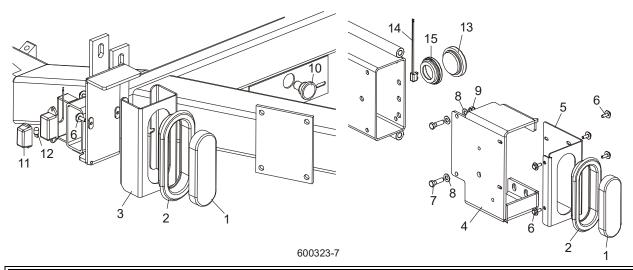
REF	DESCRIPTION (* Indicates Parts Available in Assemblies Only)	PART #	QTY.	
	OUTRIGGER ASSEMBLY, REAR ADJUSTABLE	056791	1	
1	Mount Weldment, Rear Adjustable Outrigger	056815	1	
2	Tube, Rear Adjustable Outrigger Slide	056795	1	
3	Base Weldment, Rear Adjustable Outrigger	056816	1	
4	Pin, Adjustable Outrigger Locking	056817	1	
5	Seal, Outrigger Acme Screw	039641	1	
	Bearing Assembly, Adjustable Outrigger Thrust	039639	1	
6	Bearing, Needle-Roller Thrust	039637	1	
7	Washer, Thrust Bearing	039638	2	
8	Sleeve, Outrigger Acme Screw	039645	1	

REF	DESCRIPTION (* Indicates Parts Available in Assemblies Only)	PART #	QTY.	
9	Screw, 1-5 Adjustable Outrigger Short Acme	056818	1	
10	Washer, 3/4" SAE Flat	F05011-62	1	
11	Nut, Adjustable Outrigger Hex	056774	1	
12	Nut, 1-5 Short Acme	056823	1	
13	Pin 5/16" x 1 1/4" Roll	F05012-127	1	
14	Decal, 2" Dia. Red Reflector	P07452	1	
15	Decal, 2" Dia. Amber Reflector	P07453	1	
16	Fitting, 1/4-28 Grease	P05060	1	
	Inst. Sheet, Adjustable Outrigger	FAO-1524	1	
17	BRACKET, ADJUSTABLE OUTRIGGER LOCK (OPTIONAL)	059577 ¹	1	

¹ Prevents downward creep during sawing



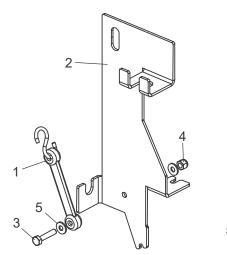
4.8 Trailer Lights



REF	DESCRIPTION (* Indicates Parts Available in Assemblies Only)	PART #	QTY.	
	PLUG, 7-PIN ELECTRIC BRAKE TRAILER LIGHT MALE (NOT SHOWN)	P11569	1	
	PLUG, 7-PIN ELECTRIC BRAKE TRAILER LIGHT FEMALE(NOT SHOWN)	P11755	1	
1	LIGHT ASSEMBLY, TRAILER TAIL LED	006391	2	
2	GROMMET, 6 1/2" LIGHT MOUNTING	006688	2	
3	GUARD, IDLE-SIDE TAIL LIGHT	006600	1	
4	MOUNT WELDMENT, DCS REAR ROLLER	025661	1	
5	CAP WELDMENT, DCS END	025662	1	
6	BOLT, 1/4-20 X 3/4" HEX W/CONICAL WASHER HEAD	F05005-134	7	
7	BOLT, 3/8-16 X 1 1/4" HEX HEAD GRADE 5	F05007-123	2	
8	WASHER, 3/8" SAE FLAT	F05011-3	4	
9	NUT, 3/8-16 HEX NYLON LOCK	F05010-10	2	
10	LIGHT, LICENSE PLATE	P09928	1	
	LIGHT, RECTANGLE RED RUNNING	P12905	1	
	LIGHT, RECTANGLE AMBER RUNNING (NOT SHOWN)	P12906	1	
11	Lens, Rectangle Red Running Light	P12921	1	
	Lens, Rectangle Amber Running Light	P12922	1	
12	Bulb, Rectangle Running Light Replacement	P12923	1	•
	LIGHT, ROUND RED RUNNING	P12913	1	
	LIGHT, ROUND AMBER RUNNING (NOT SHOWN)	P12914	1	
13	Light, Round Red Running Replacement	P12917	1	
	Light, Round Amber Running Replacement	P12918	1	
14	Pigtail, Round Running Light Replacement	P12920	1	
15	Grommet, Round Running Light Replacement	P12919	1	

4-13 WM doc 5/4/22

4.9 Wrench Bracket Assembly



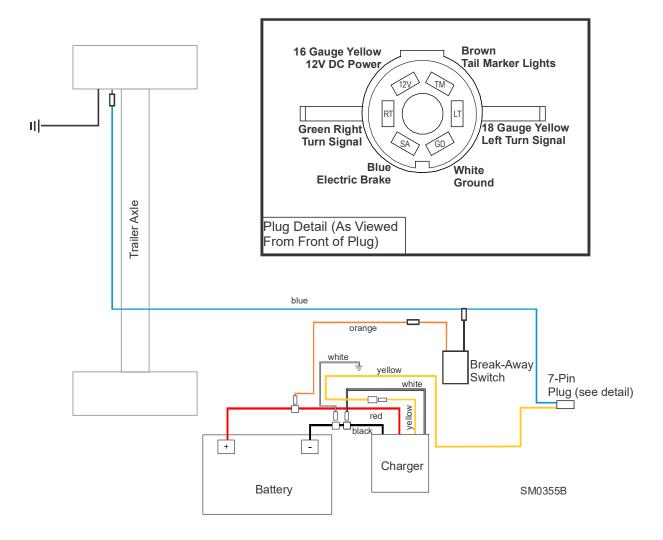
SM0382

REF	DESCRIPTION (* Indicates Parts Available in Assemblies Only)	PART #	QTY.	
	BRACKET ASSEMBLY, FAO WRENCH	075717	1	
1	Strap, Rubber 6	016542	1	
2	Bracket, FAO Wrench Mount	075710	1	
3	Bolt, 1/4-20 x 1 1/4" Hex Head Full Thread Cap	F05005-3	1	
4	Nut, 1/4-20 Nylon Lock	F05010-69	1	
5	Washer, 1/4" SAE Flat	F05011-11	2	

SECTION 5 ELECTRICAL INFORMATION

5.1 Electric Brake Wiring Diagram

Electric brake trailer system diagram for sawmills equipped with LED taillights.



5-1 WM doc 5/4/22 Electrical Information