Wood-Mizer® Heavy Duty Log Deck Safety, Setup, Operation, Maintenance and Parts

LD12HD/LD20HD

rev. A1.02

Safety is our #1 concern!

Form #2434



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-ventilated area.
- ☐ If in an enclosed area, vent the exhaust to the outside.
- □ Do not modify or tamper with the exhaust system.
- □ Do not idle the engine except as necessary.

For more information go to www.P65warnings.ca.gov.



WARNING: Drilling, sawing, sanding or machining wood products can expose you to wood dust, a substance known to the State of California to cause cancer. Avoid inhaling wood dust or use a dust mask or other safeguards for personal protection.

For more information go to www.P65Warnings.ca.gov/wood.

Active Patents assigned to Wood-Mizer, LLC

Wood-Mizer, LLC has received patents that protect our inventions which are a result of a dedication to research, innovation, development, and design. Learn more at: woodmizer.com/patents

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Wood-Mizer[®] LLC Limited Product Warranty



Wood-Mizer LLC ("Warrantor"), an Indiana corporation with its principal place of business at 8180 West Tenth Street, Indianapolis, IN 46214-2400 USA, warrants to the purchaser ("Purchaser") that for the time periods specifically stated herein and subject to the terms, conditions and limitations stated herein, the equipment manufactured by the Warrantor will be free from defects in material and workmanship attributable to Warrantor so long as, during the warranty periods stated herein, the equipment is installed, operated and maintained in accordance with the instructions provided by Warrantor

PRODUCT	MODEL CLASS	LENGTH OF	WARRANTY	EFFECTIVE DATE
PRODUCT	MODEL CLASS	USA & CANADA	NON USA & CANADA	EFFECTIVE DATE
Portable Sawmills, Resaws, Edgers	LT, LX, HR, EG	Two years	One year	
Portable Sawmills with Chassis	LT28, LT35, LT40, LT50, LT70, LX450	Two years, excluding the chassis, which chas- sis shall have a five year warranty	One year	Date of purchase
Industrial Sawmills, Resaws, Edgers	WM, HR, EG, TVS, SVS	One year	One year	Date of purchase or date of
TITAN Industrial	WB, TV, HR, EG, EA, MR	One year	One year	installation / training (if applica- ble), whichever occurs first, not to
Material Handling	TWC, IC, TD, LD, GC, CR, CB, CC	One year	One year	exceed 6 months from date of purchase
Blade Maintenance Equipment	BMS, BMT, BMST	One year	One year	
Options and Accessories	Various	One year*	One year*	
Moulders, Extractors, Kilns	MP, MD, KS, KD	One year	One year	
Slab Flattener	MB	Two years	One year	Date of purchase
Pallet Equipment	PD, PC	One year	One year	
Log Splitters	FS	One year	One year	
Replacement Parts	Various	90 days	90 days	

^{*} Warranty on Options will match the warranty on the primary equipment when purchased on same invoice.

Exclusions from 90 Day, Limited One Year and Two Year Warranty

Warrantor shall have **no** responsibility under this warranty for any wear components, including, but not limited to: belts, blade guides, blades, electric motor brushes, drum switches, filters, fuses, hoses, bearings (excluding cylindrical drive bearings), bushings, cable carriers, and spark plugs. All wear components are furnished "**as is**", without any warranty from Warrantor. This limited warranty does not cover any defects caused by misuse, negligence, alterations, damage due to overload, abnormal conditions, excessive operation, accident, or lack of performance of normal maintenance services.

Several components which are used in the manufacture of the equipment but not manufactured by Warrantor such as cant hooks, power plants, laser sights, batteries, tires, and trailer axles have warranties provided by the original equipment manufacturer (written copies available upon request). Warrantor does not separately warrant such items. Components or equipment manufactured by third parties are not covered by this warranty. Warrantor, however, will provide reasonable assistance to the Purchaser to make claims against any warranties applicable to such component parts as provided by such original equipment manufacturers. Components or equipment manufactured by third parties are not covered by this Warranty.

Five Year Limited Chassis Warranty

The limited five year chassis warranty described above, DOES NOT extend to (a) any damage stemming from accident, improper towing, overload, abuse, misuse, abnormal conditions, negligence, excessive operation, or lack of maintenance, (b) rust caused by exposure to corrosive atmospheric conditions, or (c) the sawmill head, carriage, axle, brakes, or any hydraulic or electrical components attached to the chassis.

Warrantor's Obligations as To Defects

In the event that the equipment fails to perform due to defective materials or workmanship attributable to Warrantor under normal use and service within the established warranty period, Purchaser's sole and exclusive remedy and Warrantor's sole liability shall be to replace or repair, in Warrantor's sole and subjective discretion, any defective part at Warrantor's principal place of business without cost to the Purchaser if such defect exists. The determination of whether a product is defective shall be made by Warrantor in Warrantor's sole and subjective discretion. The Purchaser must notify Warrantor prior to shipping any defective part. Warrantor, at its sole discretion, may cover expenses incurred in shipping the defective part to Warrantor for evaluation; provided, however, that Warrantor will not be responsible for labor, travel time, mileage, removal, installation or incidental or consequential damages. However, any part in excess of 140 pounds must be returned by the Purchaser, to the Warrantor's nearest authorized facility at the Purchaser's expense, if return is requested by Warrantor. Warrantor shall have a reasonable time within which to replace or repair the defective part. If Warrantor determines that the product is not defective under the terms of this warranty in Warrantor's sole and subjective discretion, then Purchaser shall be responsible for any expenses incurred by Warrantor in returning the equipment to the Purchaser.

Limitations and Disclaimers of Other Warranties

EXCEPT FOR THE EXPRESS WARRANTY PROVISIONS STATED ABOVE, WARRANTOR DISCLAIMS ALL WARRANTIES, EXPRESS AND/OR IMPLIED, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT AND TITLE. No representation or other affirmation of fact by representatives of Warrantor, whether verbal or in writing, including photographs, brochures, samples, models, or other sales aids, shall constitute a warranty or other basis for any legal action against Warrantor. There are no other representations, promises, agreements, covenants, warranties, guarantees, stipulations or conditions, express or implied, by Warrantor except as expressly set forth herein. THE ORIGINAL PURCHASER AND ANY INTENDED USER OR BENEFICIARY OF THIS EQUIPMENT, SHALL NOT BE ENTITLED TO RECOVER ANY INDIRECT, SPECIAL, PUNITIVE, EXEMPLARY, CONSEQUENTIAL, SPECIAL, OR INCIDENTIAL DAMAGES OR LOSES, INCLUDING BUT NOT LIMITED TO, DAMAGES OF LOST PRODUCTION, LOST REVENUE, LOST PRODUCT, LOST PROFITS, LOST BUSINESS, LOSS OF USE, LOSS OF GOODWILL, OR BUSINESS INTERRUPTION, FROM WARRANTOR FOR ANY REASON WHATSOEVER INCLUDING WITHOUT LIMITATION WARRANTY OR DEFECT IN THE PRODUCT REGARDLESS OF THE SOLE, JOINT AND/OR CONCURRENT NEGLIGENCE, BREACH OF CONTRACT, BREACH OF WARRANTY, STRICT LIABILITY IN TORT OR STATUTORY CLAIMS OR OTHER LEGAL FAULT OR RESPONSIBILITY OF EITHER WARRANTOR OR PURCHASER OR ITS EMPLOYEES OR AGENTS. Warrantor does not warrant that its equipment meets or complies with the requirements of any particular safety code or governmental requirements.

 $\label{eq:definition} \mbox{Defective items replaced under the terms of this warranty become the property of Warrantor.}$

Design Changes

Warrantor reserves the right to change the design of its products from time to time without notice and without obligation to make corresponding changes in or to its products previously manufactured.

Rights of Purchasers

The validity and effect of this limited warranty as well as its interpretation, operation and effect, shall be determined exclusively by the principles of law and equity of the State of Indiana, USA. This limited warranty gives Purchaser specific legal rights. Purchaser may also have other rights, which may vary from state to state. Some states may not allow limitations as to the duration of implied warranties or to the exclusion or limitation of incidental or consequential damages, so some of the limitations and exclusions detailed set forth above may not apply. In the event that any one or more of the provisions of this warranty shall be or become invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions of this warranty shall not be affected thereby.

Interpretations

This Warranty constitutes the entire warranty agreement between Warrantor and Purchaser and supersedes any prior understandings or agreements pertaining to the same subject matter. This warranty cannot be amended except in writing which refers to this warranty which is signed by both Warrantor and Purchaser.

SECTION 1 INTRODUCTION

1.1 About This Manual

This manual replaces any previous information received on your Wood-Mizer® equipment.

The information and instructions in this manual do not amend or extend the limited warranties for the equipment given at the time of purchase.

1.2 Getting Service

For contact information, sales, service, parts, and additional manuals, sign into your account on https://woodmizer.com, or call inside the USA: 1-800-553-0182 or from outside the USA: 317-271-1542

1.3 Specifications

Equipment specification are included in the Online Manuals, which are found at https://apps.woodmizer.com/Manuals/Manuals/Manuals/Manuals/Manuals.aspx?parent=0.
The LD12HD and LD20HD Log Infeed Decks are compatible with WM400 and WM4500 sawmills.

1.4 Options and Accessories

Your Wood-Mizer product may have options that can be added to the machine or accessories available to purchase. Different power configurations are also available.

Option: Your specific product can have accessories installed at the factory, or installed in the field.

Accessory: Your specific product may have accessories added to the machine that are not available to be installed at the factory. They may only be installed in the field. For example, the PC100 might have Infeed and Outfeed Table accessories.

Part #	Name	Туре
133028	Kit, HDLD12 12" Lift	Accessory
133027	Kit, HDLD20 12" Lift	Accessory
133033	Kit, HDLD12 24" Lift	Accessory
133032	Kit, HDLD20 24" Lift	Accessory

TABLE 1-1

SECTION 2 SAFETY

2.1 Safety Symbols

The following symbols and signal words call your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions.



DANGER! indicates an imminently hazardous situation which, if not avoided, will result in serious injury or death.



WARNING! suggests a potentially hazardous situation which, if not avoided, could result in serious injury or death.



CAUTION! refers to potentially hazardous situations which, if not avoided, may result in minor or moderate injury or damage to equipment.

NOTICE indicates vital information.

2.2 Safety Instructions

NOTE: ONLY safety instructions regarding personal injury are listed in this section. Caution statements regarding only equipment damage appear where applicable throughout the manual.



WARNING! Clean sawdust from all guards, vents, control boxes, or any area where sawdust may gather after every shift. Failure to do so may result in fire, causing death or serious injury.



Observe ALL Safety Instructions

NOTICE Read the entire Operator's Manual before operating this equipment.

Note all safety warnings throughout this manual and those posted on the machine.

Be able to access this manual at all times while operating this equipment.

Read additional manufacturer's manuals and observe their applicable safety instructions.

Only persons who have read and understood the entire operator's manual should operate this equipment.

This equipment is not intended for use by or around children.

It is the owner/operator's responsibility to comply with all applicable federal, state, and local laws, rules, and regulations regarding the ownership, operation, and transporting your equipment.

KEEP LOG DECK AND AREA AROUND LOG DECK CLEAN



DANGER! Maintain a clean and clear path for all necessary movement around the machine and lumber stacking areas. Failure to do so will result in serious injury.

CAUTIONS FOR LOG DECK SETUP

WARNING! Securely fasten the feet of a log deck to the floor before operating the machine. Failure to do so may result in serious injury or death.

CHECK LOG DECK BEFORE OPERATION



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



CAUTION! Never drop logs onto the log deck from a height more than 6" (15 mm) when loading. Failure to do so may result in damage to the log deck.



KEEP PERSONS AWAY



WARNING! Keep all persons out of the path of moving equipment and logs while operating log deck. Failure to do so may result in serious injury or death.

KEEP HANDS AWAY



DANGER! Always be aware of and take proper protective measures against rotating shafts, pulleys, fans, etc. Always stay a safe distance from rotating members and make sure that loose clothing or long hair does not engage rotating members resulting in possible injury.





WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, make sure the unit is not in use. If the unit is operated and moving parts activated, serious injury may result.

USE PROPER PROCEDURE WHEN CONDUCTING ELECTRICAL SAFETY CHECKS AND MAINTENANCE



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.

DANGER! Hazardous voltage inside the electric sawmill disconnect box, starter box, and at the motor can cause shock, burns, or death. Disconnect and lock out power supply before servicing! Keep all electrical component covers closed and securely fastened during mill operation.





WARNING! Consider all electrical circuits energized and dangerous.

WARNING! Never assume or take the word of another person that the power is off; check it out and lock it out.

WARNING! Do not wear rings, watches, or other jewelry while working around an open electrical circuit.

Electrical Lockout Procedures

RULES FOR USING LOCKOUT PROCEDURE

The equipment shall be locked out to protect against accidental or inadvertent operation when such operation could cause injury to personnel. Do not attempt to operate any switch or valve bearing a lock.

LOCKOUT PROCEDURES MUST BE USED DURING, BUT NOT LIMITED TO:

- Changing or adjusting blades
- Unjamming operations
- Cléaning
- Mechanical repair
- Electrical maintenance
- Retrieval of tools/parts from work area
- Activities where guards or electrical panel guard is open or removed

MAINTENANCE HAZARDS INCLUDE, BUT NOT LIMITED TO:

- Blade contact
- Pinch points
- Kickbacks
- Missiles (thrown blades/wood chips)
- Electrical

FAILURE TO LOCKOUT MAY RESULT IN, BUT NOT LIMITED TO:

- Cut
- Crush
- Blindness
- Puncture
- Electrocution
- Serious injury and death
- Amputation
- Burn
- Shock

TO CONTROL MAINTENANCE DANGERS:

- Lockout procedures must be followed (see OSHA regulation 1910.147).
- Never rely on machine stop control for maintenance safety (emergency stops, on/off switches, interlocks). Do not reach into moving blades or feed systems. Allow all coasting parts to come to a complete stop.
- Electrical power supply and air supply must both be locked out.
- Where established lockout procedures cannot be used (electrical troubleshooting or mechanical dynamic troubleshooting), alternative effective protective techniques shall be employed which may require special skills and planning.
- Always follow safe operations practices in the workplace.

EQUIPMENT LOCKOUT PROCEDURE

Lockout procedures per OSHA regulation 1910.147, appendix A:

GENERAL

The following simple lockout procedure is provided to assist owner/operators in developing their procedures so they meet the requirements of **OSHA** regulation 1910.147. When the energy isolating devices are not lockable, tagout may be used, provided the owner/operator complies with the provisions of the standard which require additional training and more rigorous periodic inspections. When tagout is used and the energy isolating devices are lockable, the owner/operator must provide full operator protection (see OSHA regulation 1910.147, paragraph (c)(3)) and additional training and more rigorous periodic inspections are required. For more complex systems, more comprehensive procedures may need to be developed, documented, and utilized.

PURPOSE

This procedure establishes the minimum requirements for the lockout of energy isolating devices whenever maintenance or servicing is done on machines or equipment. It shall be used to ensure that the machine or equipment is stopped, isolated from all potentially hazardous energy sources and locked out before personnel perform any servicing or maintenance where the unexpected enervation or start-up of the machine or equipment or release of stored energy could cause injury.

COMPLIANCE WITH THIS PROGRAM

All personnel are required to comply with the restrictions and limitations imposed upon them during the use of lockout. The authorized personnel are required to perform the lockout in accordance with this procedure. All operators, upon observing a machine or piece of equipment which is locked out to perform servicing or maintenance shall not attempt to start, energize, or use that machine or equipment.

SEQUENCE OF LOCKOUT

- 1. Notify all affected personnel that servicing or maintenance is required on a machine or equipment and that the machine or equipment must be shut down and locked out to perform the servicing or maintenance.
- 2. The authorized employee shall refer to the company procedure to identify the type and magnitude of the energy that the machine or equipment utilizes, shall understand the hazards of the energy, and shall know the methods to control the energy.
- 3. If the machine or equipment is operating, shut it down by the normal stopping procedure (depress the stop switch, open switch, close valve, etc.).
- **4.** De-activate the energy isolating device(s) so that the machine or equipment is isolated from the energy source(s).
- 5. Lock out the energy isolating device(s) with assigned individual lock(s).
- **6.** Stored or residual energy (such as that in capacitors, springs, elevated machine members, rotating flywheels, hydraulic systems, and air, gas, steam, or water pressure, etc.) must be dissipated or restrained by methods such as grounding, repositioning, blocking, bleeding down, etc.
- 7. Ensure that the equipment is disconnected from the energy source(s) by first checking that no personnel are exposed, then verify the isolation of the equipment by operating the push button or other normal operating control(s) or by testing to make certain the equipment will not operate.



CAUTION! Return operating control(s) to neutral or "off" position after verifying the isolation of the equipment.

8. The machine or equipment is now locked out.

RESTORING EQUIPMENT TO SERVICE

When the servicing or maintenance is completed and the machine or equipment is ready to return to normal operating condition, the following steps shall be taken.

- 1. Check the machine or equipment and the immediate area around the machine to ensure that nonessential items have been removed and that the machine or equipment components are operationally intact.
- 2. Check the work area to ensure that all personnel have been safely positioned or removed from the area.
- 3. Verify that the controls are in neutral.
- 4. Remove the lockout devices and re-energize the machine or equipment.

NOTE: The removal of some forms of blocking may require re-enervation of the machine before safe removal.

5. Notify affected personnel that the servicing or maintenance is completed and the machine or equipment is ready for use.

PROCEDURE INVOLVING MORE THAN ONE PERSON

In the preceding steps, if more than one individual is required to lock out the equipment, each shall place his own personal lock on the energy isolating devices.

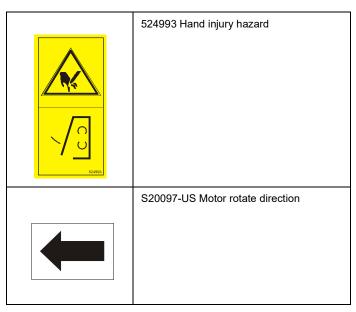
2.4 Safety Labels Description

See table below for safety labels description.

TABLE 2-1

Label View	Description
09/31	096317 CAUTION! Read and understand operator's manual before handling the machine.
C) (09220)	099220 Close guards prior to operating the machine
Question (096316 Electric box opening is possible with the switch in "0" position only.
4	096319 Always disconnect the power cord before opening the electric box.

TABLE 2-1



SECTION 3 SETUP & OPERATION

3.1 Component Overview

With the Log Infeed Deck, you can load logs directly onto the sawmill bed. Log Infeed Decks are available in 12-Foot (LD12HD) and 20-Foot (LD20HD) options. The following manual will guide you in installation, operation, and alignment of the Log Infeed Deck.

The Heavy Duty Log In-feed Deck can be used with WM4000and WM4500 mills. For mills with a 12" or 24" lift kit, an optional lift kit can also be installed on the Log Infeed Deck. <u>See Section 3.8</u> for installation instructions.



WARNING! Keep all persons out of the path of moving equipment and logs while operating the Log Infeed Deck. Failure to do so may result in serious injury or death.

The main components of the Log In-feed Deck are shown below.

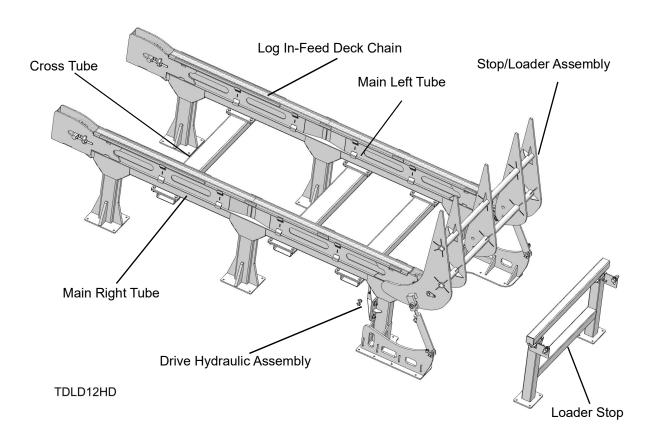
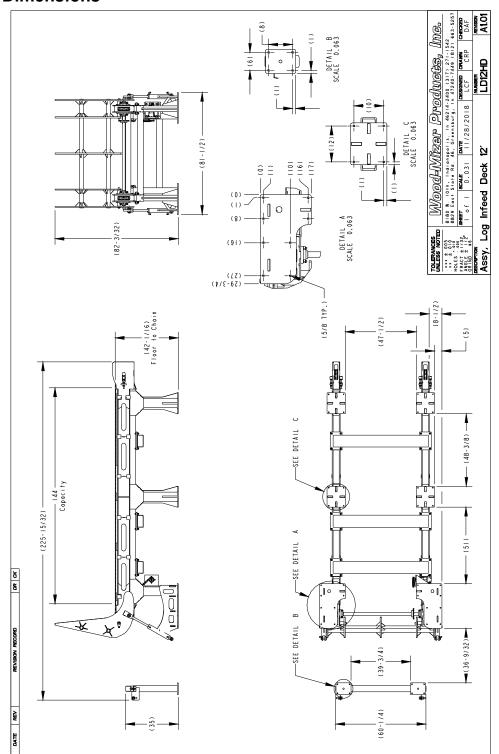
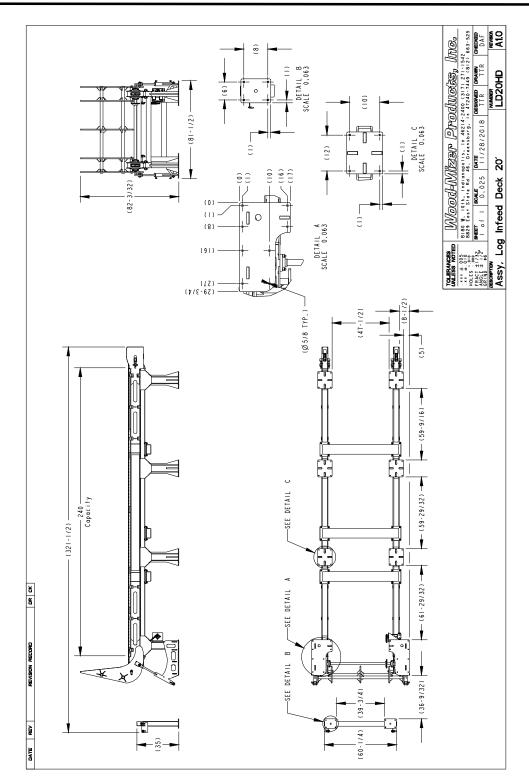


FIG. 3-1

3.2 Overall Dimensions





3.3 Log Deck Installation (WM4000/WM4500)

Prepare a firm, level area where the Log Infeed Deck can be anchored. A cement pad with 1/2" diameter anchor bolts is recommended.

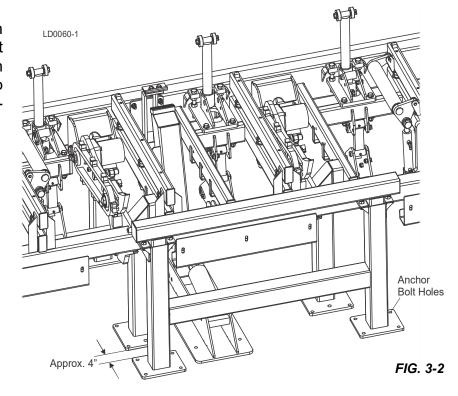
IMPORTANT! If the Log Deck is to be installed to the opposite side of the sawmill bed, it is required to order the WM4000 Log Loader Hydraulic Stop Kit (#074672) including all the necessary additional parts with the installation instruction sheet (<u>See Form #2072</u>).

Log Deck Installation

1. Place the log deck loader stop in position close to the sawmill frame as shown below.

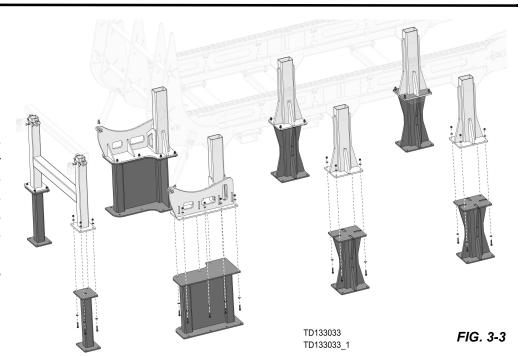
NOTE: If installing an optional 12" or 24" lift kit to the log deck to match the machine height, do so at this point. Otherwise skip to step 6.

- 2. Align Lift Tubes with matching legs on log deck rail.
- 3. Secure each Lift Tube with (4) bolts, (8) washers, and (4) nuts.
- Align (2) Deck Foot Lifts with 2 log deck rail feet.



- 5. Secure each Deck Foot Lift with (8) bolts, (16) washers, and (8) nuts.
- 6. Use 1/2" anchor bolts and nuts at each of the two foot locations to anchor the log deck loader stop to the floor.

NOTE: Raise the loader stop to make the top of the loader stop level with the sawmill bed rails as necessary.



Position the log deck frame approximately 22 1/4" (565mm) away from the loader stop. The loader arms should rest on the loader stop when lowered.

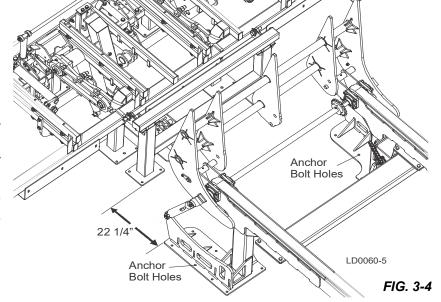
7. Use 1/2" anchor bolts and nuts at each of the foot locations to anchor the log deck frame to the floor.



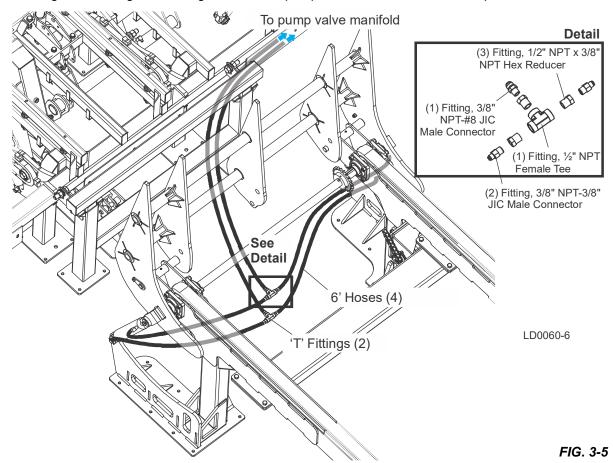
WARNING! Securely fasten the feet of the Log Infeed Deck to the floor before operating the Log Infeed Deck. Failure to do so may result in serious injury or death.

Hydraulic Installation

- Connect the provided 6' extension hoses to the log deck cylinders.
- 2. Connect the top hoses from each cylinder to the provided 'T' fitting.
- 3. Connect the bottom hoses from each cylinder to the other 'T' fitting.
- **4.** Connect the long hoses to the 'T' fittings as shown.



5. Route the long hoses along the existing hoses to the pump valve manifold behind the operator station

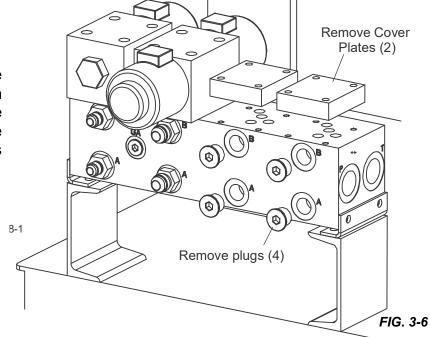


Remove the two cover plates and the four plugs from the manifold located at the hydraulic power station.

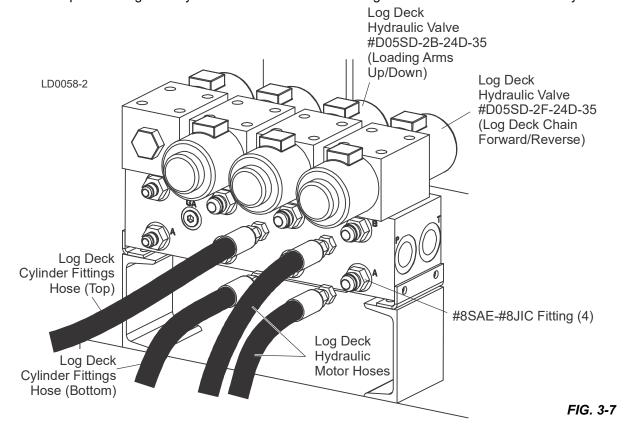
6. Install the provided fittings and the log deck hydraulic valves to the hydraulic manifold.

IMPORTANT! Check the valve numbers located on top of the valves and make sure that the valves are installed correctly as shown below.

- 7. Connect the hydraulic hoses from the Log Deck cylinders to the loading arms up/down hydraulic valve.
- Connect the hose from the top cylinder fittings to the top valve fitting and the hose from the bottom cylinder fittings to the bottom valve fitting.



9. Connect the two provided log deck hydraulic motor hoses to the fittings on the chain forward/reverse hydraulic valve.



10. Route the hydraulic motor hoses along the existing hydraulic hoses to the hydraulic drive motor on the log deck.

- 11. Replace the existing hydraulic motor fittings with the provided #10 SAE-#8 JIC fittings.
- 12. Connect the hose from the valve fitting labeled #A to the hydraulic motor fitting labeled #A.
- 13. Connect the hose from the valve fitting labeled #B to the hydraulic motor fitting labeled #B
- **14.** Secure all the hydraulic hoses to the existing hoses along the sawmill bed with the provided tie wraps.

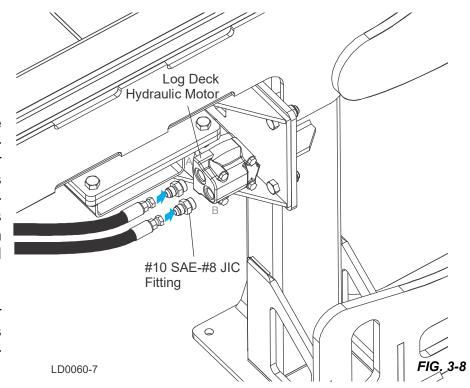
Electrical Installation



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.



WARNING! Consider all electrical circuits energized and dangerous.



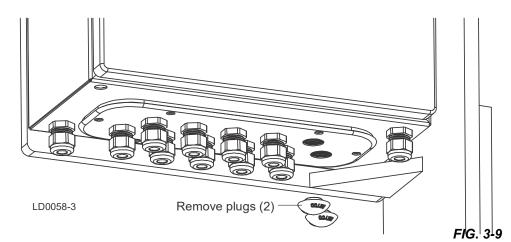
WARNING! Never assume or take the word of another person that the power is off; check it out and lock it out.

WARNING! Do not wear rings, watches, or other jewelry while working around an open electrical circuit.

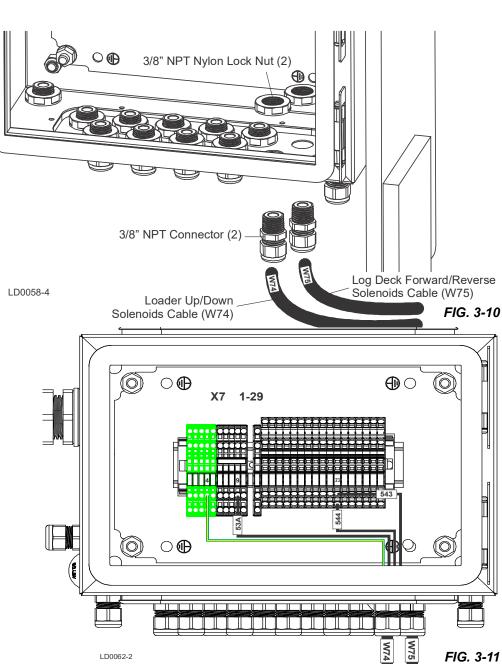
WARNING! Before performing service near moving parts such as blades, pulleys, motors, belts and chains, make sure the unit is not in use. If the unit is operated and moving parts activated, serious injury may result.

- 1. Disconnect the power from the machine. Lock and tag out the machine prior to performing this procedure.
- 2. Remove the two plugs from the holes at the bottom of the control box..

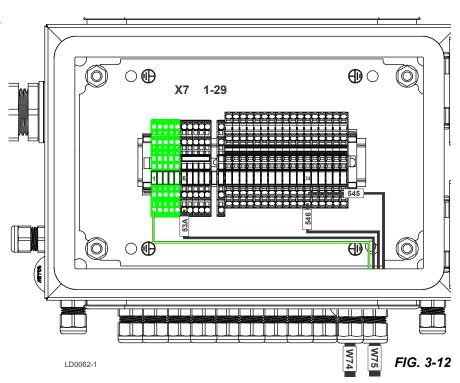
Unlock and open the hydraulic control box on the hydraulic power station.

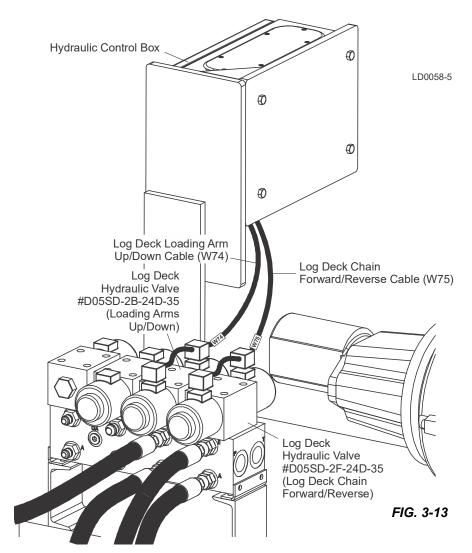


- Install the two provided cable connectors to the bottom holes and secure with the provided nylon lock nuts.
- Route the two provided cables labeled W74 and W75 through the connectors at the bottom of the hydraulic box.
- 6. Connect the W74 cable wires: At X7 terminal block:
- 7. Connect the wire labeled #543 to terminal 23.1:2.
- Connect the wire labeled #544 to terminal 23.2:2.
- Connect the wire labeled #53A to terminal 9.3.
- **10.** Connect the green/yellow ground wire to terminal 4.3.



- 11. Connect the W75 cable wires: At X7 terminal block:
- **12.** connect the wire labeled #545 to terminal 24.1:2.
- **13.** Connect the wire labeled #546 to terminal 24.2:2.
- **14.** Connect the wire labeled #53A to terminal 6.4
- **15.** Connect the green/yellow ground wire to terminal 1.4.
- Route the W74 and W75 cables from the hydraulic control box to the hydraulic valves.
- Connect the W74 cable to the solenoids on the log deck loading arms valve.
- Connect the W75 cable to the solenoids on the log deck chain forward/reverse valve.
- **19.** Use the provided tie wraps to secure the cables to the existing hydraulic control box cables.





3.4 Operation (WM4000/WM4500)



DANGER! Always be aware of and take proper protective measures against rotating shafts, pulleys, fans, etc.

Always stay a safe distance from rotating members and make sure that loose clothing or long hair does not engage rotating members resulting in possible injury.



WARNING! Keep all persons out of the path of moving equipment and logs while operating log deck.



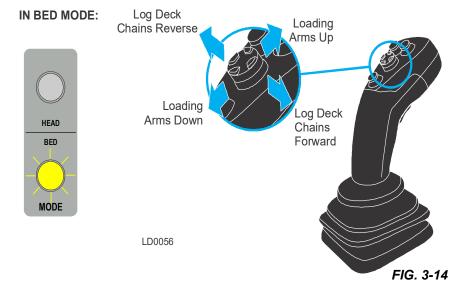
CAUTION! Never drop logs onto the log deck from a height more than 6" (15 mm) when loading. Failure to do so may result in damage to the log deck.

Use the left joystick to control the log handling functions.

Press the rear switch of the left joystick to change to bed mode.

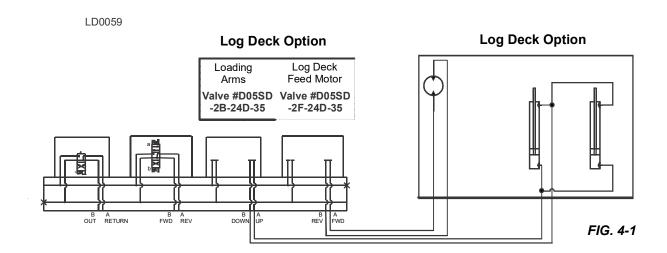
While in bed mode, press the thumbstick forward to raise the loading arms, press it down to lower the loading arms.

Press the thumbstick left for backward movement and right for forward.



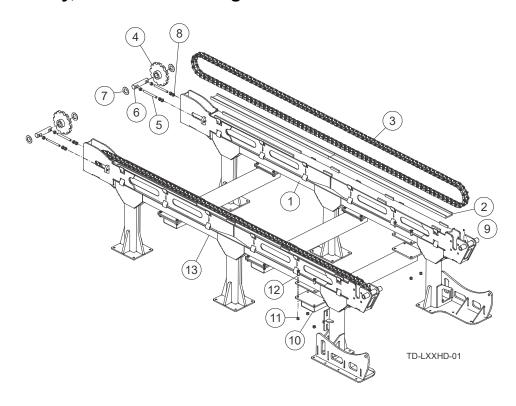
SECTION 4 HYDRAULIC INFORMATION

4.1 Hydraulic Schematics



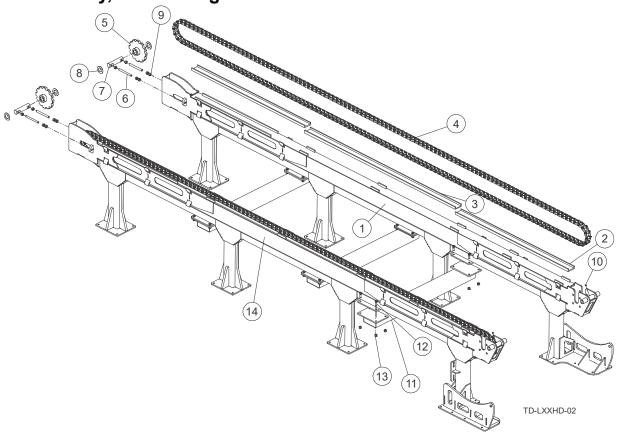
SECTION 5 REPLACEMENT PARTS

5.1 Rail Assembly, 12-Foot Left & Right



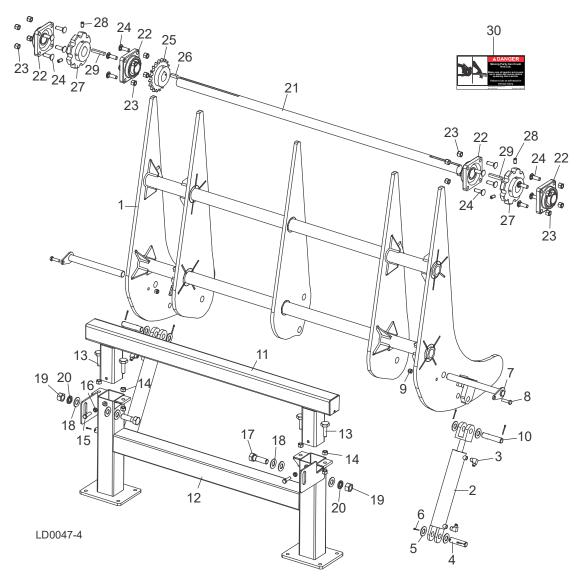
REF	PART#	DESCRIPTION	COMMENTS	QTY.
	104674	ASSY, RAIL LD 12 LEFT		1
	104675	ASSY, RAIL LD 12 RIGHT		1
1	123104	Weldment, LD12 Rail Left		1
	123105	Weldment, LD12 Right		1
2	104228	Channel, 72" UHMW Conveyor		2
3	104680	Chain, WR78 131p w/ Pin		2
	104239	Assy, Rear Sprocket & Tension		2
4	123168	Sprocket Assy, Idler		2
	036708	Bushing, 1 15/16x2 15/16x3 3/4 Bronze		2
	123169	Sprocket Weldment, Idler WR7808		2
5	017642	Stud, 3/4-16x7 3/4		4
6	033718	Shaft, Chain Idler		2
7	033735	Washer, 1.95IDx4ODx.075		4
8	F05010-92	Nut, 3/4-16 Hex		12
9	P04107	Fitting, 3/16x3/16 Straight Grease		2
10	035767	CROSS TUBE WLDMNT, INFEED		2
11	F05009-2	BOLT, 5/8-11X2 HH GR2		
12	F05010-34	NUT, 5/8-11 NYL LOCK		

6.2 Rail Assembly, 20-Foot Right & Left



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	104207	Assy, Rail LD 20 Right		1
	104206	Assy, Rail LD 20 Left		1
1	123108	Weldment, LD20 Right		1
	123107	Weldment, LD20 Left		1
2	104228	Channel, 72" UHMW Conveyor		4
3	104247	Channel, 96" UHMW Conveyor		2
4	104245	Chain, WR78 206p w/ Pin		2
	104239	Assy, Rear Sprocket & Tension		2
5	123168	Sprocket Assy, Idler		2
	036708	Bushing, 1 15/16x2 15/16x3 3/4 Bronze		2
	123169	Sprocket Weldment, Idler WR7808		2
6	017642	Stud, 3/4-16x7 3/4		4
7	033718	Shaft, Chain Idler		2
8	033735	Washer, 1.95IDx4ODx.075		4
9	F05010-92	Nut, 3/4-16 Hex		12
10	P04107	Fitting, 3/16x3/16 Straight Grease		2
11	035767	Cross Tube Widmnt, Infeed		3
12	F05009-2	Bolt, 5/8-11x2 HH Gr2		24
13	F05010-34	Nut, 5/8-11 Nyl Lock		24
14	104206	Assy, Rail LD 20 Left		1

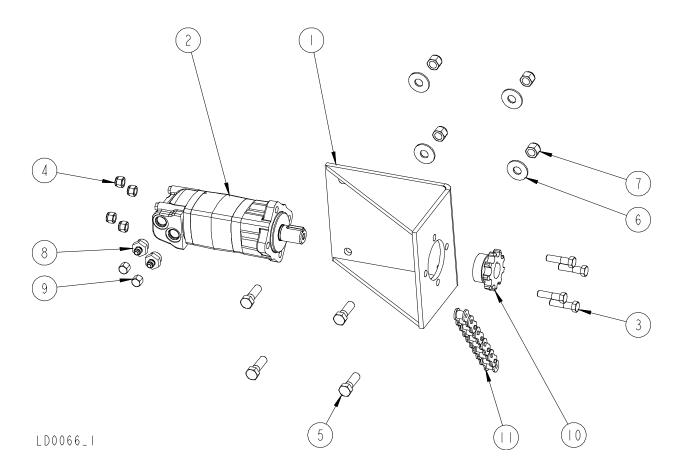
7.3 Stop/Loader Assembly



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	104208	Arm Assembly, Log Unloading 2-Strand		1
1	104249	Arm Weldment, 2-Strand Log Loading		1
2	050105	Cylinder, 2 1/2" X 22 1/4" Rod End Welded		2
	P12955	Seal Kit, 2 1/2x8 Hydraulic Cylinder		1
3	016820	Fitting, 3/8" NPT-3/8" JIC 90° Elbow		4
4	S09251	Pin, 1" X 3.88"		2
5	F05011-28	Washer, 1" ID SAE Flat		8
6	F05012-23	Pin, 3/16" X 1 1/2" Cotter		8
7	062805	Pin Weldment, 1-1/4" x 13" Pivot		2
8	F05008-88	Bolt, 1/2-13 x 1 3/4" Hex Head Grade 5 Full Thread		2
9	F05010-8	Nut, 1/2-13 Nylon Hex Lock		2
10	065885	Pin, 1" x 4-5/8" Pivot		2
	036543	Stop Assembly, Loader (LD12-1/LD20-1)		1
	033773-1	Stop Assembly, Loader (LD12/LD20)		1
11	050112	Weldment, Rail Top Rest		1

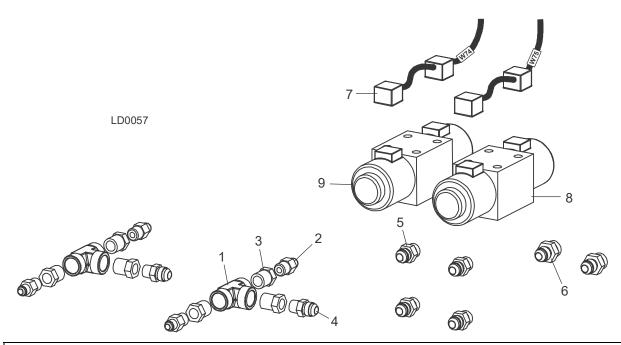
REF	PART #	DESCRIPTION	COMMENTS	QTY.
12	036542	Stop Weldment, Loader (LD12-1/LD20-1)		1
	033772-1	Stop Weldment, Loader (LD12/LD20)		1
13	S13006	Bolt, Bed Rail Adjust LT50		4
14	F05010-5	Nut, 5/8-11 Hex		8
15	F05008-127	Bolt, 1/2-20 X 1 3/4" Hex Head Full Thread		2
16	F05010-16	Nut, 1/2-20 Hex Jam		2
17	F05009-51	Bolt, 1-8 X 3 1/4" Hex Head Grade 5		2
18	F05011-28	Washer, 1" ID SAE Flat		6
19	F05010-94	Nut, 1-8 Hex		2
20	F05011-53	Washer, 1" Split Lock		2
	065915	Shaft Assembly, Log Deck Drive		1
21	065883	Shaft, Jack 1-15/16" x 69-1/4"		1
22	033712	Bearing, 1 15/16" 4-Bolt Flange		4
23	F05010-34	Nut, 5/8-11 Nylon Lock		16
24	F05009-116	Bolt, 5/8-11 x 2" Grade 5 Carriage		16
25	065783	Sprocket, 80B20 x 1 15/16"		1
26	033738	Key, 1/2" Square x 1 1/2"		1
	123132	Sprocket Assembly, Drive		2
27	123133	Weldment, Drive Sprocket		1
28	F05008-9	Screw, 1/2-13 x 1" OP Nyl Insert Socket Set		2
29	S12249	Key, 1/2" x 1/2" x 3"		2
30	033254	Decal, Moving Parts Danger		1

8.4 Drive Hydraulic Assembly



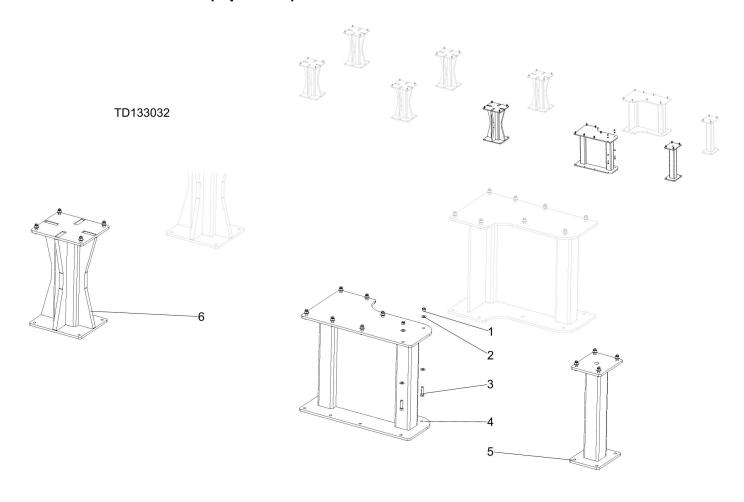
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	110218	Drive Assembly, Hydraulic Log Deck		1
1	050101	Motor Mount Wldmt, Log Deck		1
2	130038	Motor, Eaton 104-5092-006 Hydaulic		1
3	F05008-102	BOLT, 1/2-13X2 HH GR5		4
4	F05010-8	Nut, 1/2-13 Nyl Hex Lock		4
5	F05009-2	BOLT, 5/8-11X2 HEX HD GR2, ZN		4
6	F05011-40	Washer, 5/8 Standard Zinc Flat		4
7	F05010-34	Nut, 5/8-11 Nyl Lock		4
8	017640	Fitting, #10SAE x 3/8JIC		2
9	016816	Fitting, 3/8JIC Cap		2
10	074791	Sprocket, 80B9Hx1-1/4 Special		1
11	104686	Chain, #80 61 Links + 1 CL		1

9.5 Installation Kit (WM4000/WM4500)



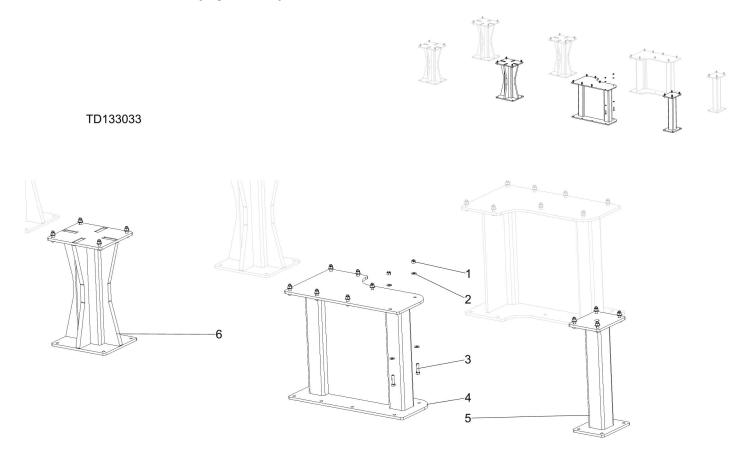
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	LD4000KIT	Installation Kit, WM4000 Log Deck		1
	074184	Hose, 3/8" Hydraulic w/Fittings CS 72" Long HP		4
	074186	Hose, 3/8" Hydraulic w/Fittings CS 310" Long HP		4
	074031	Fitting Assembly, WM4000 LD Cylinder Hose "T"		2
1	016793	Fitting, 1/2" NPT Female Tee		1
2	016819	Fitting, 3/8" NPT-3/8" JIC Male Connector		2
3	028073	Fitting, 1/2" NPT x 3/8" NPT Hex Reducer		3
4	036822	Fitting, 3/8" NPT-#8 JIC Male Connector		1
5	028076	Fitting, #8SAE-#8 JIC		4
6	025963	Fitting, #10 SAE-#8 JIC		2
7	068211	Control Assembly, Industrial Mill Log Deck	Available in assemblies only.	1
8	074100	Valve, D05SD-2F-24D-35 Hyvair Hydraulic (Chain Forward/Reverse)		1
9	074101	Valve, D05SD-2B-24D-35 Hyvair Hydraulic (Arms Up/Down)		1
	F05089-5	Tie Wrap, 5/16" x 15 UV Black		20

10.6 HDLD20 Lift Kits (Optional)



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	133032	KIT, HDLD20 24" LIFT		1
	133027	KIT, HDLD20 12" LIFT		1
1	F05010-8	Nut, 1/2-13 Nyl Hex Lock		48
2	F05011-2	Washer, 1/2 SAE Flat		96
3	F05009-106	Bolt, 1/2-13x2 HHFT GR8 Znc		48
4	133021	Weldmnt, Infeed Deck Foot 24" Lift		2
	133012	Weldmnt, Infeed Deck Foot 12" Lift		2
5	133020	Weldmnt, 24" Lift Tube		2
	133010	Weldmnt, 12" Lift Tube		2
6	133031	Weldmnt, HD 24" Lift Tube		6
	133025	Weldmnt, HD 12" Lift Tube		6

10.7 HDLD12 Lift Kits (Optional)



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	133033	KIT, HDLD12 24" LIFT		1
	133028	KIT, HDLD12 12" LIFT		1
1	F05010-8	Nut, 1/2-13 Nyl Hex Lock		40
2	F05011-2	Washer, 1/2 SAE Flat		80
3	F05009-106	Bolt, 1/2-13x2 HHFT GR8 Znc		40
4	133021	Weldmnt, Infeed Deck Foot 24" Lift		2
	133012	Weldmnt, Infeed Deck Foot 12" Lift		2
5	133020	Weldmnt, 24" Lift Tube		1
	133010	Weldmnt, 12" Lift Tube		2
6	133031	Weldmnt, HD 24" Lift Tube		4
	133025	Weldmnt, HD 12" Lift Tube		4