



Wood-Mizer[®] Sawmill

Safety, Operation, Maintenance, & Parts Manual

TD1 Transfer Deck rev. A1.00 - A4.00



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

June 2001

Form #1062

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SECTION 1 SAFETY

1.1 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 death or serious injury.



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



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



IMPORTANT! indicates vital information.

NOTE: gives helpful information.



Warning stripes are placed on areas where a single decal would be insufficient. To avoid serious injury, keep out of the path of any equipment marked with warning stripes.

1.2 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 SAFETY INSTRUCTIONS



IMPORTANT! Read the entire Operator's Manual before operating the transfer deck. Take notice of all safety warnings throughout this manual and those posted on the machine. Keep this manual with this machine at all times, regardless of ownership.

Also read any additional manufacturer's manuals and observe any applicable safety instructions including dangers, warnings, and cautions.

Only persons who have read and understood the entire operator's manual should operate the transfer deck. The transfer deck is not intended for use by or around children.

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 of your Wood-Mizer products. All Wood-Mizer product owners are encouraged to become thoroughly familiar with these applicable laws and comply with them fully while using the machine.



KEEP TRANSFER DECK AND AREA AROUND TRANSFER 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 TRANSFER DECK SETUP


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

CHECK TRANSFER DECK BEFORE OPERATION

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



KEEP PERSONS AWAY

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

USE PROPER PROCEDURE WHEN CONDUCTING 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 control 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 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.

SECTION 2 GENERAL INFORMATION

2.1 Transfer Deck Components

The Transfer Deck (TD1) enables you to change the direction of material flow. The transfer deck is also equipped with the kicker system allowing you to separate boards and cants. The following instructions will guide you in installation, operation, and alignment of the Transfer Deck.

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

See Figure 2-1. The main components of the Transfer Deck are shown below.

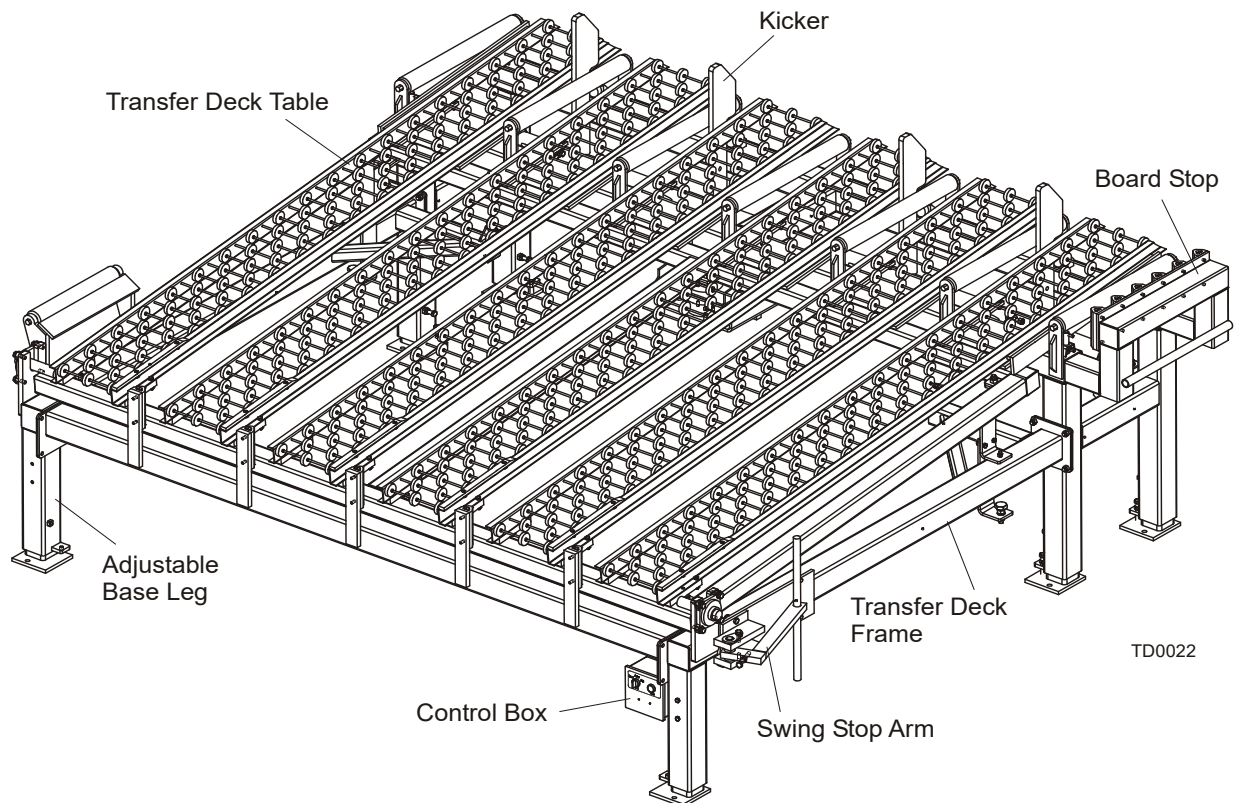


FIG. 2-1 TRANSFER DECK (TD1)

2.2 Overall Dimensions

See Figure 2-2. The overall dimensions of the Transfer Deck (TD1) are shown below.

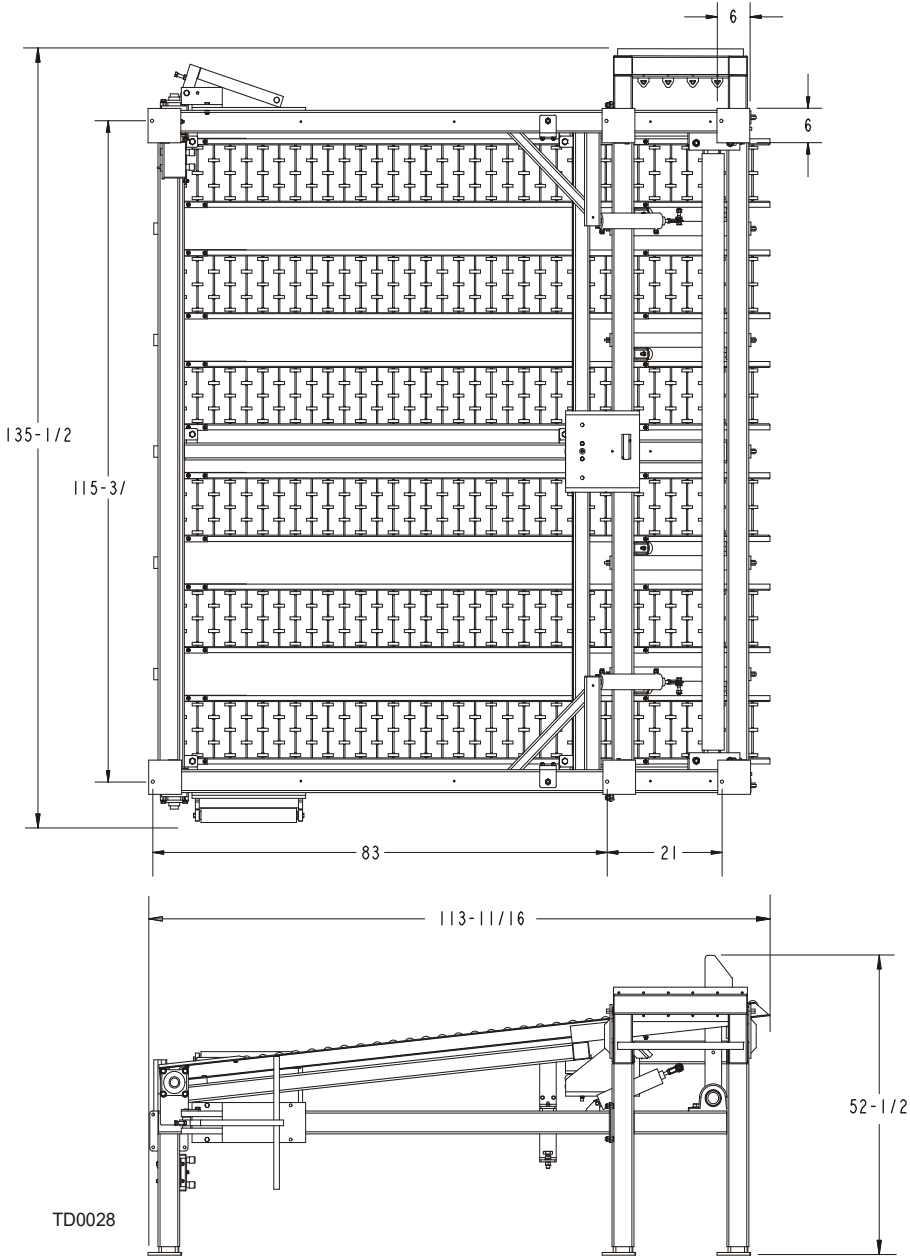


FIG. 2-2 TRANSFER DECK (TD1)

SECTION 3 INSTALLATION & SETUP

3.1 Installation

This section describes the installation and setup procedures. Make sure the transfer deck is properly assembled before operating the unit.

To assemble the transfer deck make sure to perform the following steps if necessary:

1. Position the transfer deck cross tube and the right and left transfer deck frames close to each other. Use three 1/2-13 X 1 1/4 hex head bolts and 1/2-13 hex nylon lock nuts on each side to install the transfer deck cross tube to the right and left frames. Tighten the bolts and nuts.

See Figure 3-1.

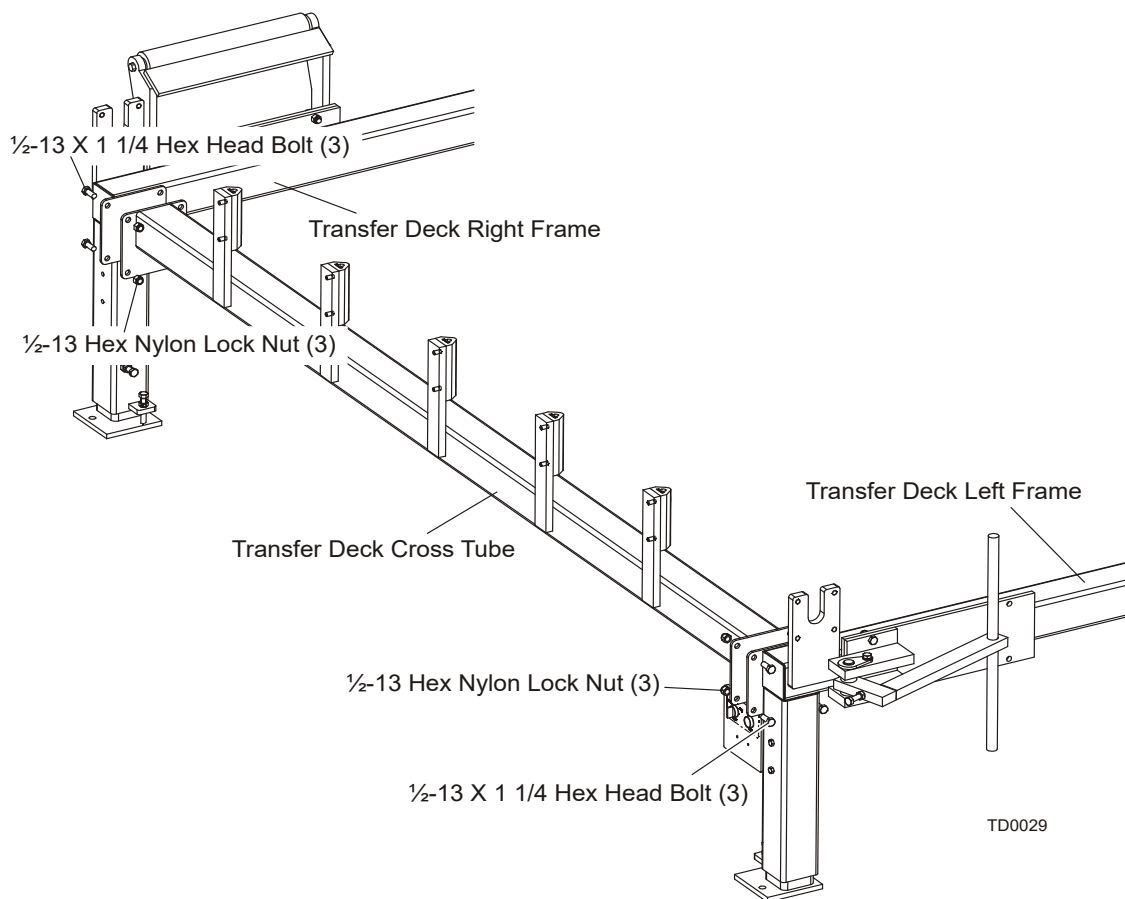


FIG. 3-1

2. **Rev. A4.00+:** Position all the transfer deck frame parts as shown below. Use six 1/2-13 X 1 1/2" hex head bolts and 1/2-13 hex nylon lock nuts to install the transfer deck frame. Tighten the bolts and nuts to secure the frame.

See Figure 3-2.

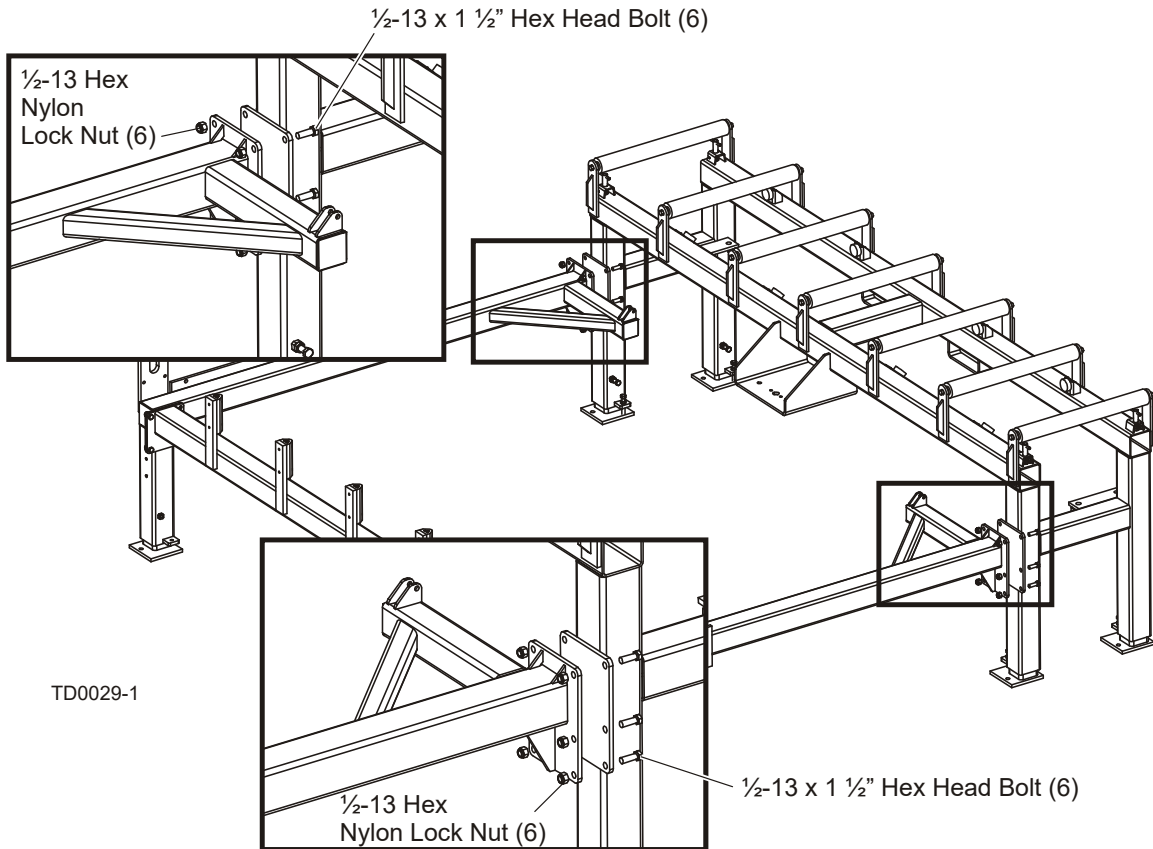


FIG. 3-2 REV. A4.00+

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Installation & Setup

Installation

Rev. A1.00 - Rev. A3.01: Position all the transfer deck frame parts as shown below. Use four 1/2-13 X 1 1/4" hex head bolts and 1/2-13 hex nylon lock nuts to install the transfer deck frame. Tighten the bolts and nuts to secure the frame.

See Figure 3-3.

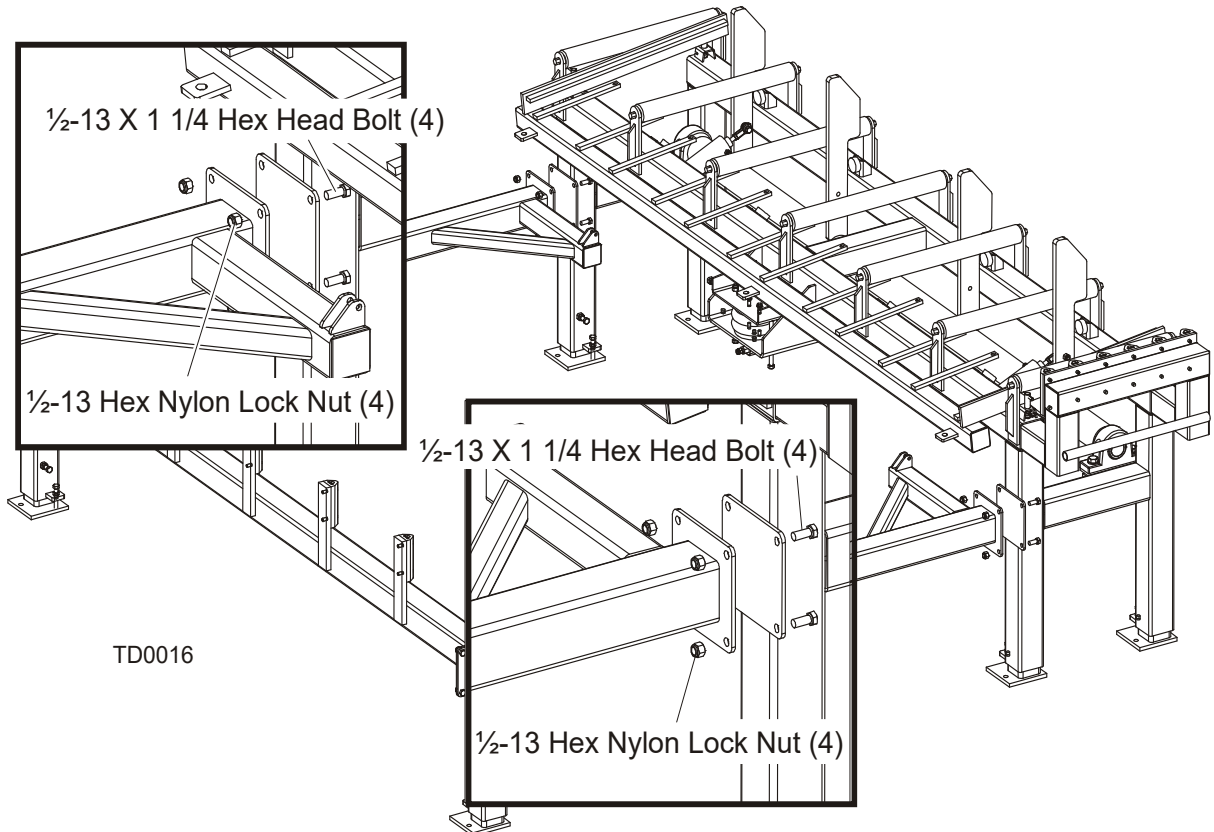


FIG. 3-3 REV. A1.00 - A3.01

3. Install the bottom of the kicker air cylinders to the transfer deck frame. Use 3/8-16 X 2 hex head bolts and 3/8-24 nylon lock nuts to secure each cylinder in position. Make sure the bolts and nuts are tightened.

See Figure 3-4.

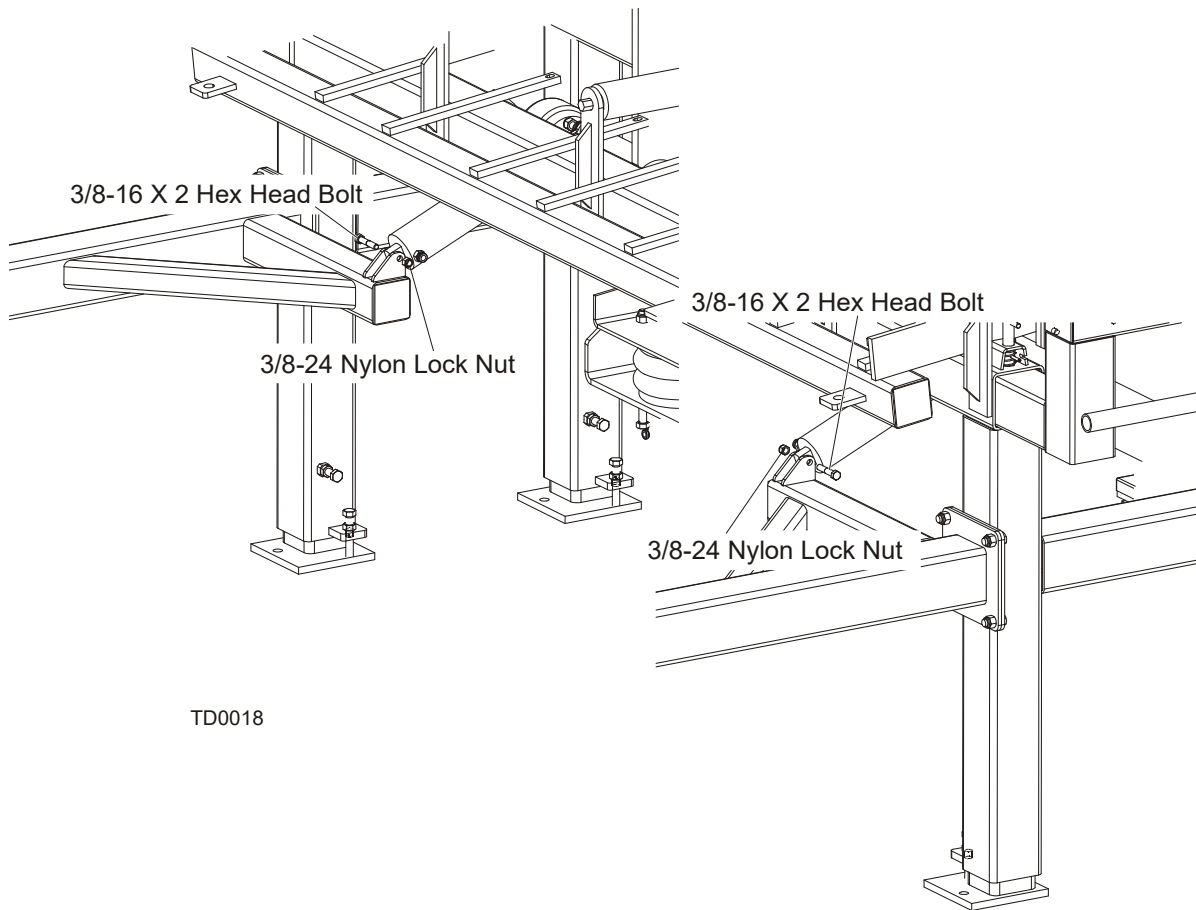


FIG. 3-4

3 Installation & Setup

Installation

4. Install the lower table tube with bearings to the transfer deck frame. Use four 1/2-13 X 1 1/2 hex head bolts, 1/2 split lock washers, and 1/2 flat washers. Tighten the bolts to secure the lower table cross tube in place.

See Figure 3-5.

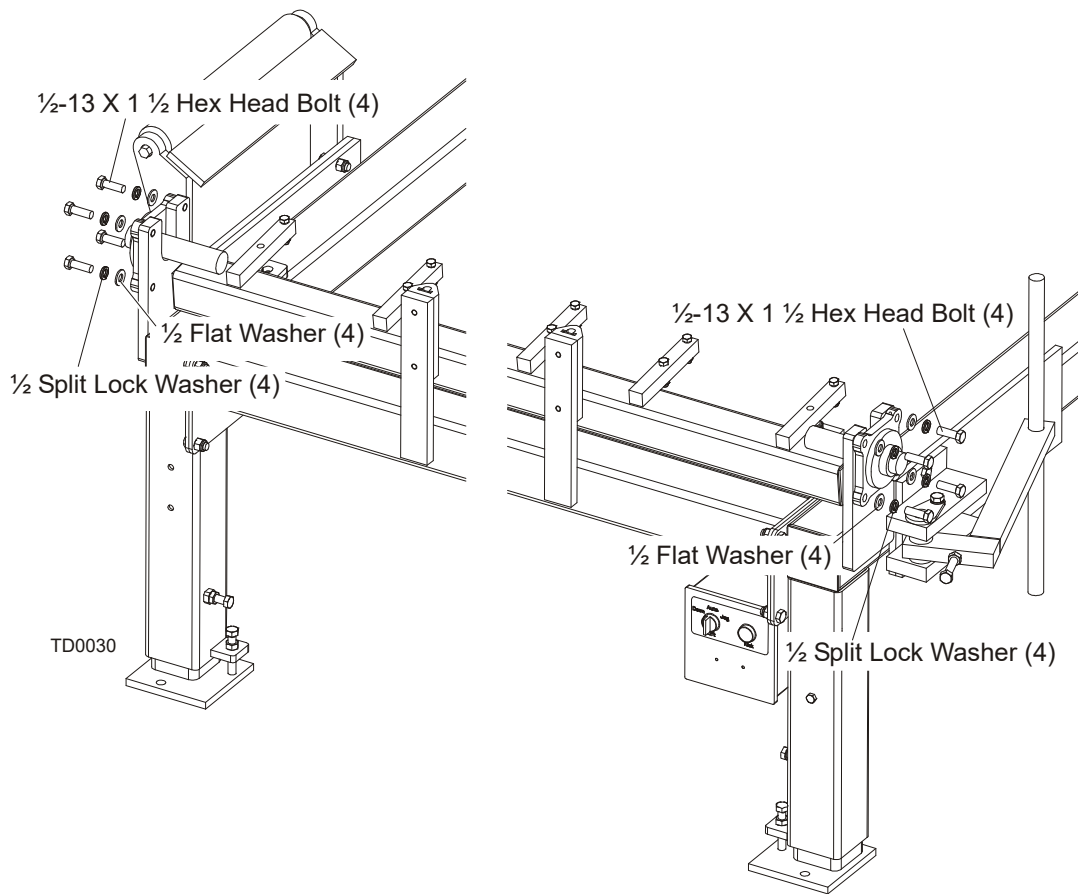


FIG. 3-5

5. Install the center, right and left table tubes to the transfer deck table. Use two 5/8-11 X 1 3/4 hex head bolts and 3/8-16 X 1 nylon lock nuts on each tube. Make sure to secure the tubes to the table.

See Figure 3-6.

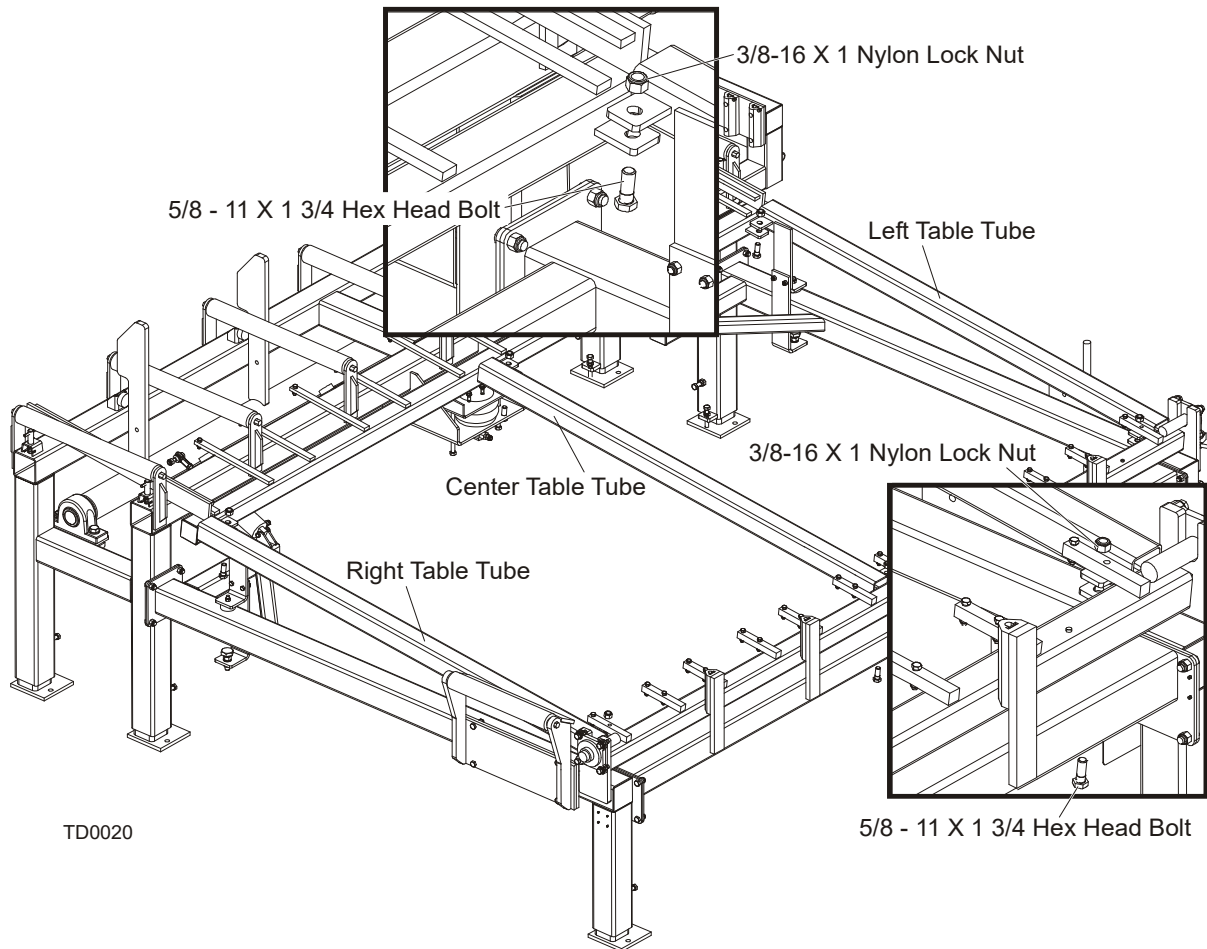


FIG. 3-6

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Installation & Setup

Installation

6. Install each of six table rollers to the transfer deck table. Use four 3/8-16 X 3/4 hex head bolts and 3/8-16 hex nylon lock nuts at the lower section of the transfer deck table. Tighten the bolts and nuts. Use two 3/8-16 X 3/4 hex head bolts and 3/8-16 hex nylon lock nuts. Secure the table roller at the upper section of the transfer deck table.

See Figure 3-7.

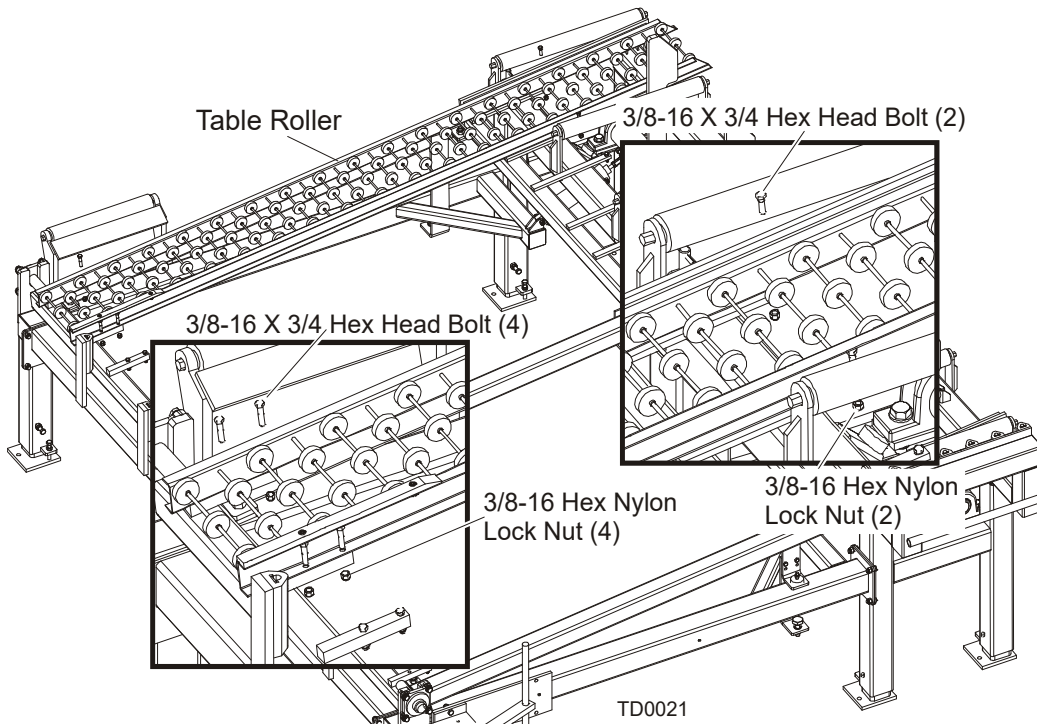


FIG. 3-7

NOTE: Make sure all the bolts and nuts are tightened before operating the transfer deck table.

7. Make the appropriate air hoses connections. [See Section 3.2 Air Installation](#), for transfer deck air system diagram.

3.2 Air Installation

See Figure 3-8. The transfer deck air system diagram is shown below.

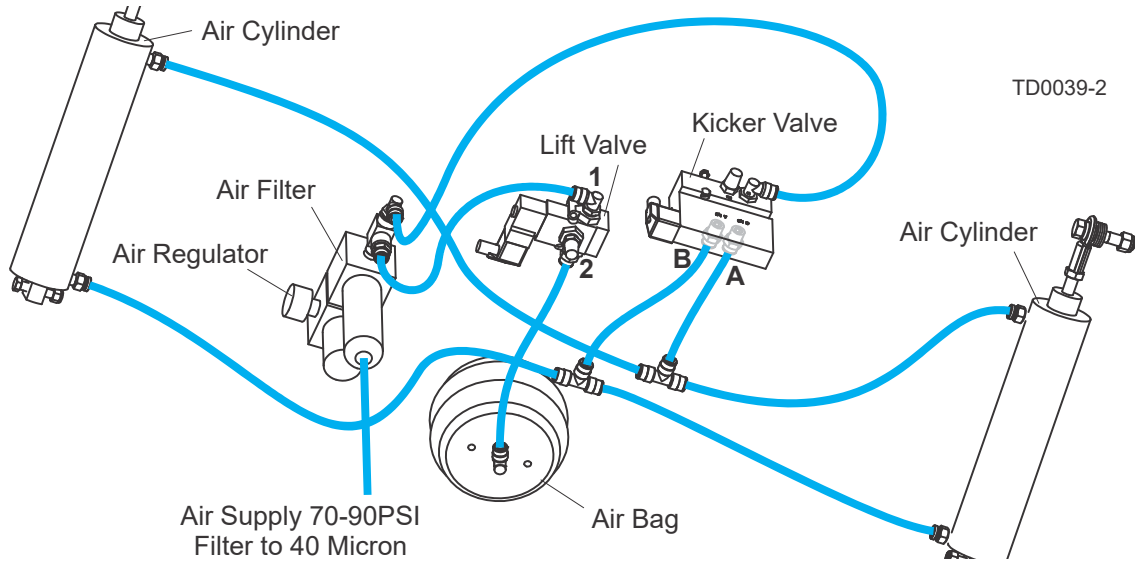


FIG. 3-8

See Figure 3-9. The transfer deck air system diagram is shown below.

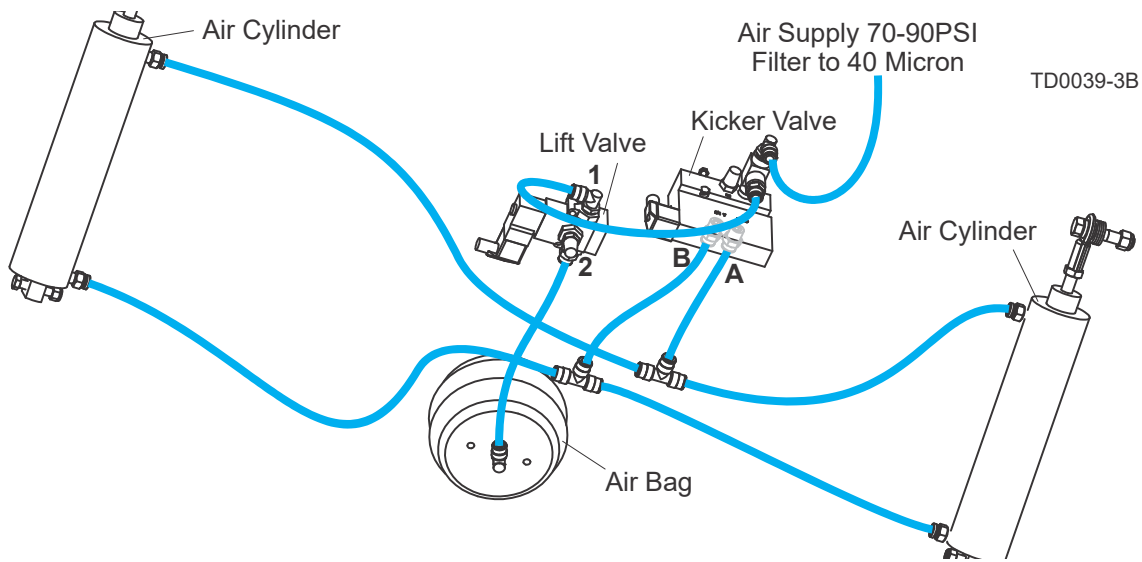


FIG. 3-9 TD1

NOTE: Wood-Mizer highly recommends using the Transfer Deck together with the

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Installation & Setup

Air Installation

Wood-Mizer Incline Conveyor. After connecting the transfer deck table to the air supply, the transfer deck table automatically lowers when the board or cant gets between the electronic sensors on the incline conveyor belt. The transfer deck table automatically raises when the board or cant leaves the incline conveyor and there is no object on the incline conveyor belt between the electronic sensors.

To operate the transfer deck with the incline conveyor, connect the air supply to the transfer deck air supply line. **NOTE:** Make sure each hose fits tight on the fitting before operating the unit.

3.3 Setup

Prepare a firm, level area where the transfer deck can be anchored before operating the unit. A cement pad with 1/2" diameter anchor bolts is recommended.

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

NOTE: If you use the Wood-Mizer Incline Conveyor, the distance between the transfer deck and conveyor should be approximately 25" (635 mm).

See Figure 3-10.

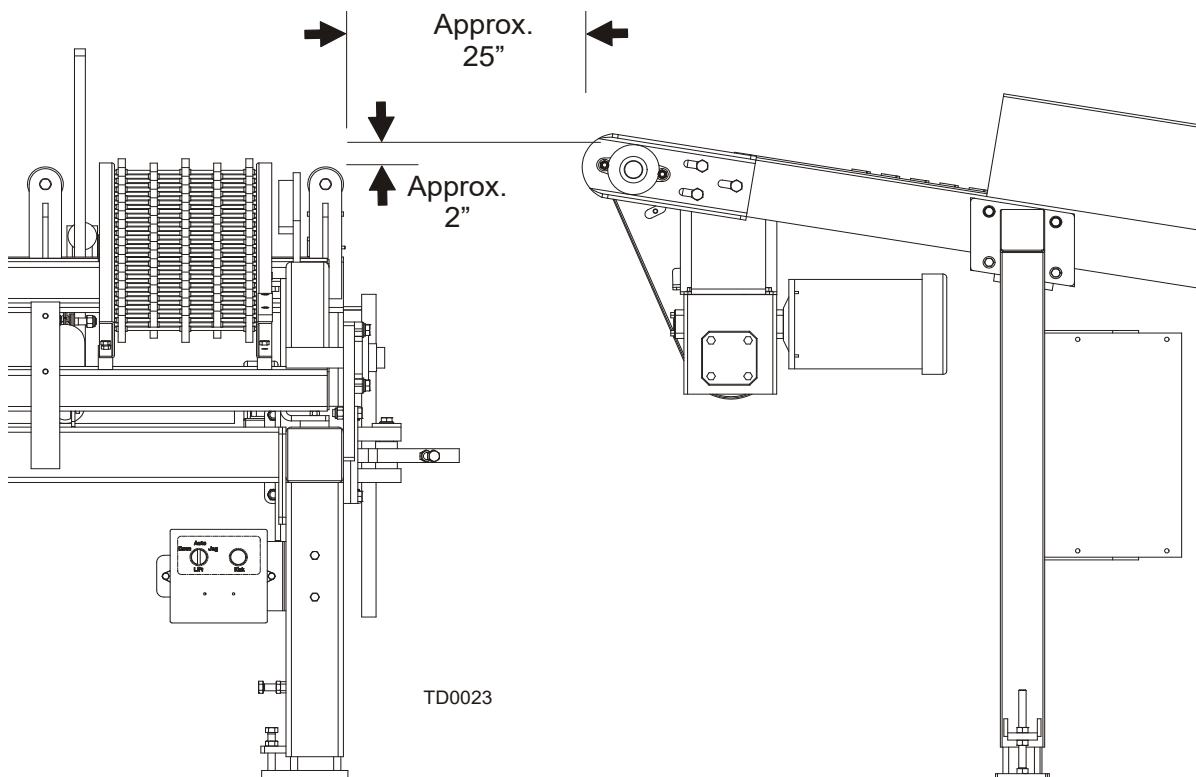


FIG. 3-10 TRANSFER DECK (TD1)

The top of the conveyor drive roller should be approximately 2" (50mm) higher than the top of the transfer deck rollers. Make sure that lumber can easily get to the transfer deck table.

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Installation & Setup

Setup

Adjust the legs so each leg is in contact with the ground. Loosen the locking bolt. Turn the adjustment bolt clockwise to raise, turn counterclockwise to lower the transfer deck frame.

See Figure 3-11.

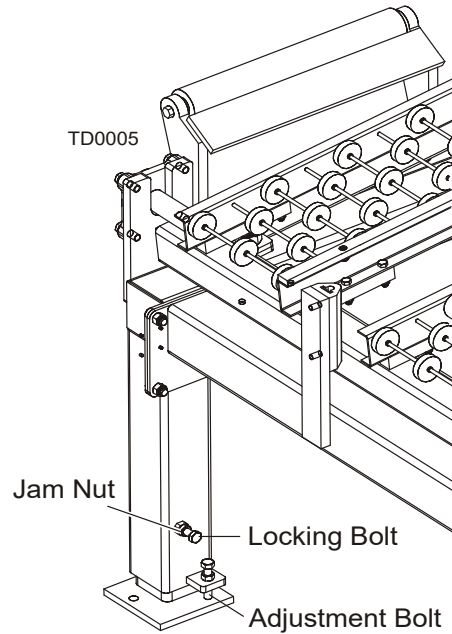


FIG. 3-11 TRANSFER DECK (TD1)

Secure the leg with the locking bolt. Tighten the jam nuts when the adjustment is complete.

3.4 Electrical Installation

This section explains how to connect the Transfer Deck and the Incline Conveyor to work together.

⚠ 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.

To connect the transfer deck to the incline conveyor:

1. Route the air lift and kicker valve cables along the transfer frame. Use the provided clamps to secure the cable in place. Connect the cables to the air lift and kicker valves located under the transfer deck air bag.

See Figure 3-12.

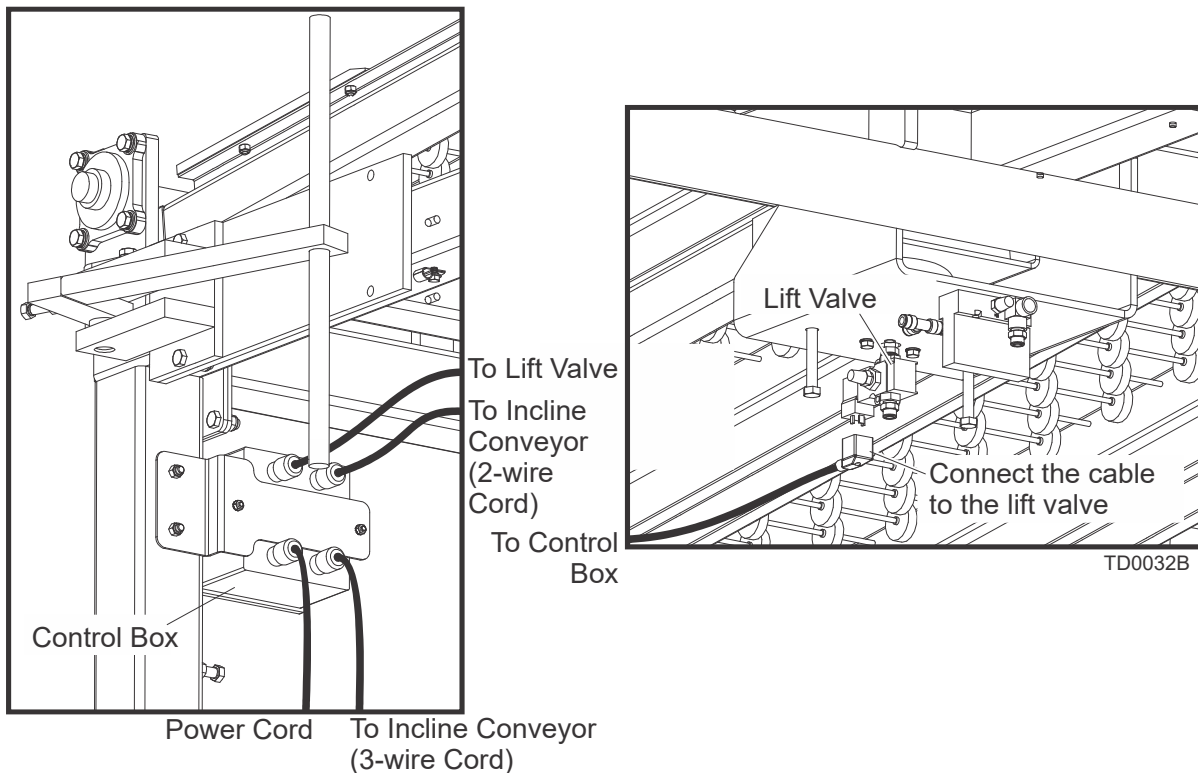


FIG. 3-12 TRANSFER DECK (TD1)

2. Mount the provided sensor power junction box to the cross tube on the Incline Conveyor with the two provided bolts.

See Figure 3-13.

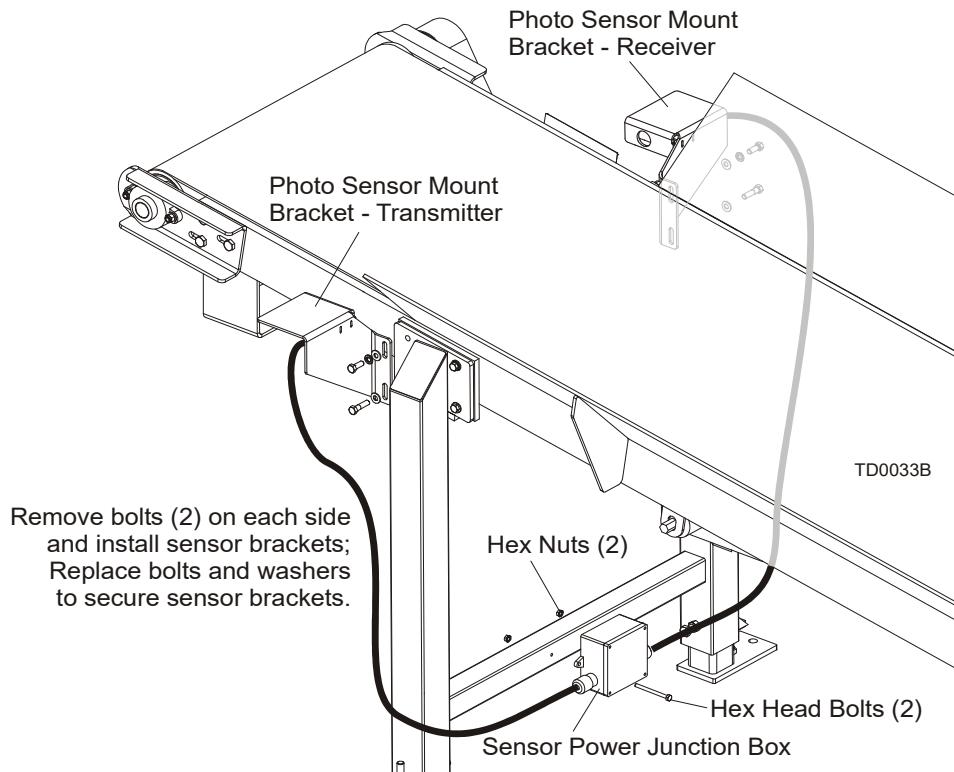


FIG. 3-13

3. Route the transfer deck cable to the sensor power junction box. Route the cable through the cable connector in the bottom of the box. Secure the cable to the frame and ground to make sure the operator has a clear path for all necessary movement around the machines. **NOTE:** Connect the white wires from the transfer deck control box to the white wire terminal inside the power junction box; connect the green wires to the green wire terminal; then connect the black wire to the black wire terminal inside the power junction box installed on the incline conveyor.
4. Install the photoelectric sensors to the mounting brackets with the screws and nuts provided. Secure the cables to the brackets with the clamps provided on the brackets. Remove two of the conveyor leg mounting bolts on each side, install the sensors and replace the bolts and washers. **NOTE:** A longer bolt is provided for use on older conveyors that use a thru-hole at the bottom leg mounting bolt location. Level the sensors to face each other and tighten the bolts to secure the sensor brackets. Use the provided clamps, lock washers and bolts to secure the sensor cables to the conveyor legs, drilling and tapping 3/8-16 holes as needed.

5. Plug the power cord from the transfer deck control box into a grounded 110V electrical receptacle.

3.5 Board Stop Adjustment

The Board Stop Assembly can be mounted to either of the Transfer Deck sides. Install the board stop on the side opposite to the direction from which the lumber is flowing. The boards will stop as soon as they hit the board stop assembly.



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

Adjust the accessory roller width to suit your application. To adjust the board stop:

1. Lift and turn the two pins securing the board stop in its closest-to-table position.
2. Move the board stop assembly so that it is long enough to make the lumber fit the transfer deck table. The maximum board dimension to be used with the transfer deck can not exceed 16 ft. (4.88m).

See Figure 3-14.

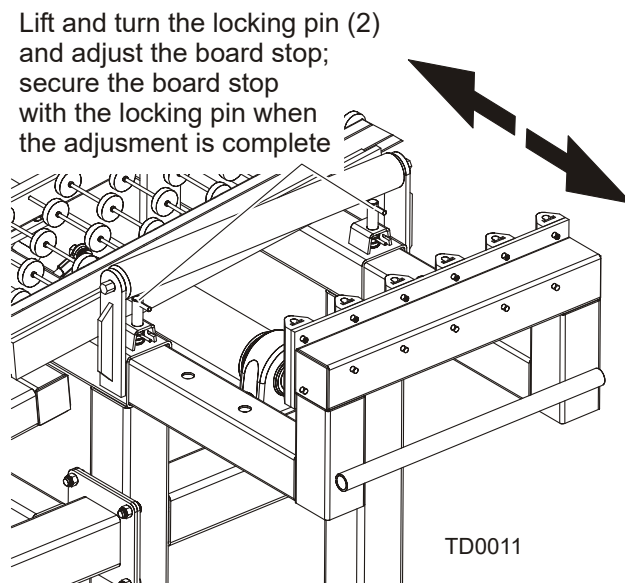


FIG. 3-14 TRANSFER DECK (TD1)

3. Secure the board stop assembly with the two locking pins when the adjustment is complete.

TD1 Only: NOTE: When reinstalling the board stop to the other side of the transfer deck from its original position, make sure to switch the accessory roller and the swing stop assemblies.

To replace the accessory roller and the swing stop assemblies:

1. Remove the four hex head bolts securing the accessory roller. Remove the accessory roller assembly from the transfer deck.
2. Remove the four hex head bolts securing the swing stop and remove the swing stop.

See Figure 3-15.

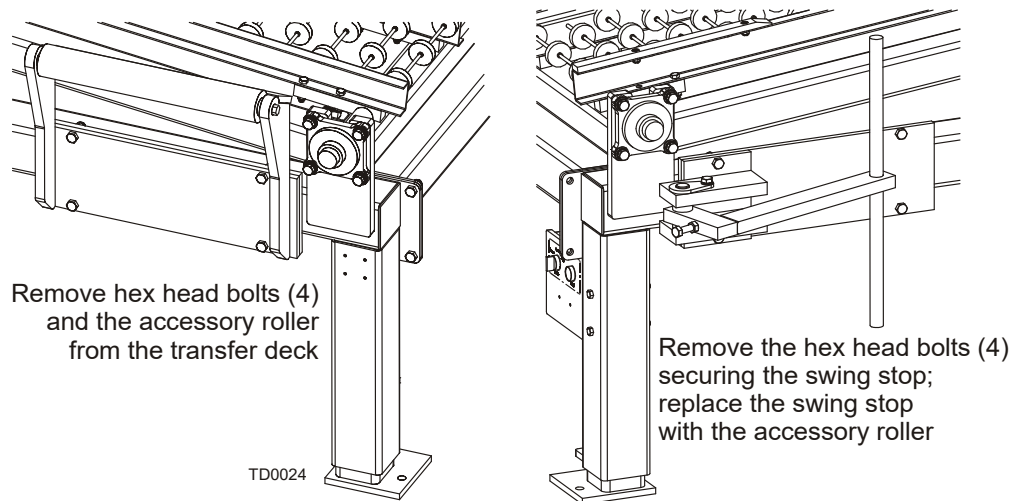


FIG. 3-15

3. Install the accessory roller to the side where the swing stop was firstly mounted. Mount the swing stop on the other side of the transfer deck frame. Make sure the swing stop is installed to the same side of the transfer deck where the board stop is located.

NOTE: The accessory roller assembly has been designed to help the operator transfer lumber to an additional conveyor or any other wood-processing equipment. You can remove the accessory roller assembly if not used.

4. Make sure to tighten the mounting bolts when the replacement procedure is complete.

3

Installation & Setup

Board Stop Adjustment

SECTION 4 OPERATION

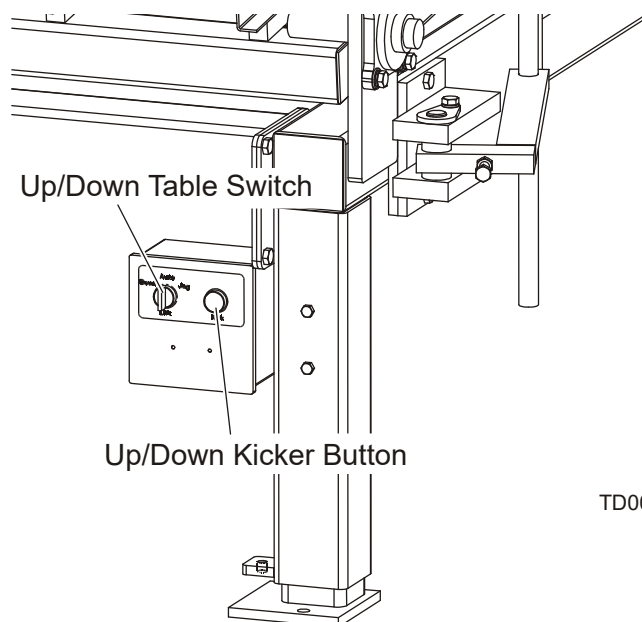
4.1 Control Box Operation

The transfer deck is provided with all the necessary air hoses connected. To operate the transfer deck, make the appropriate connections. [See Section 3.2 Air Installation](#), for transfer deck air system diagram.

The transfer deck is designed to work with the incline conveyor. This manual explains how to operate the unit working together with the incline conveyor.

Use the up/down table switch located on the control box to operate the transfer deck option. Turn the up/down table switch to the "AUTO" position to make the table lower when the lumber comes from the incline conveyor. The table raises automatically when the lumber gets on the table and leaves the conveyor. The lumber slides down when the table raises.

See Figure 4-1.



TD0025

FIG. 4-1 TRANSFER DECK (TD1)

Turn the up/down table switch to the "DOWN" position to lower the transfer deck table. Use the "DOWN" position to keep the table down when operating the kicker.

Move the up/down table switch to the "JOG" position to raise the transfer deck table. Release the switch to return to the "AUTO" position. Use the "JOG" position when the lumber coming from the incline conveyor gets stuck between the transfer deck and conveyor.

Operating the kicker

The transfer deck kicker is designed to help the operator separate different kind of lumber, e.g. cants and boards. Use the kicker whenever it is necessary to save your time and for convenience.

To separate cants from boards, turn the up/down table switch to the "DOWN" position to prevent the cants from sliding down the table. Press the up/down kicker button to raise the kicker. The kicker pulls the cant off the table. Release the up/down kicker button to lower the kicker. **NOTE:** Have a cart or other collection system available next to the transfer deck to receive the cants as they are kicked off the table.

4.2 Swing Stop

The transfer deck was designed to allow the operator to work with the lumber maximum length of 16 ft. (4.8 m). Use the swing stop if the lumber is longer than 120" (3 m). Swing off the swing stop all the way out to prevent longer boards from sliding off the table if necessary.

See Figure 4-2.

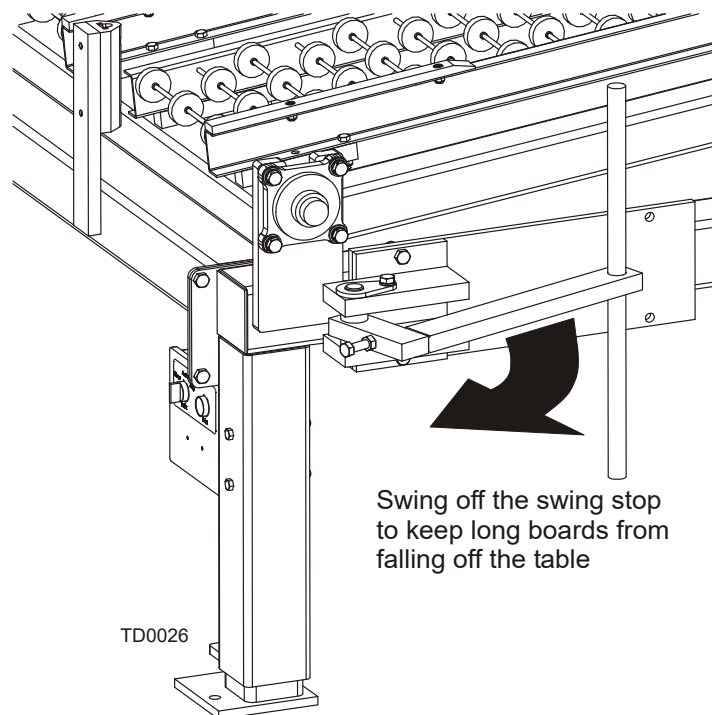
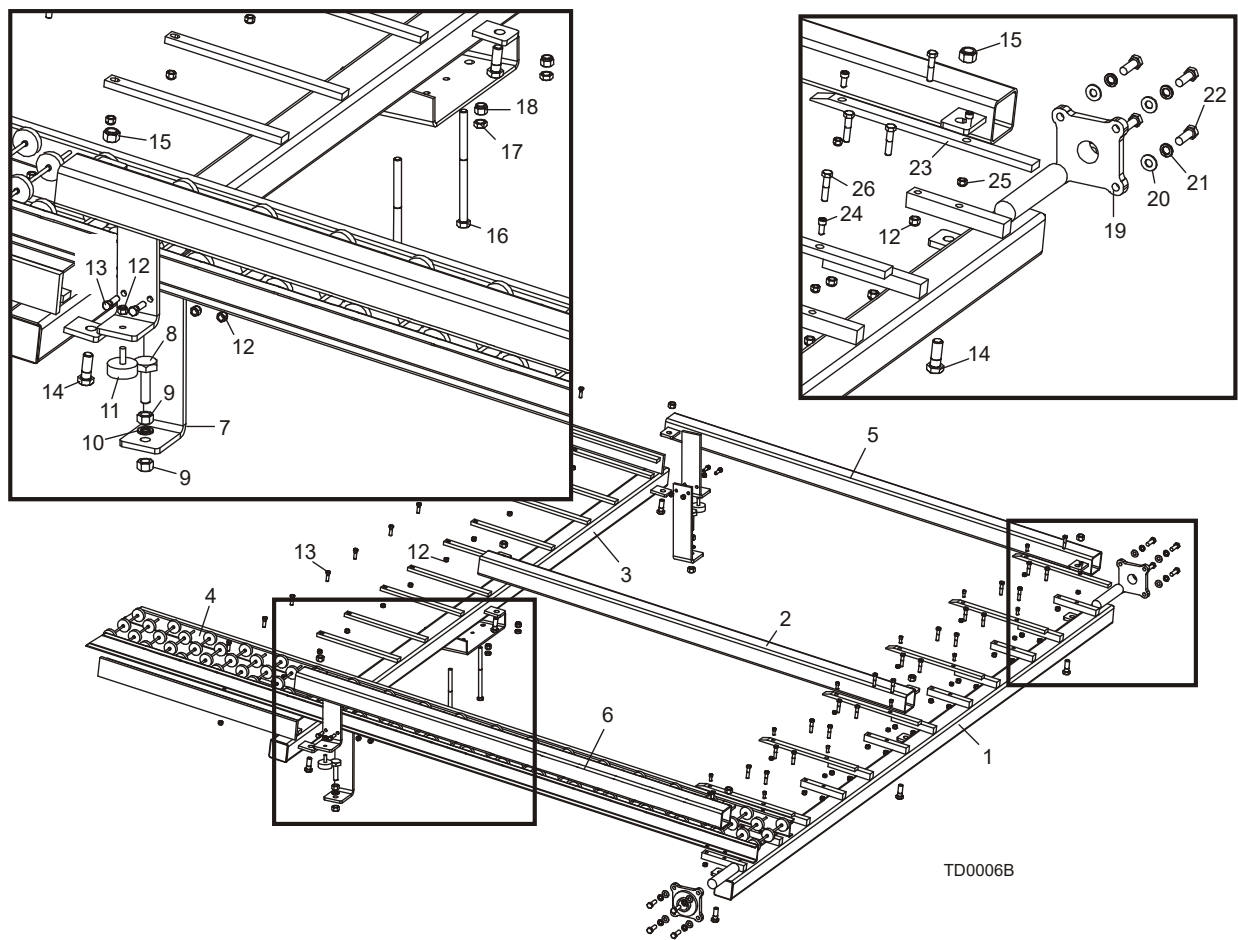


FIG. 4-2

SECTION 5 REPLACEMENT PARTS

5.1 Table Assembly



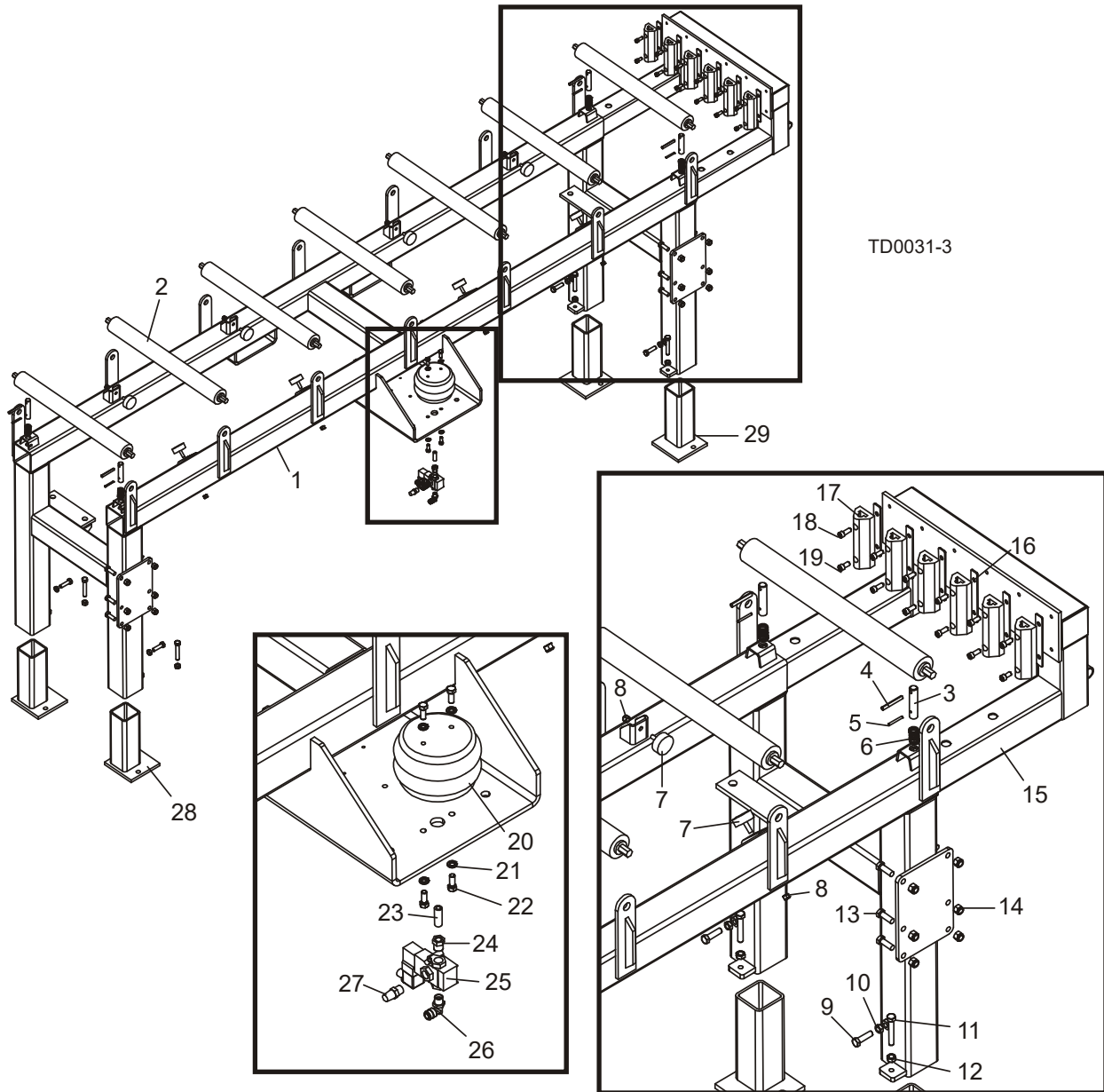
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	TABLE ASSEMBLY, CONVEYOR (ORANGE)	034137	1
	TABLE ASSEMBLY, CONVEYOR (GREY)	034137-1	1
1	Tube Weldment, Lower Conveyor Table (Orange)	034134	1
	Tube Weldment, Lower Conveyor Table (Grey)	034134-1	1
2	Tube Weldment, Center Conveyor Table (Orange)	034136	1
	Tube Weldment, Center Conveyor Table (Grey)	034136-1	1
3	Tube Weldment, Upper Conveyor Table (Orange)	034135	1
	Tube Weldment, Upper Conveyor Table (Grey)	034135-1	1
4	Conveyor, Roller	034150	6
5	Tube Weldment, Left Conveyor Table (Orange)	034171	1
	Tube Weldment, Left Conveyor Table (Grey)	034171-1	1

6	Tube Weldment, Right Conveyor Table (Orange)	034172	1	
	Tube Weldment, Right Conveyor Table (Grey)	034172-1	1	
7	Plate, Lower Table Stop	034117	2	
8	Bolt, Table Adjustment	S13006	2	
9	Nut, 5/8-11 Hex	F05010-5	4	
10	Washer, 5/8 Split Lock	F05011-27	2	
11	Bumper, Table	034175	2	
12	Nut, 3/8-16 Hex Nylon Lock	F05010-10	40	
13	Bolt, 3/8-16 x 1 1/4" Hex Head Grade 5	F05007-123	16	
14	Bolt, 5/8-11 x 1 3/4" Hex Head	F05009-33	6	
15	Nut, 5/8-11 Hex Nylon Lock	F05010-34	6	
16	Bolt, 1/2-13 x 8" Hex Head Grade 5	F05008-69	2	
17	Nut, 1/2-13 Hex Jam	F05010-31	2	
18	Nut, 1/2-13 Hex Nylon Lock	F05010-8	2	
19	Bearing, 1 1/2" Dia. 4-Bolt Flange	034176	2	
20	Washer, 1/2" SAE Flat	F05011-2	8	
21	Washer, 1/2" Split Lock	F05011-9	8	
22	Bolt, 1/2-13 X 1 1/2" Hex Head Grade 5	F05008-33	8	
23	Bar, Board Slow Down	034173	6	
24	Bolt, 5/16-18 x 3/4" Socket Head	F05006-63	12	
25	Nut, 5/16-18 Hex Nylon Lock	F05010-58	12	
26	Bolt, 3/8-16 x 1 3/4" Hex Head	F05007-119	22	

5.2 Board Stop/Air Bag Assembly

TD1

Rev. A4.00



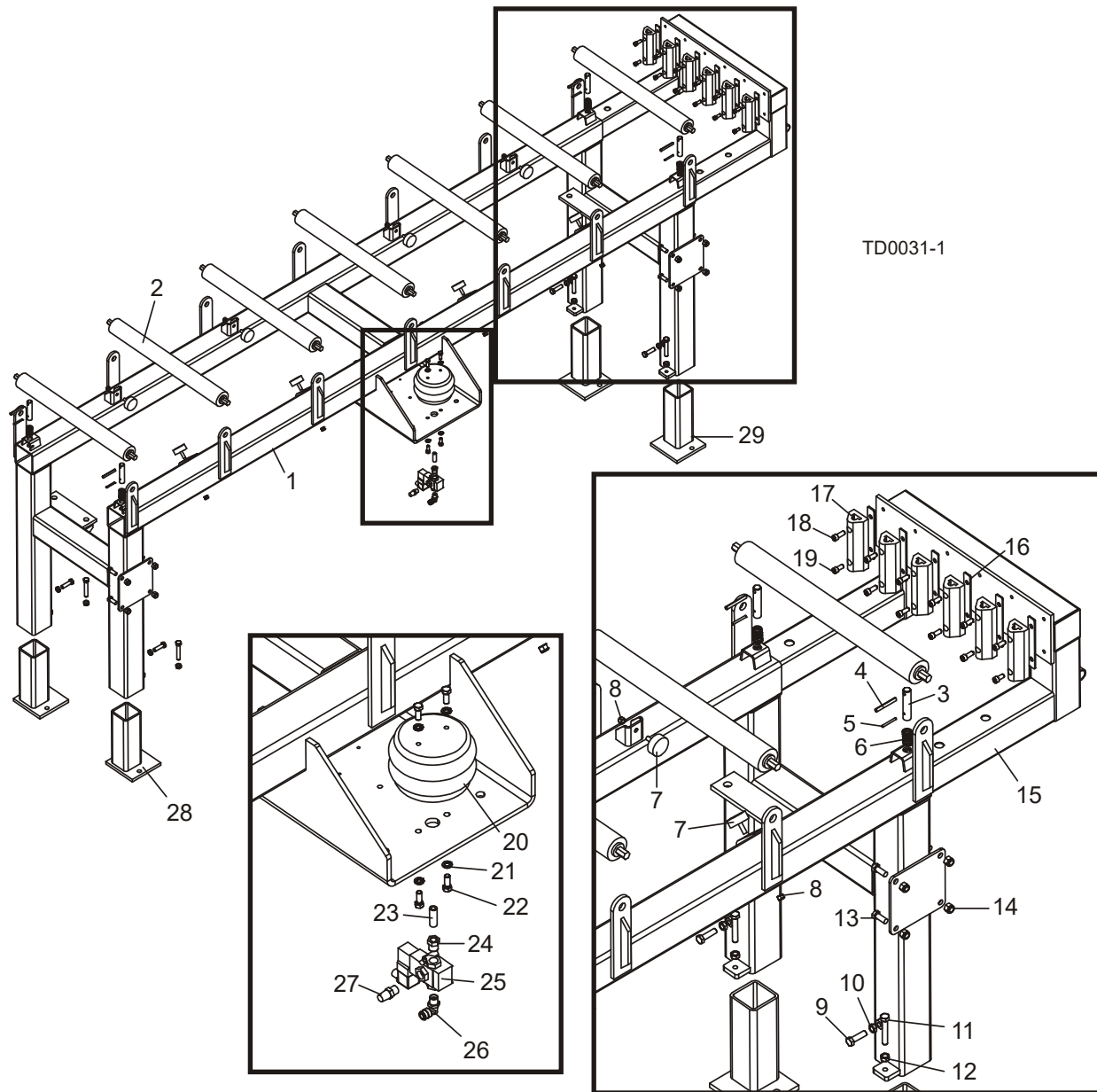
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	FRAME ASSEMBLY, TRANSFER DECK (ORANGE)	034114 1	1
	FRAME ASSEMBLY, TRANSFER DECK (GRAY)	034114-1 1	1
1	Frame Weldment, Roller (Orange)	034108	1
	Frame Weldment, Roller (Gray)	034108-1	1

2	Roller, 2 1/2" Dia. x 25" BF Painted	038167	7	
	Pin Assembly, .75" Outrigger Pull	016148	4	
3	Pin, .75" Outrigger Pull	016147	1	
4	Pin, Roll 5/16" X 2 1/2"	F05012-47	1	
5	Pin, 3/16" X 1 3/4" Roll Zinc	F05012-103	4	
6	Spring, .92" X 1.5" X .07"9 Compression	016145	4	
7	Bumper, Table	034175	8	
8	Nut, 3/8-16 Hex Nylon Lock	F05010-10	8	
9	Bolt, 1/2-20 X 1 3/4" Hex Head	F05008-127	4	
10	Nut, 1/2-20 Hex Jam	F05010-16	4	
11	Bolt, 1/2-13 X 3" Hex Head Full Thread Zinc	F05008-7	4	
12	Nut, 1/2-13 Hex	F05010-35	4	
13	Bolt, 1/2-13 X 1 1/2" Hex Head Grade 5 Zinc	F05008-33 ¹	12	
14	Nut, 1/2-13 Nylon Hex Lock	F05010-8 ¹	12	
	STOP ASSEMBLY, BOARD (ORANGE)	034160	1	
	STOP ASSEMBLY, BOARD (GRAY)	034160-1	1	
15	Stop Weldment, Board (Orange)	034147	1	
	Stop Weldment, Board (Gray)	034147-1	1	
16	Plate, Rubber Bolt	034158	6	
17	Stop, Bottom Rubber	034153	6	
18	Bolt, 3/8-16 X 1" Socket Head	F05007-52	10	
19	Bolt, 3/8-16 X 3/4" Socket Head	F05005-104	2	
	ASSEMBLY, AIR BAG (See Section 5.7 FOR AIR SOLENOID PARTS)	016984	1	
20	Bag, Air	016980	1	
21	Washer, 3/8" Split Lock	F05011-4	4	
22	Bolt, 3/8-16 x 1" Hex Head Grade 5	F05007-87	4	
23	Fitting, 1/4" Steel Pipe Coupler	016983	1	
24	Fitting, 1/4" NPT x 3/8" NPT Reducer	015490	1	
25	Valve Assembly, Air	042659	1	
26	Fitting, 3/8" NPT x 3/8" Tube 90° Elbow	P21526	1	
27	Fitting, 3/8" NPT Air Muffler	P21528	1	
28	LEG WELDMENT, RIGHT ADJUST BASE	W21342-1	2	
29	LEG WELDMENT, LEFT ADJUST BASE	W21342	2	

¹ Frame assembly modified Rev. A4.00. Mounting plates made thicker and larger, utilizing six mounting bolts and nuts for each plate. Stronger mounting plates eliminate possible damage caused when moving or shipping machine. [See Section 5.3](#) for previous mounting hardware.

5.3 Board Stop/Air Bag Assembly

TD1 Rev. A1.00 - A3.01



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	FRAME ASSEMBLY, TRANSFER DECK (ORANGE)	034114 ¹	1
	FRAME ASSEMBLY, TRANSFER DECK (GRAY)	034114-1 ¹	1
1	Frame Weldment, Roller (Orange)	034108	1
	Frame Weldment, Roller (Gray)	034108-1	1
2	Roller, 2 1/2 X 25 BF	038058	7

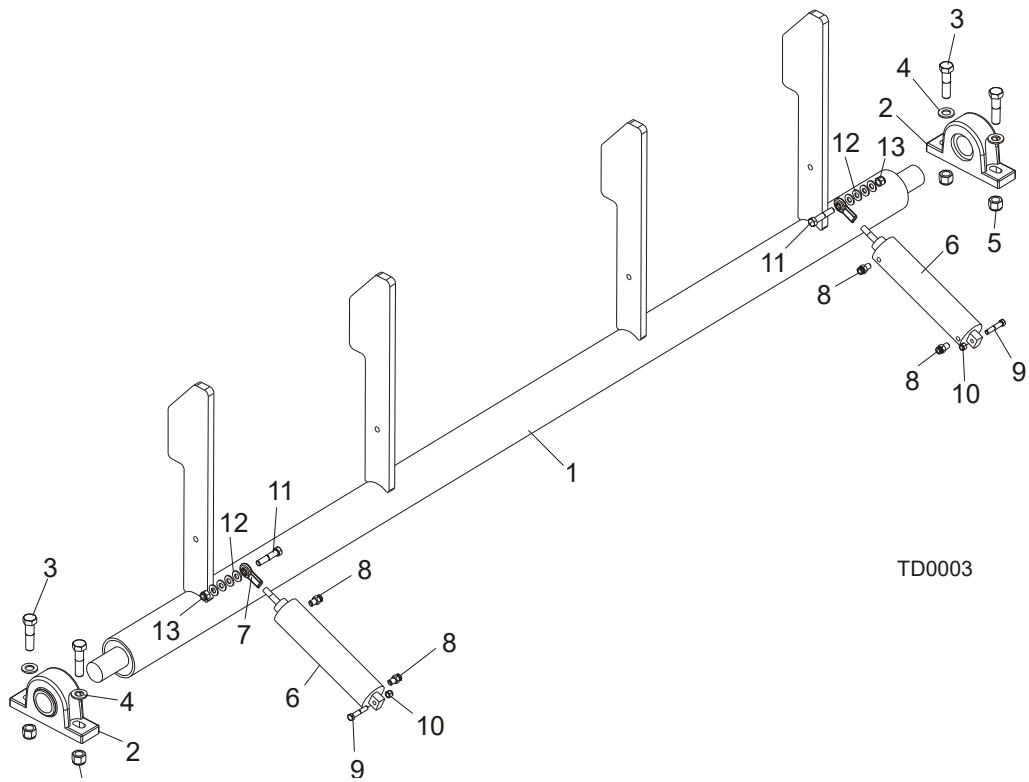
	Pin Assembly, .75" Outrigger Pull	016148	4	
3	Pin, .75" Outrigger Pull	016147	1	
4	Pin, Roll 5/16" X 2 1/2"	F05012-47	1	
5	Pin, 3/16" X 1 3/4" Roll Zinc	F05012-103	4	
6	Spring, .92" X 1.5" X .07"9 Compression	016145	4	
7	Bumper, Table	034175	8	
8	Nut, 3/8-16 Hex Nylon Lock	F05010-10	8	
9	Bolt, 1/2-20 X 1 3/4" Hex Head	F05008-127	4	
10	Nut, 1/2-20 Hex Jam	F05010-16	4	
11	Bolt, 1/2-13 X 3" Hex Head Full Thread Zinc	F05008-7	4	
12	Nut, 1/2-13 Hex	F05010-35	4	
13	Bolt, 1/2-13 X 1 1/4" Hex Head Grade 5 Zinc	F05008-37 ¹	8	
14	Nut, 1/2-13 Nylon Hex Lock	F05010-8 ¹	8	
	STOP ASSEMBLY, BOARD (ORANGE)	034160	1	
	STOP ASSEMBLY, BOARD (GRAY)	034160-1	1	
15	Stop Weldment, Board (Orange)	034147	1	
	Stop Weldment, Board (Gray)	034147-1	1	
16	Plate, Rubber Bolt	034158	6	
17	Stop, Bottom Rubber	034153	6	
18	Bolt, 3/8-16 X 1" Socket Head	F05007-52	10	
19	Bolt, 3/8-16 X 3/4" Socket Head	F05005-104	2	
	ASSEMBLY, AIR BAG (See Section 5.7 FOR AIR SOLENOID PARTS)	016984	1	
20	Bag, Air	016980	1	
21	Washer, 3/8" Split Lock	F05011-4	4	
22	Bolt, 3/8-16 x 1" Hex Head Grade 5	F05007-87	4	
23	Fitting, 1/4" Steel Pipe Coupler	016983	1	
24	Fitting, 1/4" NPT x 3/8" NPT Reducer	015490	1	
25	Valve Assembly, Air	042659	1	
26	Fitting, 3/8" NPT x 3/8" Tube 90° Elbow	P21526	1	
27	Fitting, 3/8" NPT Air Muffler	P21528	1	
28	LEG WELDMENT, RIGHT ADJUST BASE	W21342-1	2	
29	LEG WELDMENT, LEFT ADJUST BASE	W21342	2	

¹ Frame assembly modified Rev. A4.00. Mounting plates made thicker and larger, utilizing six mounting bolts and nuts for each plate. Stronger mounting plates eliminate possible damage caused when moving or shipping machine. [See Section 5.2](#) for new mounting hardware.

5 Replacement Parts

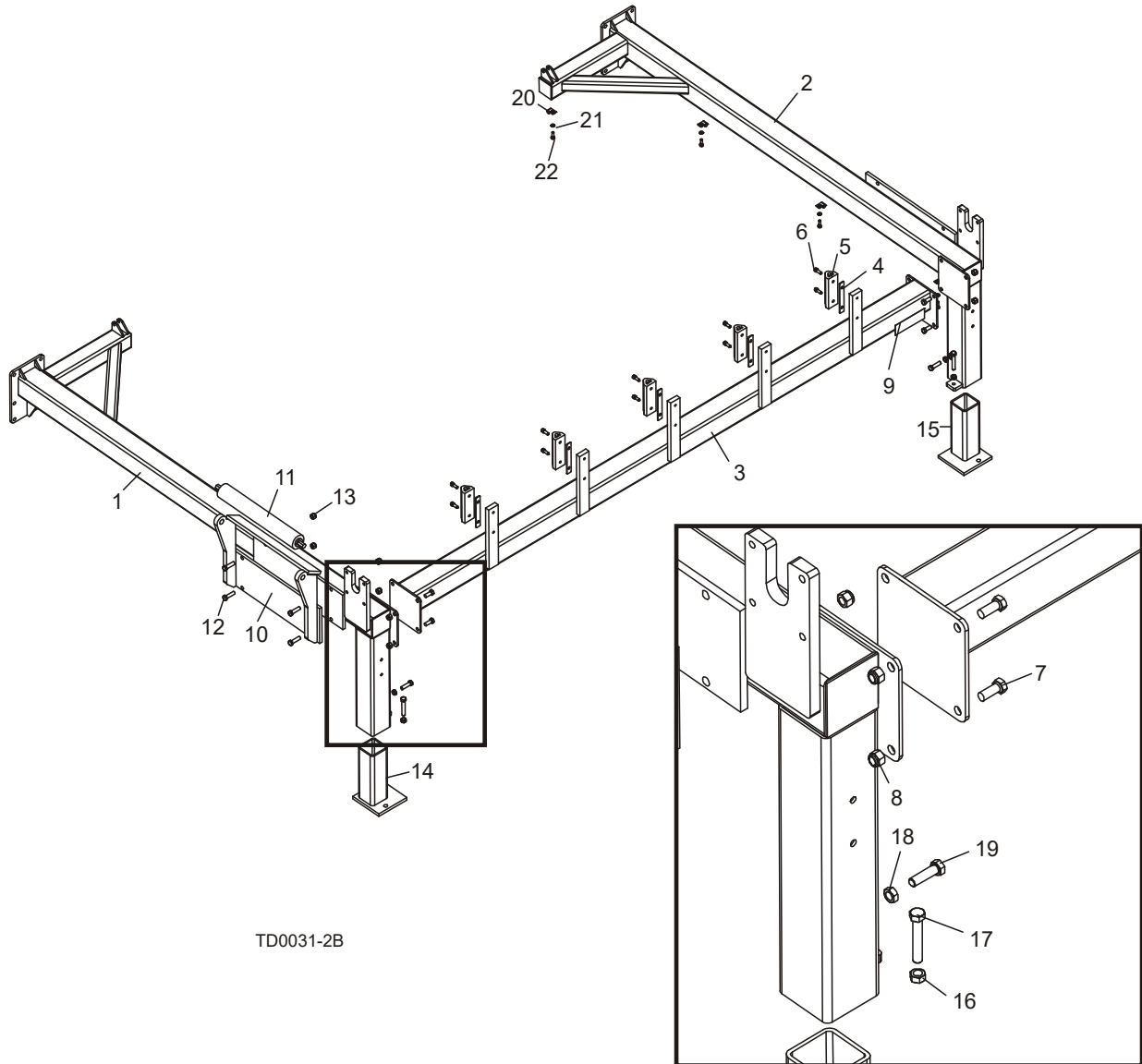
Kicker & Air Cylinder

5.4 Kicker & Air Cylinder



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	TUBE ASSEMBLY, KICKER (GRAY)	034159-1	1
	TUBE ASSEMBLY, KICKER (ORANGE)	034159	1
1	Tube Weldment, Kicker (Gray)	034126-1	1
	Tube Weldment, Kicker (Orange)	034126	1
2	Bearing, Pillow Block	P11107	2
3	Bolt, Hex Head 3/4-10 X 3" Grade 5	F05013-5	4
4	Washer, 3/4" SAE Flat	F05011-62	4
5	Nut, 3/4-10 Nylon Lock	F05010-103	4
	ASSEMBLY, AIR CYLINDER	016982	2
6	Cylinder, 2 1/2" x 8" Air	016977	1
7	End, 1/2-20 Rod	016979	1
8	Fitting, 1/4" NPT x 3/8" Tube Straight	P21559	2
9	Bolt, 3/8-16 x 2" Hex Head Grade 5	F05007-124	1
10	Nut, 3/8-16 Nylon Lock	F05010-10	1
11	Bolt, 1/2-13 x 2 1/2" Hex Head Grade 5	F05008-74	1
12	Washer, 1/2" SAE Flat	F05011-2	4
13	Nut, 1/2-13 Hex Nylon Lock	F05010-8	1

5.5 Lower Frame



TD0031-2B

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	FRAME WELDMENT, RIGHT SIDE (ORANGE)	034110 ¹	1
	FRAME WELDMENT, RIGHT SIDE (GRAY)	034110-1 ¹	1
2	FRAME WELDMENT, LEFT SIDE (ORANGE)	034109 ¹	1
	FRAME WELDMENT, LEFT SIDE (GRAY)	034109-1 ¹	1
	TUBE ASSEMBLY, FRONT CROSS (ORANGE)	036101	1
	TUBE ASSEMBLY, FRONT CROSS (GRAY)	036101-1	1

5 Replacement Parts

Lower Frame

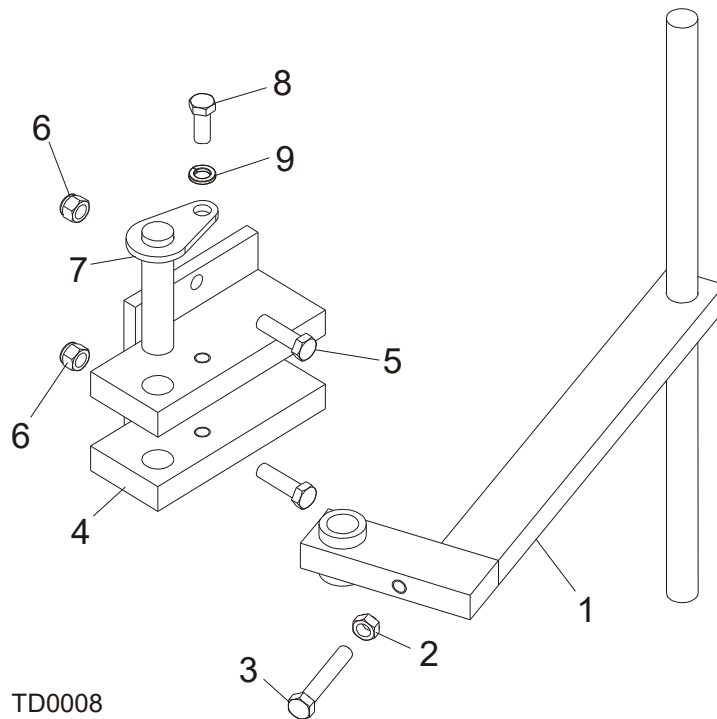
3	Tube Weldment, Cross (Orange)	034113	1	
	Tube Weldment, Cross (Gray)	034113-1	1	
4	Plate, Rubber Bolt	034158	5	
5	Stop, Bottom Rubber	034153	5	
6	Bolt, 3/8-16 X 1" Socket Head	F05007-52	10	
7	Bolt, 1/2-13 x 1 1/4" Hex Head Grade 5	F05008-37	6	
8	Nut, 1/2-13 Hex Nylon Lock	F05010-8	6	
9	Plate, Serial Number ID	S20038	1	
10	MOUNT WELDMENT, END ROLLER	034156 ²	1	◆
11	ROLLER, 2 1/2" X 18" PAINTED	038168 ³	1	
12	BOLT, 1/2-13 X 1 3/4" HEX HEAD GRADE 5	F05008-88	4	
13	NUT, 1/2-13 NYLON HEX LOCK	F05010-8	4	
14	LEG, WELDMENT, RIGHT ADJUST BASE	W21342-1	1	
15	LEG WELDMENT, LEFT ADJUST BASE	W21342	1	
16	NUT, 1/2-13 HEX	F05010-35	2	
17	BOLT, 1/2-13 X 3" HEX HEAD FULL THREAD	F05008-7	2	
18	NUT, 1/2-20 HEX JAM	F05010-16	2	
19	BOLT, 1/2-20 X 1 3/4" HEX HEAD FULL THREAD	F05008-127	2	
20	CLAMP, 1/2 EMT COATED	P07584	4	
21	WASHER, 5/16" SPLIT LOCK	F05011-13	4	
22	BOLT, 5/16-18 X 1" HEX HEAD	F05006-1	4	

¹ Frame weldments modified Rev. A4.00. Mounting plates made thicker and larger, utilizing six mounting bolts and nuts for each plate. Stronger mounting plates eliminate possible damage caused when moving or shipping machine.

² End Roller made obsolete and no longer available (5/06).

³ Use painted roller 038168 to service in place of unpainted roller 038140.

5.6 Swing Stop



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	SWING STOP ASSEMBLY	034170 ¹	1	◆
1	Stop Weldment, Swing	034168 ¹	1	◆
2	Nut, 1/2-13 Hex	F05010-35	1	
3	Bolt, 1/2-13 X 3 Hex Head Full Thread	F05008-7	1	
4	Mount Weldment, Swing Stop	034169 ¹	1	◆
5	Bolt, 1/2-13 x 1 3/4" Hex Head Grade 5	F05008-88	2	
6	Nut, 1/2-13 Hex Nylon Lock	F05010-8	2	
7	Pin Weldment, Swing Stop Mount	042232 ²	1	
8	Bolt, 1/2-13 x 1 1/4" Hex Head Grade 5	F05008-37	1	
9	Washer, 1/2" Split Lock	F05011-9	1	

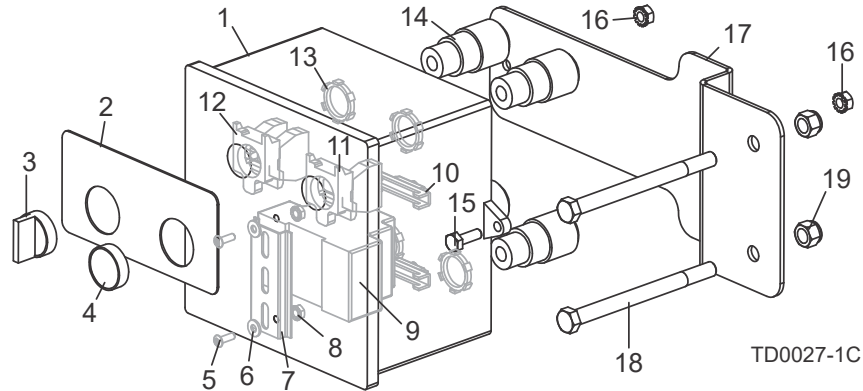
¹ Swing Stop Assembly and Parts made obsolete and are no longer available (5/06).

² Replaces 034166 originally supplied (duplicate parts).

5 Replacement Parts

Control Box

5.7 Control Box



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	CONTROL MODULE, TRANSFER DECK	036096	1
	Control Box Assembly, Transfer Deck	050184	1
1	Enclosure, 6 X 6 X 4 Plastic	050183	1
2	Decal, Transfer Deck Control	052278 ¹	1
	Decal, Transfer Deck Control (Gray)	050242 ²	1
3	Switch Head, Transfer Deck Table Lift	050199	1
4	Switch Head, 22mm Mom Flush Blue XB4	050197	1
5	Bolt, #8-32 x 1/2" Socket Button Head Stainless Steel	F05004-64	2
6	Washer, #8 SAE Flat	F05011-41	2
7	Rail, 35mm x 7.5mm x 3" DIN	024474-3	1
8	Nut, #8-32 Self-Locking	F05010-41	2
9	Power Supply, 24VDC 1.0A Switcher	050365	1
10	Clamp, DIN Rail	E22707	2
11	Switch Body, 1 NO 22mm XB4	025242 ²	1
12	Switch Body, 22mm 1 NO 1 NC 24V ZB4	050527 ³	1
13	Nut, 1/2" #141 Lock	E20461	4
14	Connector, Flex .125-.375 Cord 1/2 Hub	E23492	4
15	Bolt, 1/4-20 X 3/4" Hex Head	F05005-1	2
16	Nut, 1/4-20 Hex	F05010-9	2
	Cable, 5M Form A DIN 24VDC w/LED PUR Lift Cable	024923	1
	Cable, 10M Form C DIN 24VDC w/LED PUR Kicker Cable	025233	1
17	Bracket, Control Box Mount	050178	1
18	Bolt, 3/8-16 X 4 3/4" Hex Head Grade 5	F05007-109	2
19	Nut, 3/8-16 Hex Nylon Lock	F05010-10	2

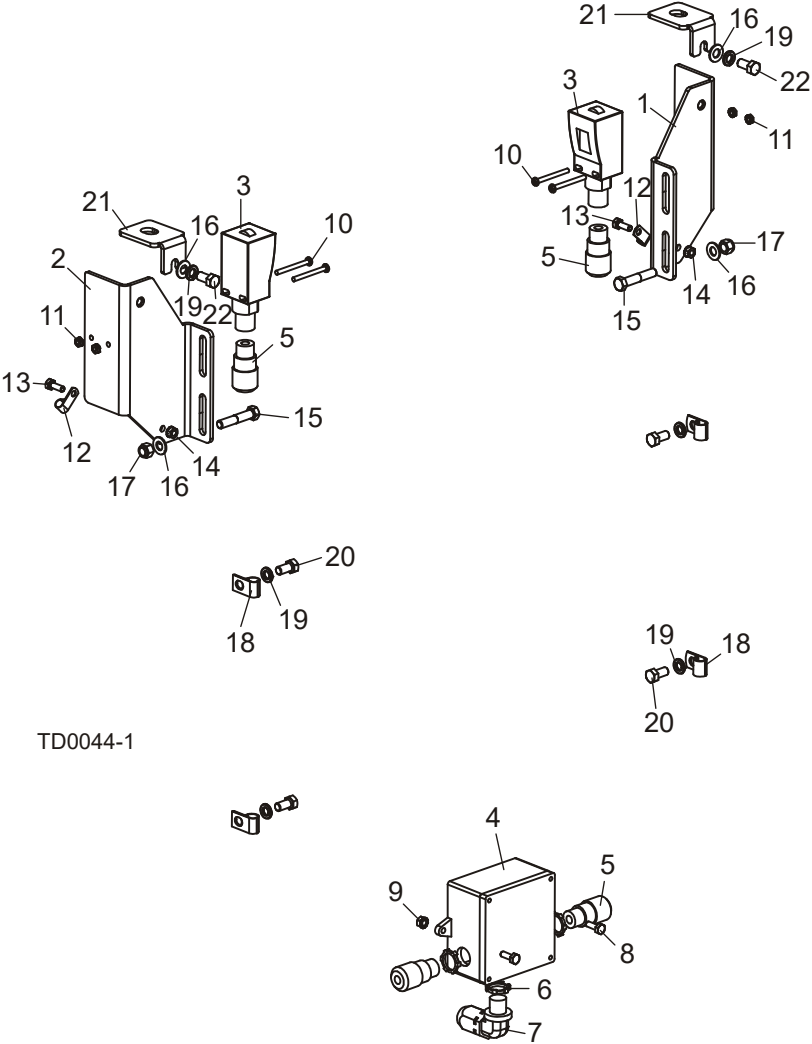
¹ AWMV decal 052278 replaces decal 050242 originally supplied prior to Rev. A1.01.

² Replaces 050153 (duplicate parts).

³ Replaces 050198 originally supplied prior to 4/03 (duplicate part numbers).

5.8 Photo Sensors

TD1 Retrofit



TD0044-1

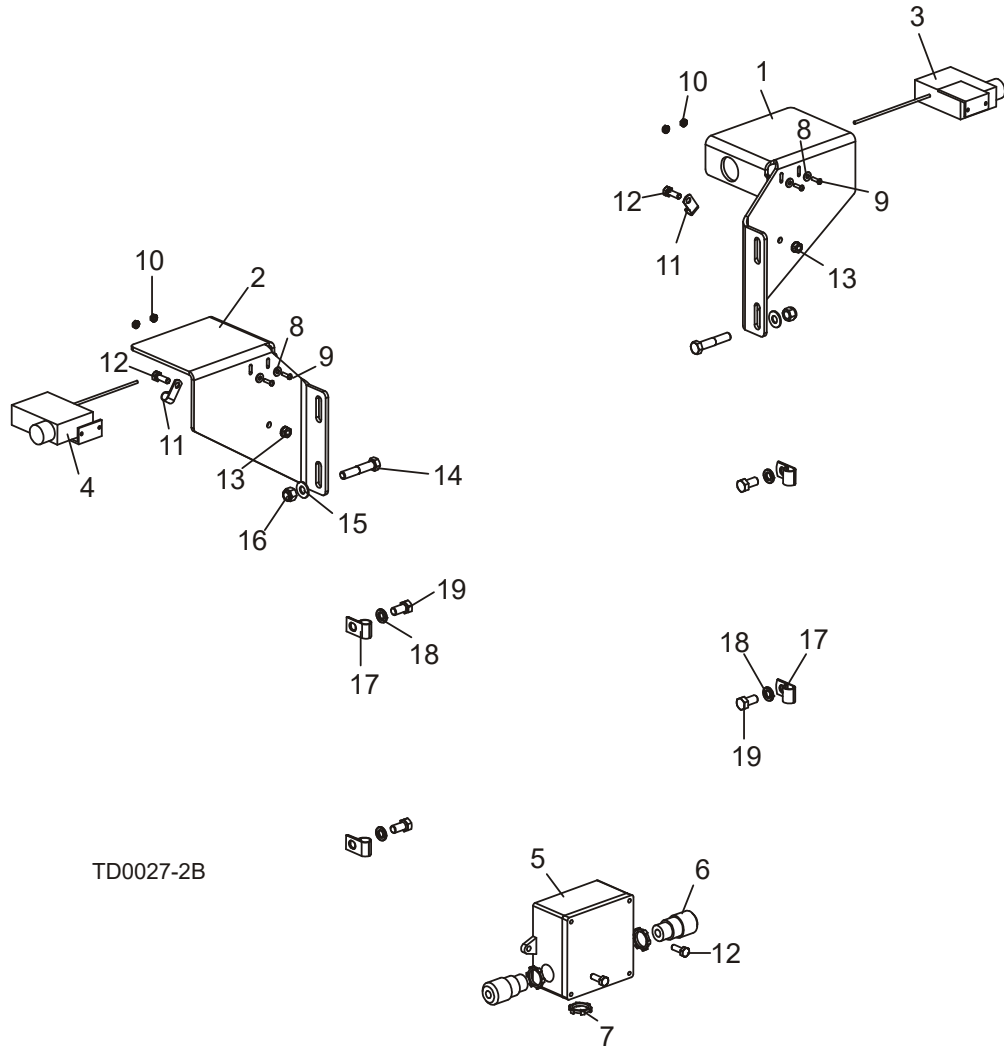
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	CONTROL SYSTEM, TRANSFER DECK ELECTRIC	050076	1
1	Bracket, Photo Sensor Mount Left	006316	1
2	Bracket, Photo Sensor Mount Right	006317	1
	Sensor Assembly, Transfer Deck Control	053126	1
3	Sensor, 240V 3A Photoelectric Receiver/Transmitter	053125	1
4	Box, 4x4x2 Plastic Enclosure	050179	1
5	Connector, Flex Str. .125-.375 Cord 1/2 Hub	E23492	4
6	Nut, 1/2" #141 Lock	E20461	3
7	Connector, Flex 90° .125-.375 Cord 1/2 Hub	050202	1
8	Bolt, 1/4-20 x 3/4" Hex Head Full Thread	F05005-1	2

5**Replacement Parts***Photo Sensors*

9	Nut, 1/4-20 Self-Locking Hex	F05010-9	2	
	Junction Block, 3-Position Wire Clamp	052293	3	
10	Screw, #10-24 x 2" Phillips Pan Head	F05004-229	4	
11	Nut, #10-24 Self-Locking Hex	F05010-14	4	
12	Clamp, 3/8" Cable 1/4" Mount	050201	2	
13	Bolt, 1/4-20 x 3/4" Hex Head Full Thread	F05005-1	2	
14	Nut, 1/4-20 Self-Locking Hex	F05010-9	2	
15	Bolt, 3/8-16 x 2" Hex Head Grade 5	F05007-124	2	
16	Washer, 3/8" SAE Flat	F05011-3	4	
17	Nut, 3/8-16 Hex Nylon Lock	F05010-10	2	
18	Clamp, 1/4" Cable 13/32" Mount	024155	4	
19	Washer, 3/8" Split Lock	F05011-4	6	
20	Bolt, 3/8-16 x 3/4" Hex Head	F05007-27	4	
21	Cap, Sensor Mount	006315	2	
22	Bolt, 3/8-16 x 3/4" Hex Head Grade 5	F05007-118	2	

5.9 Photo Sensors

TD1 Rev. A1.00 - A4.00



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	CONTROL SYSTEM, TRANSFER DECK ELECTRIC	050076 ¹	1	
1	Bracket, Photo Sensor Receiver Mount	050079	1	
2	Bracket, Photo Sensor Transmitter Mount	050080	1	
	Sensor Assembly, Transfer Deck Control	050200 ¹	1	◆
3	Sensor, Photo Receiver	050083 ¹	1	◆
4	Sensor, Photo Transmitter	050082 ¹	1	◆
5	Box, 4x4x2 Plastic Enclosure	050179	1	
6	Connector, Flex Str. .125-.375 Cord 1/2 Hub	E23492	2	
7	Nut, 1/2" #141 Lock	E20461	3	

5**Replacement Parts***Photo Sensors*

	Connector, Flex 90° .125-.375 Cord 1/2 Hub	050202	3	
8	Washer, #8 SAE Flat	F05011-41	4	
9	Screw, #6-32 x 1/2" Slotted Round Head	F05015-24	4	
10	Nut, #6-32 Self-Locking Hex	F05010-59	4	
11	Clamp, 3/8" Cable 1/4" Mount	050201	2	
12	Bolt, 1/4-20 x 3/4" Hex Head Full Thread	F05005-1	4	
13	Nut, 1/4-20 Self-Locking Hex	F05010-9	2	
14	Bolt, 3/8-16 x 2" Hex Head Grade 5	F05007-124	2	
15	Washer, 3/8" SAE Flat	F05011-3	2	
16	Nut, 3/8-16 Hex Nylon Lock	F05010-10	2	
17	Clamp, 1/4" Cable 13/32" Mount	024155	4	
18	Washer, 3/8" Split Lock	F05011-4	4	
19	Bolt, 3/8-16 x 3/4" Hex Head	F05007-27	4	

¹ Photo Sensor/Receiver 050083 & Transmitter 050082 discontinued by vendor. Replaced with new combined 2-sensor unit 050076 used since 6/08. ([See Section 5.8](#)).

SECTION 6 ELECTRICAL INFORMATION

6.1 Electrical Diagrams

See Figure 6-1. Retrofit: The electrical diagram is shown below.

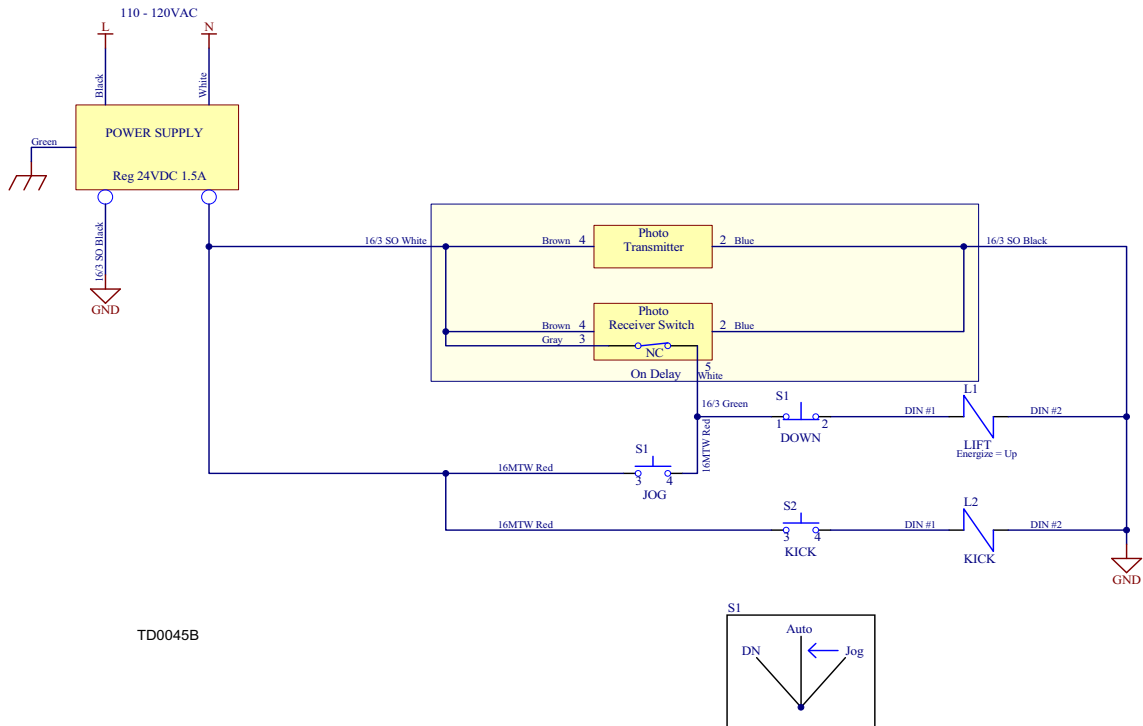


FIG. 6-1

6

Electrical Information Electrical Component List

See Figure 6-2. Rev. A1.00 - A4.00: The electrical diagram is shown below.

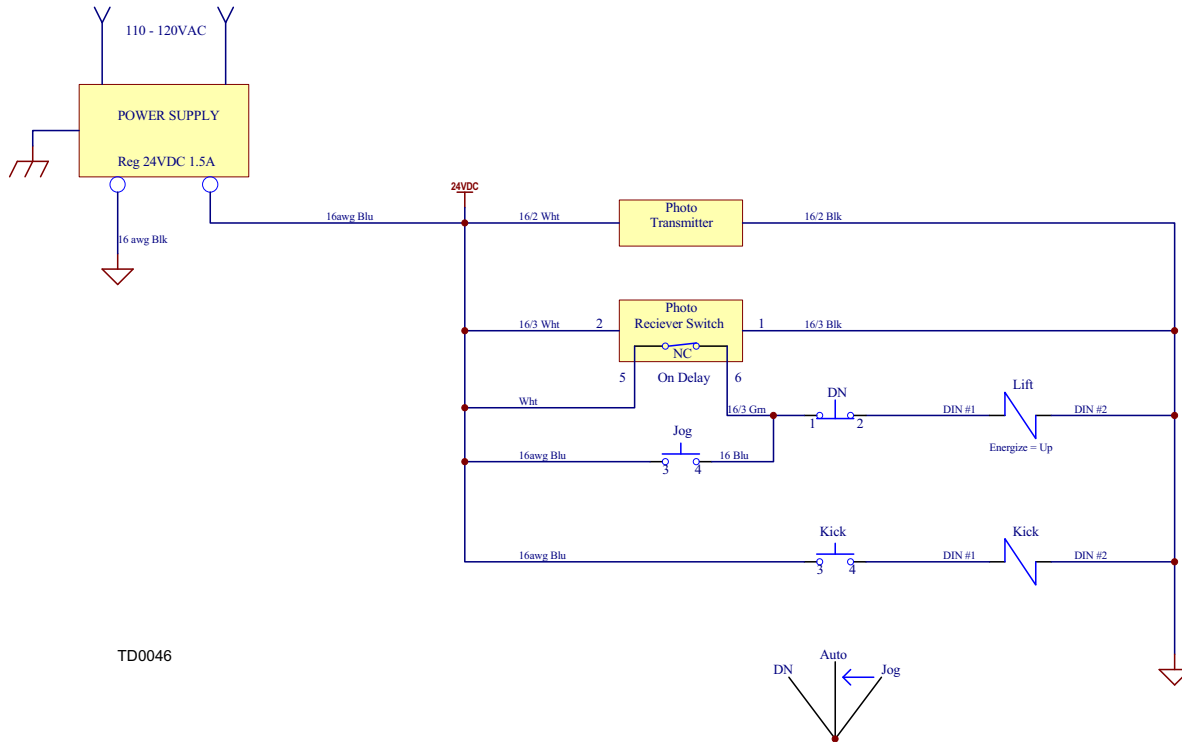


FIG. 6-2

6.2 Electrical Component List

Component	Part No.	Description
L1 (Lift)	042659	Solenoid Assembly, Transfer Deck (Lift Valve)
L2 (Kick)	050159	Valve, Solenoid 24V DC 5.4W
Power Supply	050365	Power Supply, 24VDC 1.0A Switcher
Photo Transmitter/ Receiver	053125	Sensor, 240V 3A Photoelectric (Receiver/Transmitter)
S1 (Lift)	050199	Switch Head, 22 mm 2 Man 1 Mom Toggle
	050527	Base, 1 NC 1 NO Contact ZB4
S2 (Kick)	050197	Switch Head, 22mm Mom Flush Blue ZB4
	025242	Switch Body, 1NO 22mm ZB4

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