

**Safety, Operation, Maintenance &  
Parts Manual**

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**TWC**

**rev. A6.00**

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***Safety is our #1 concern!***

*Form #1207*

**Models Effected:**

TWC, Three Way Conveyor, 9' Drive, Standalone

TWC-EXT, Three Way Conveyor, 9' Extension Deck



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

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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.



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### OBSERVE SAFETY INSTRUCTIONS



**IMPORTANT!** Read the entire Operator's Manual before operating the 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 deck. The 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 DECK AND AREA AROUND 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 DECK SETUP



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

### CHECK DECK BEFORE OPERATION



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

**WARNING!** Keep hands away from area underneath the table top. Serious injury may result.

### 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.

# **1** Safety

## *Safety Instructions*

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**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 SETUP & OPERATION

### 2.1 Overview

The Three-Way Deck allows you to quickly route finished material and unfinished cants to the desired paths of your processing system. The following manual will guide you in installation, operation, and maintenance of the Three-Way Deck.

Three configurations of the Three-Way Deck are available. The decks can be combined to suit your processing system.

#### 2.1.1 Specifications

See **Figure 2-1**. The specifications of the Three-Way Deck (TWC) are shown below.

#### **Model: TWC-1, TWC-2, TWC-EXT Rev. A1.00+**

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##### **Dimensions:**

Length (per table): 9'-1 3/4"  
 Width: 3'- 6 3/4"  
 Height (Table Down): 2'-11 5/16" min. - 4'-2 5/16" max. (up to 15" leg adjustment)  
 Height (Table Up): 4'-6 3/16" min. - 5'-9 3/16" max. (up to 15" leg adjustment)  
 Height (Ground To Top of Roller): 2'-9 1/2" min. - 3'-11 1/2" max.

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##### **Weight:**

Basic Unit: lbs.

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##### **Drive Motor:**

2HP 230/460V 3 Phase

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##### **Capacity:**

Per 9' table w/standard 2 air cylinders: 1000 lbs.  
 Per 9' table w/optional 3 air cylinders: 1400 lbs.

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##### **Electrical Requirements:**

Electrical Service: 460V 30A 3 Phase  
 Fused Disconnect: 30A  
 Time Delay Fuse: 5A  
 Suggested Wire Size (50' max.): 16AWG

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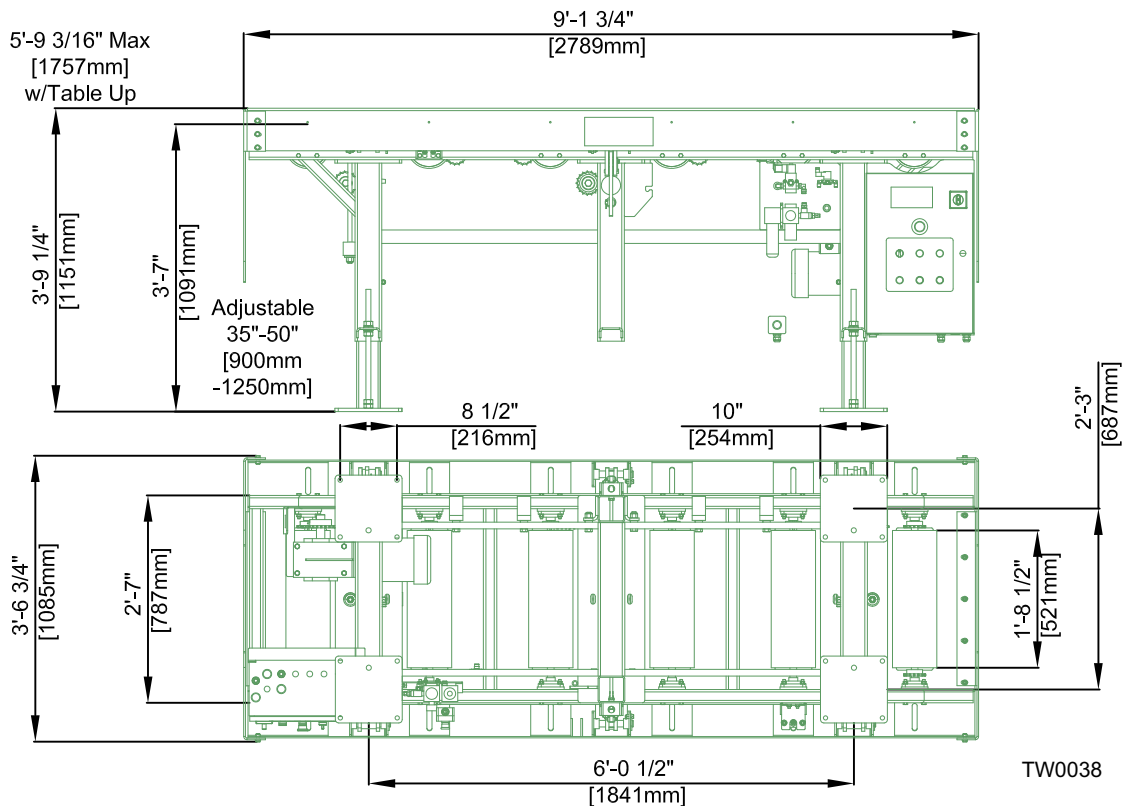
##### **Air Requirements:**

Shop Air Supply: Regulated @ 100 psi  
 1.44 cfm required per air cylinder (2 per table standard, 3 per table optional)  
 Minimum 50 gal. reserve tank and 3/4" supply line required.

**FIG. 2-1**

### 2.1.2 Dimensions

See **Figure 2-2**. The overall dimensions of the Three-Way Deck (TWC) are shown below.



**FIG. 2-2**

See **Figure 2-3**. A single TWC deck can be used to route material up to 9 feet long in three directions. A TWC-EXT deck can be attached to increase the capacity up to 18 feet long. The TWC-OP deck control can be mounted to the stand to operate the deck from the processing line. The control can also be installed at the sawmill operator location to allow the sawmill operator to control deck operation (requires Auxiliary E-Stop kit 053395).



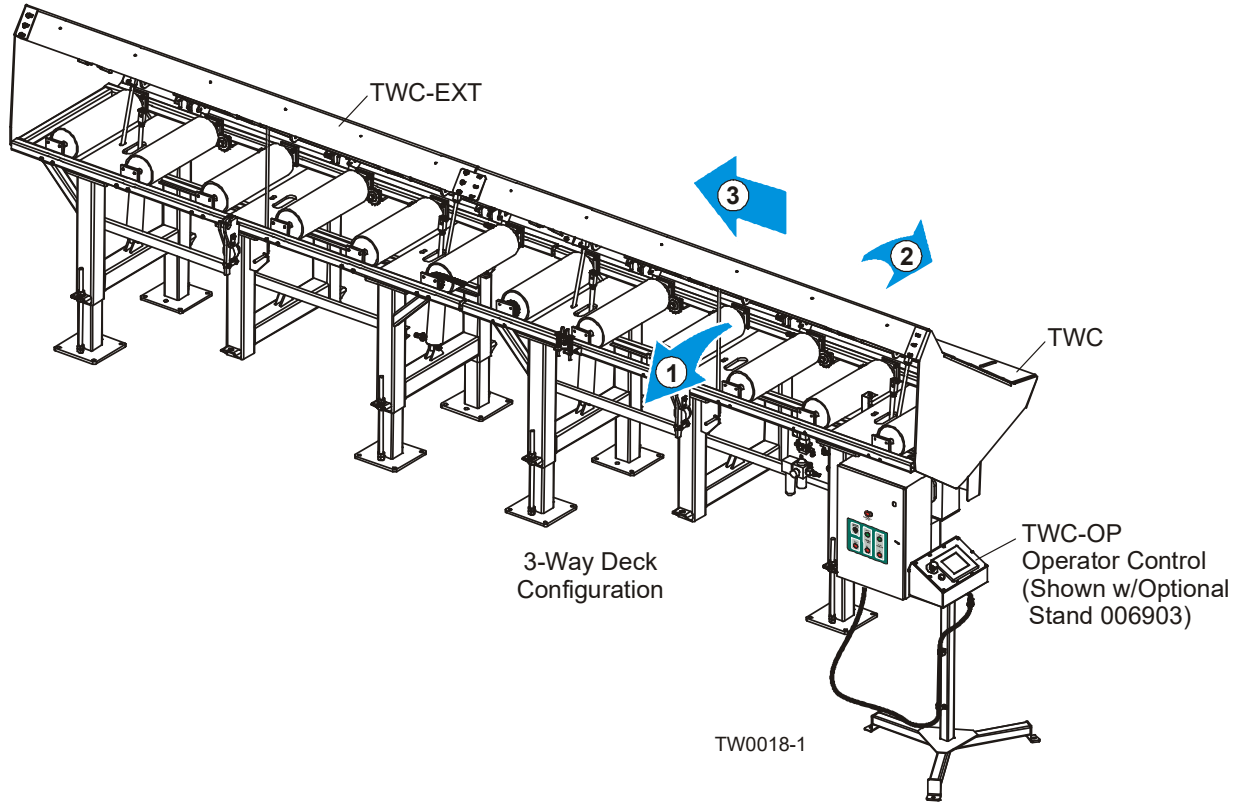
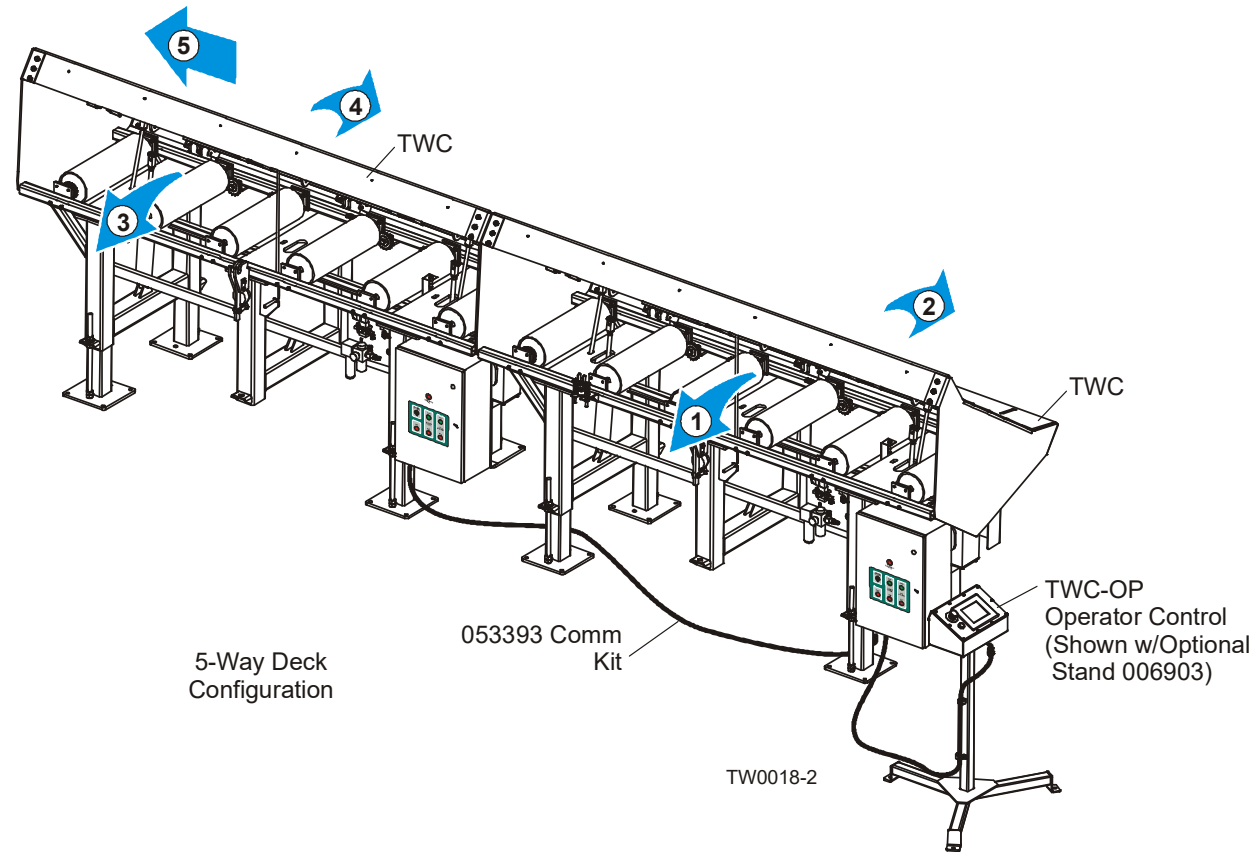


FIG. 2-3

## 2 Setup & Operation

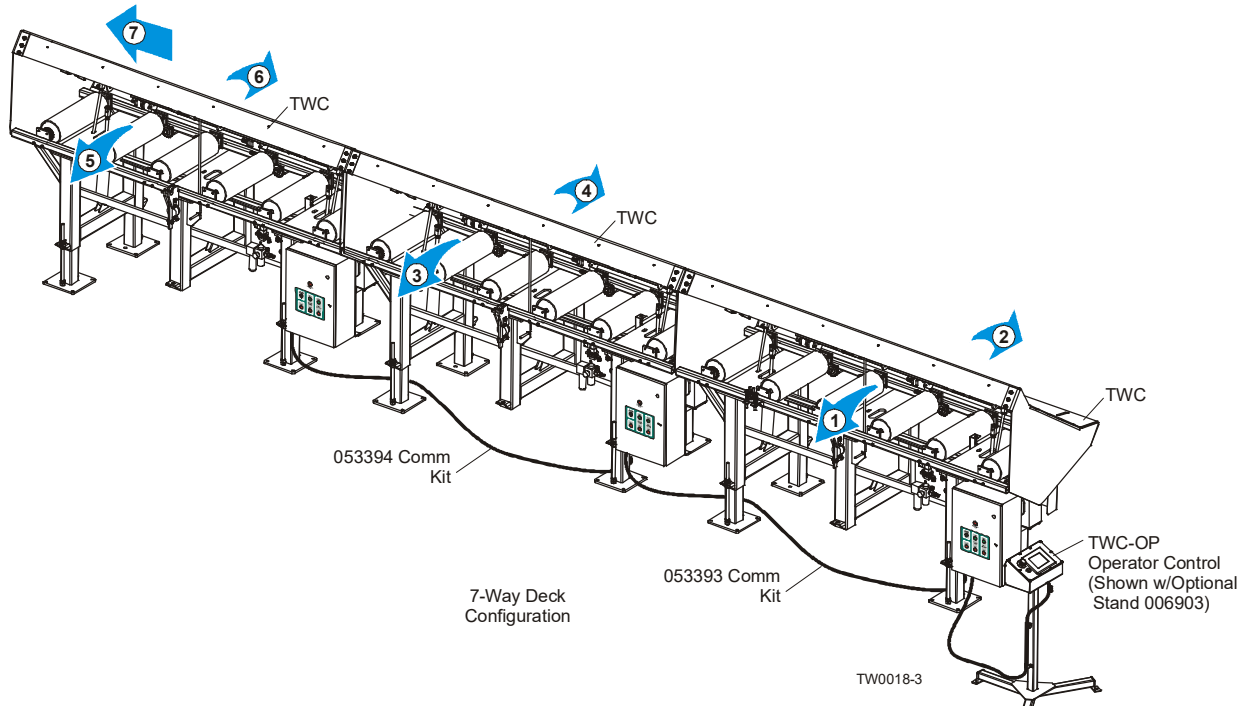
### Overview

See **Figure 2-4**. A second TWC deck can be added to route material up to 9 feet long in five directions. A TWC-EXT deck can be attached to each deck to increase the capacity up to 18 feet long.



**FIG. 2-4**

See **Figure 2-5**. A third TWC deck can be added to route material up to 9 feet long in seven directions. A TWC-EXT deck can be attached to each deck to increase the capacity up to 18 feet long.




**FIG. 2-5**

## 2.2 Installation

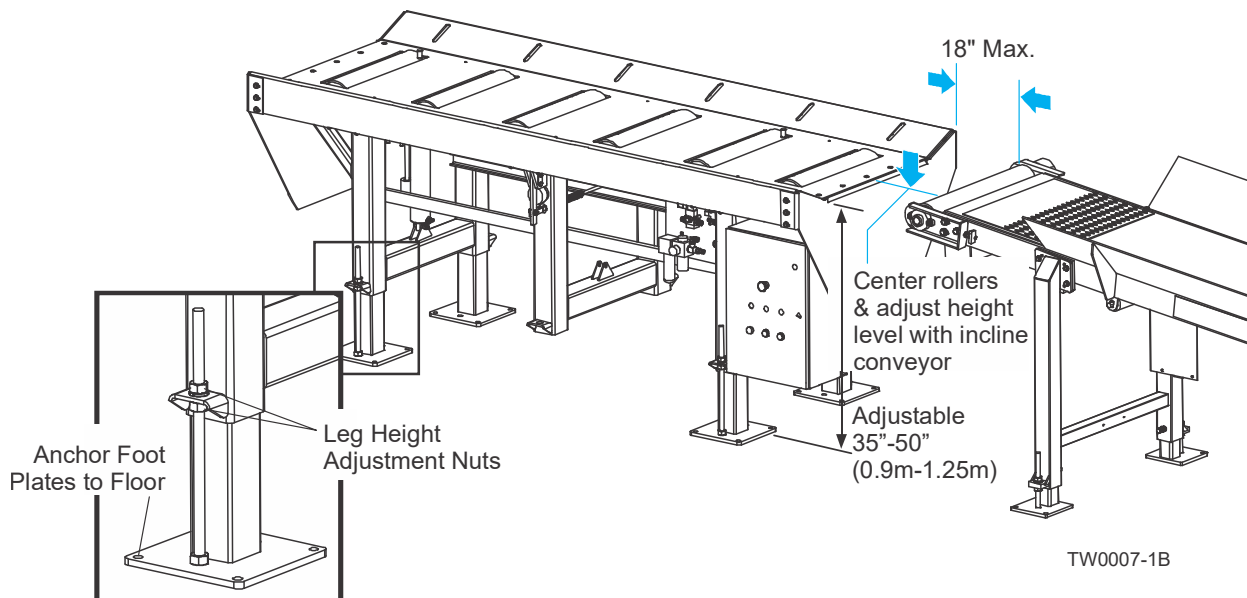
### 2.2.1 First Deck Position

Prepare a firm, level area where the deck can be anchored next to the incline conveyor. A cement pad with 1/2" diameter anchor bolts is recommended.

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

Position the first Three-Way Deck inline with the Incline Conveyor. The end of the deck should be no further than 18" from the outfeed roller on the Incline Conveyor. Position the deck so the rollers are centered with the Incline Conveyor roller.

See Figure 2-6.



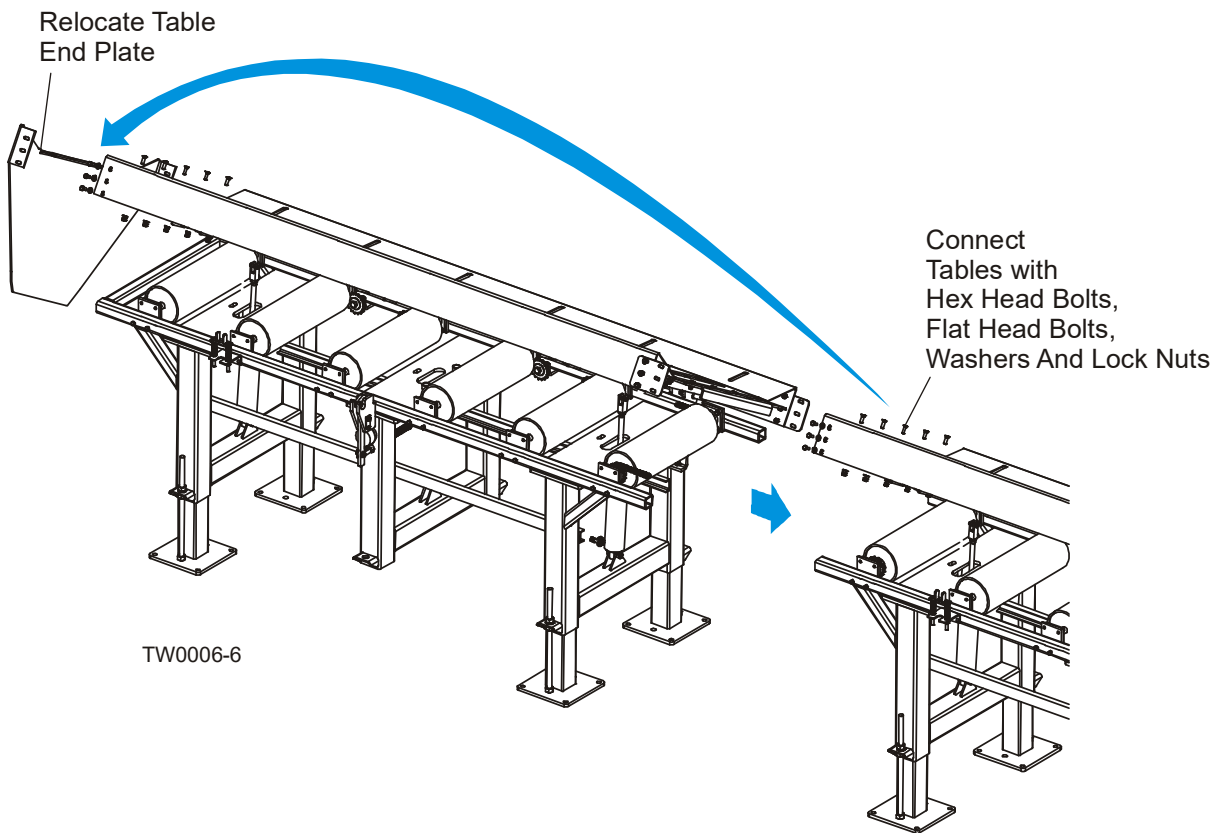
**FIG. 2-6**

Adjust the table legs so the height of the three-way table is level with the height of the incline conveyor. To adjust the legs, turn the adjustment nuts to raise or lower the leg as desired. Tighten the adjustment nuts when the adjustment is complete.

Secure the table to the floor with 1/2" anchor bolts. Use at least two anchors in each foot plate.

### 2.2.2 Table Extension Installation (Optional)

See **Figure 2-7**. Remove the table end plate from the primary deck and install it to the rear of the extension deck. Position the extension deck behind the primary deck and align the connecting plate holes with the primary deck table holes. Adjust the extension deck legs if necessary to the same height as the primary deck. Secure the tables together with the previously removed connecting plate bolts. Secure the tables to the floor with 1/2" anchor bolts. Use at least two anchors in each foot plate.



**FIG. 2-7**

See **Figure 2-8**. Locate the 3/8" and 1/4" air line 'T' fittings extending from the extension table. These fittings will be spliced into the air lines of the primary table. Install the 3/8" 'T' fitting to the 3/8" air line on the primary table near the rear table lift cylinder. Cut the air line approximately 3 feet from the cylinder fitting and insert each end into the extension table 'T' fitting. Install the 1/4" 'T' fitting to the 1/4" air line on the primary table near the air bag cylinder. Cut the air line approximately 2 feet from the air bag fitting and insert each end into the extension table 'T' fitting. Secure all air lines away from moving parts of the tables to avoid damage.

## 2

### Setup & Operation

#### Second/Third Deck Position (Optional)

Separate the master link of the #50 x 45" roller chain located around the front roller sprocket of the extension table. Route the chain around the rear roller sprocket of the primary table and reinstall the master link.

Remove the board sensor from the bracket at the rear of the primary table and reinstall it in the bracket at the rear of the extension table. Secure the sensor cable out of the way of moving parts to avoid damage.

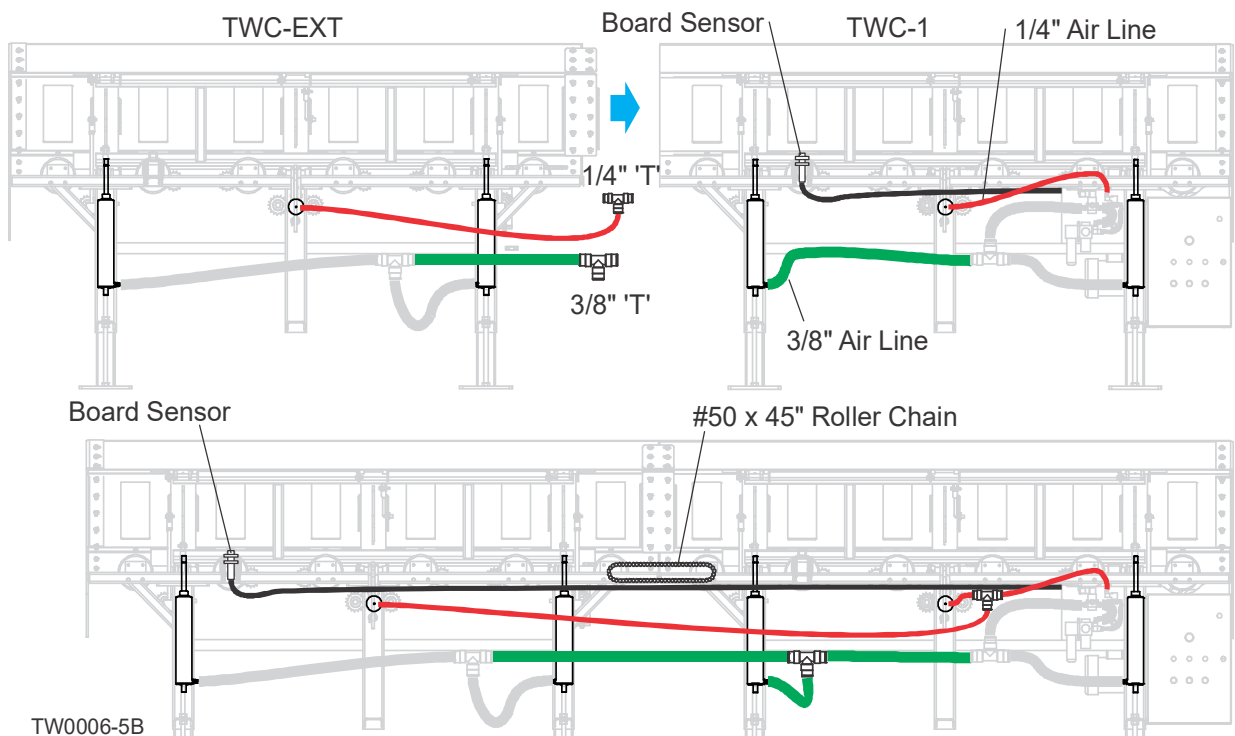


FIG. 2-8

#### 2.2.3 Second/Third Deck Position (Optional)

Up to three decks can be installed inline. If extension tables (TWC-EXT) are to be used, install the extensions to the primary tables as described in [Section 2.2.2](#). Place the second deck at the end of the first deck with about 1" of space in between decks.

Adjust the table legs so the height of the second deck is level with the height of the first deck. To adjust the legs, turn the adjustment nuts to raise or lower the leg as desired. Tighten the adjustment nuts when the adjustment is complete.

Secure the table to the floor with 1/2" anchor bolts. Use at least two anchors in each foot plate.

Repeat for the third deck at the end of the second deck, if applicable.

**2.2.4 Electrical/Air 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.

**Have a qualified electrician install the power supply before receipt of your machine.** The power supply must meet the provided specifications concerning wire size, fused disconnect, and voltage. The electrical installation must also meet local codes.

**See Table 2-1.** Install a fused disconnect switch for each deck control within sight of the machine. Typical minimum switch, fuse, and wire sizes are shown. All electrical installation must meet local electrical codes. Fuses are sized for short-circuit protection only.

3-Phase Volts	Fuse Disconnect	Time Delay Fuse	Suggested Wire Size
460 VAC	30 Amps	5 Amps	16AWG up to 50'

**TABLE 2-1**

**See Table 2-2.** The TWC electrical specifications are shown below.

Model	FLA of Largest Load	FLA	IR (AIC)	SCCR	Voltage	Hz	Phase
TWC	3.1A	3.1A	25kA	5kA	460V	60	3

**TABLE 2-2**

**IMPORTANT!** The TWC is wired for use with a 460 volt power supply. To operate the TWC with 240V, 400V or 600V power supplies an additional transformer is required. See the table below for transformers available from Wood-Mizer. All transformers are manufactured by Square D.

**See Table 2-3.**

Conversion From/To	240 to 480 volts	400 to 480 volts	600 to 480 volts
Wood-Mizer Part No.	078203	078204	078205

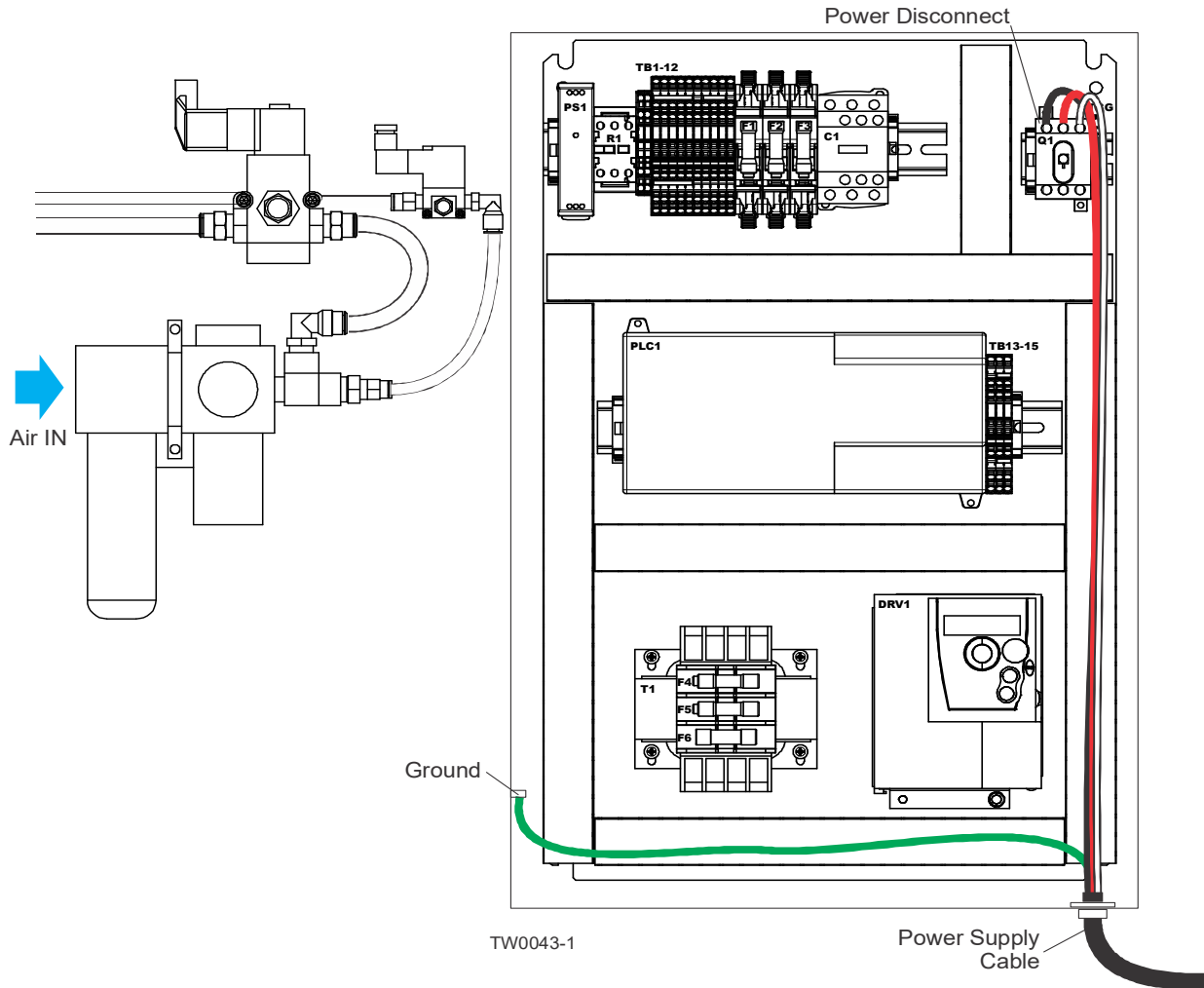
**TABLE 2-3**

# 2

## Setup & Operation

### Electrical/Air Installation

**See Figure 2-9.** Route the incoming power supply from the disconnect switch to the control box. Secure the power supply cable in the provided connector. Connect the ground wire to the ground stud in the control box. Remove the wireway covers and route the three power lines through the wireways to the disconnect block at the top of the cabinet. Repeat for each additional deck control.



**FIG. 2-9**

Install the appropriate fittings to the air system filter and connect the air supply line. The air supply should be 3 scfm per nine foot deck (4.5 scfm if equipped with optional third air cylinder). A minimum 3/4" air supply line is required.



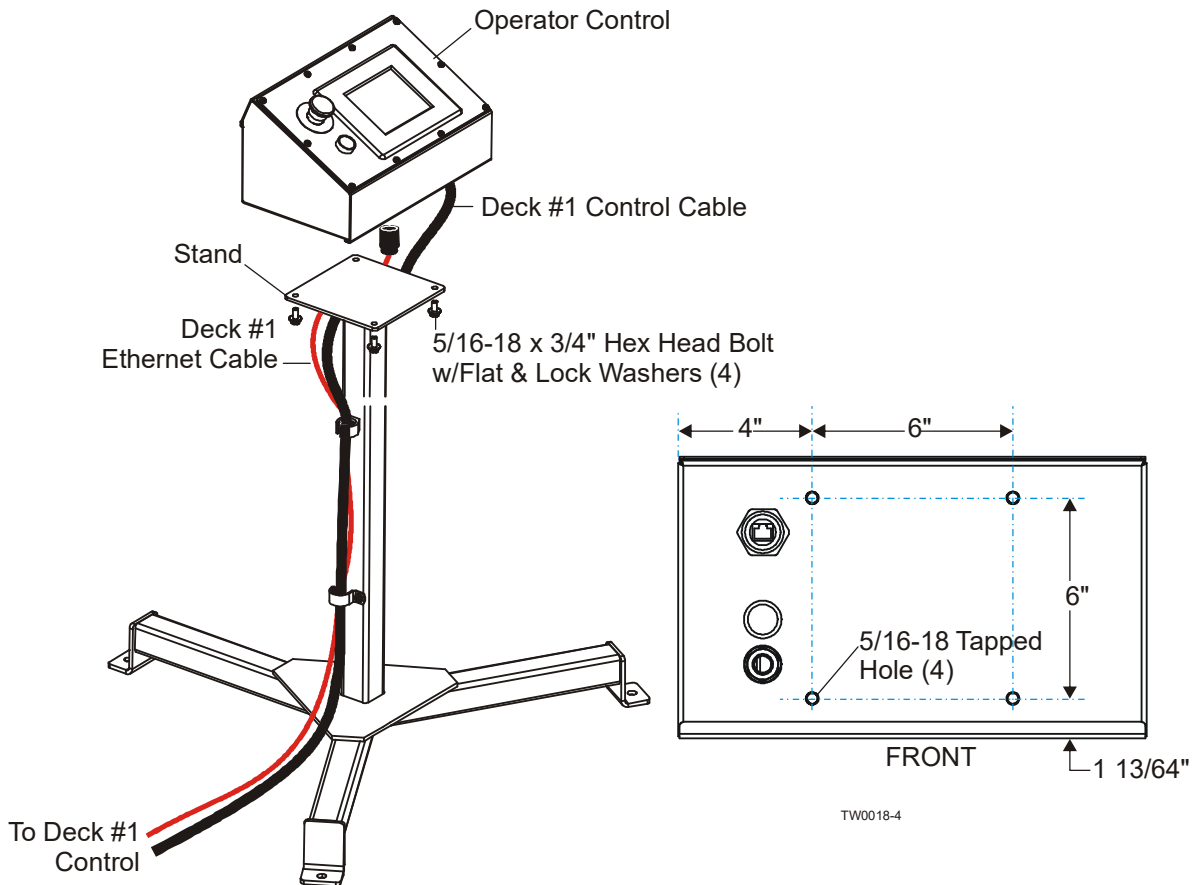
## 2.3 Control Installation

### 2.3.1 Deck #1



**DANGER!** Disconnect and lock out power supply before servicing! Failure to do so will result in shock, burns or death.

See **Figure 2-10**. Assemble the operator control to the optional stand or at the sawmill control. Mounting hole locations are provided if you wish to fabricate a mounting solution. If the operator control is to be installed at the sawmill control, installation of an Auxiliary E-Stop Harness is required to interface the 3-Way deck E-stop with the sawmill E-Stop ([See Section 2.4.4](#)).



**FIG. 2-10**

Connect one end of the provided deck #1 ethernet cable to the receptacle at the bottom of the operator control. Push the connectors together and twist the outer housing to lock together. Route the ethernet and control cables down toward the first three-way deck control box. If using the optional operator control stand, secure the cables in the clamps on the stand post.

# 2

## Setup & Operation

### Deck #1

See Figure 2-11. Plug the ethernet cable into connector J1 in the bottom of the control box.

Remove the hole plug in the bottom of the deck control box and route the control harness up into the box. Secure the cable to the box with the provided connector, seal and lock nut. Remove the wireway covers and route the control cable wires to terminal block bank TB13-TB15. Connect the control wires to the control components as described below.

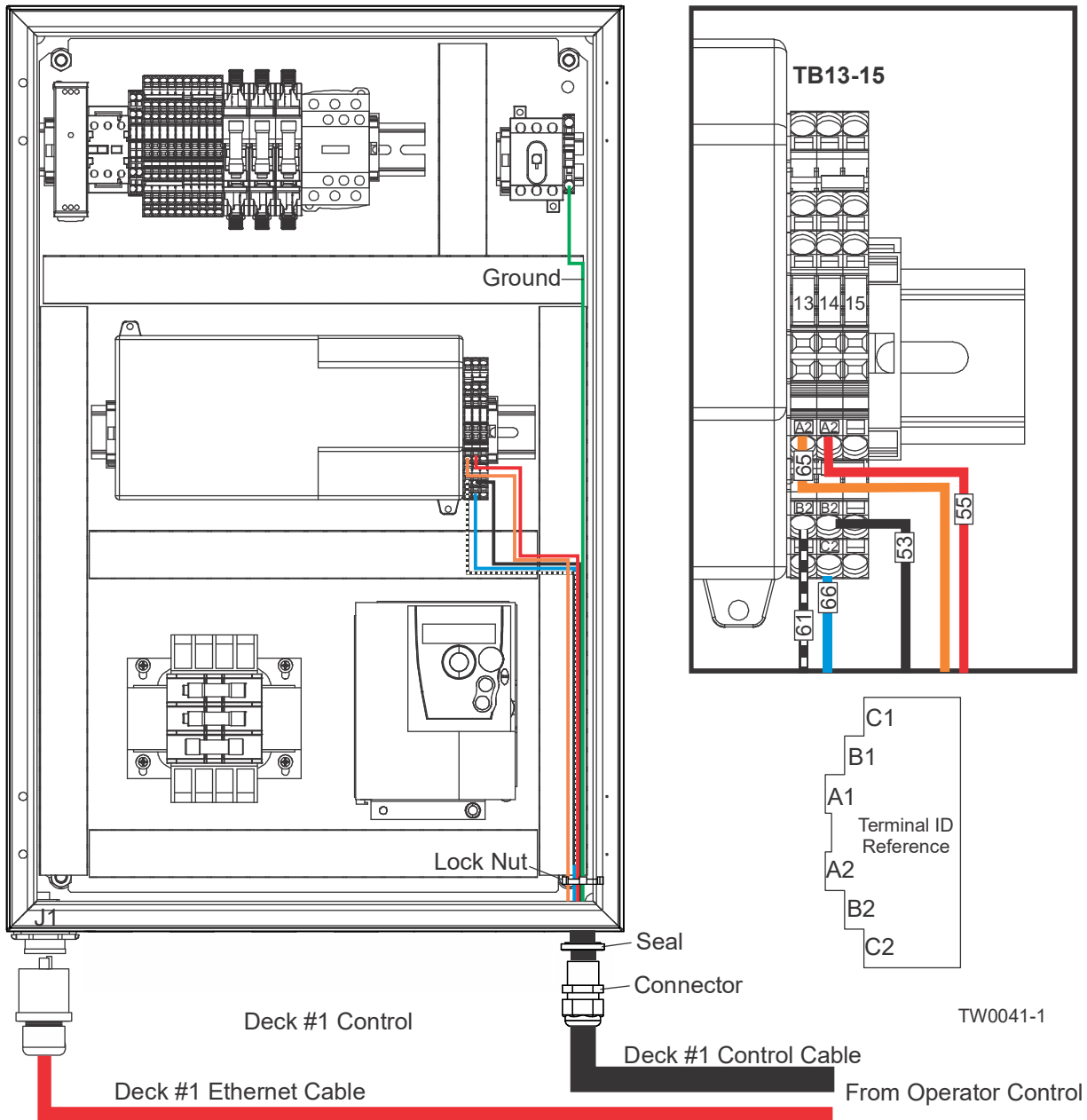


FIG. 2-11

- Connect blue wire #66 to terminal block #TB14 C2.
- Connect white/black wire #61 to terminal block #TB13 B2.
- Connect black wire #53 to terminal block #TB14 B2.
- Connect orange wire #65 to terminal block #TB13 A2.
- Connect red wire #55 to terminal block #TB14 A2.
- Connect green ground wire to the ground terminal located next to the disconnect.

Secure the control and ethernet cables out of the way of moving parts to avoid damage.

If you are installing a single 3-way configuration, replace the wireway covers and close the control box door. Refer to [Section 2.4.4](#) to install the optional auxiliary E-stop harness, if applicable.

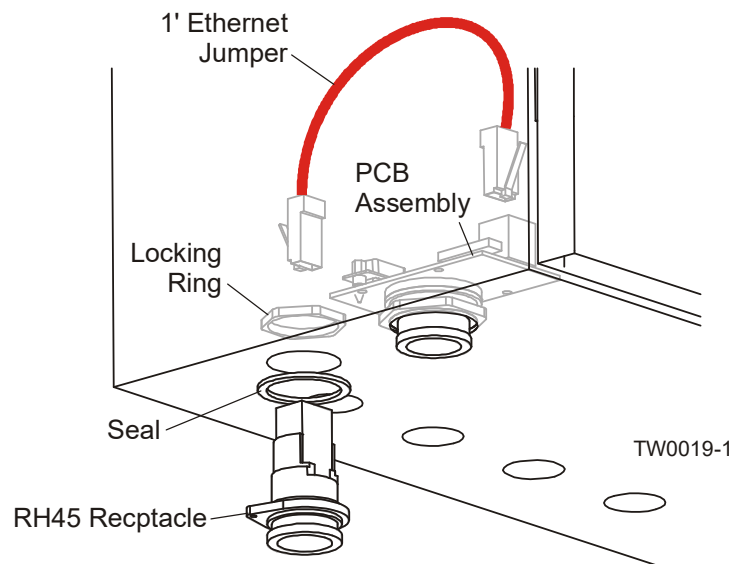
## 2.3.2 Deck #2



**DANGER!** Disconnect and lock out power supply before servicing! Failure to do so will result in shock, burns or death.

To connect a second deck control for a 5-way configuration, use the communication kit to connect the first deck control to the second deck control.

**See Figure 2-12.** Locate the plugged hole in the bottom of deck #1 control box behind the existing ethernet receptacle. Remove the hole plug and install the provided RJ45 receptacle to the port hole. Orient the receptacle with the housing and seal outside of the box and secure with the threaded locking ring. Connect the receptacle to connector "J2" on the PCB assembly with the 1' ethernet jumper cable. Plug the deck #2 ethernet cable into the receptacle.



**FIG. 2-12**

See Figure 2-13. Remove the hole plug in the bottom of deck control box #1 and route deck #2 control cable up into the box. Secure the cable to the box with the provided connector, seal and lock nut. Route the control cable wires to terminal block banks TB3-12 & TB13-TB15. Connect the control wires to the control components as described below.

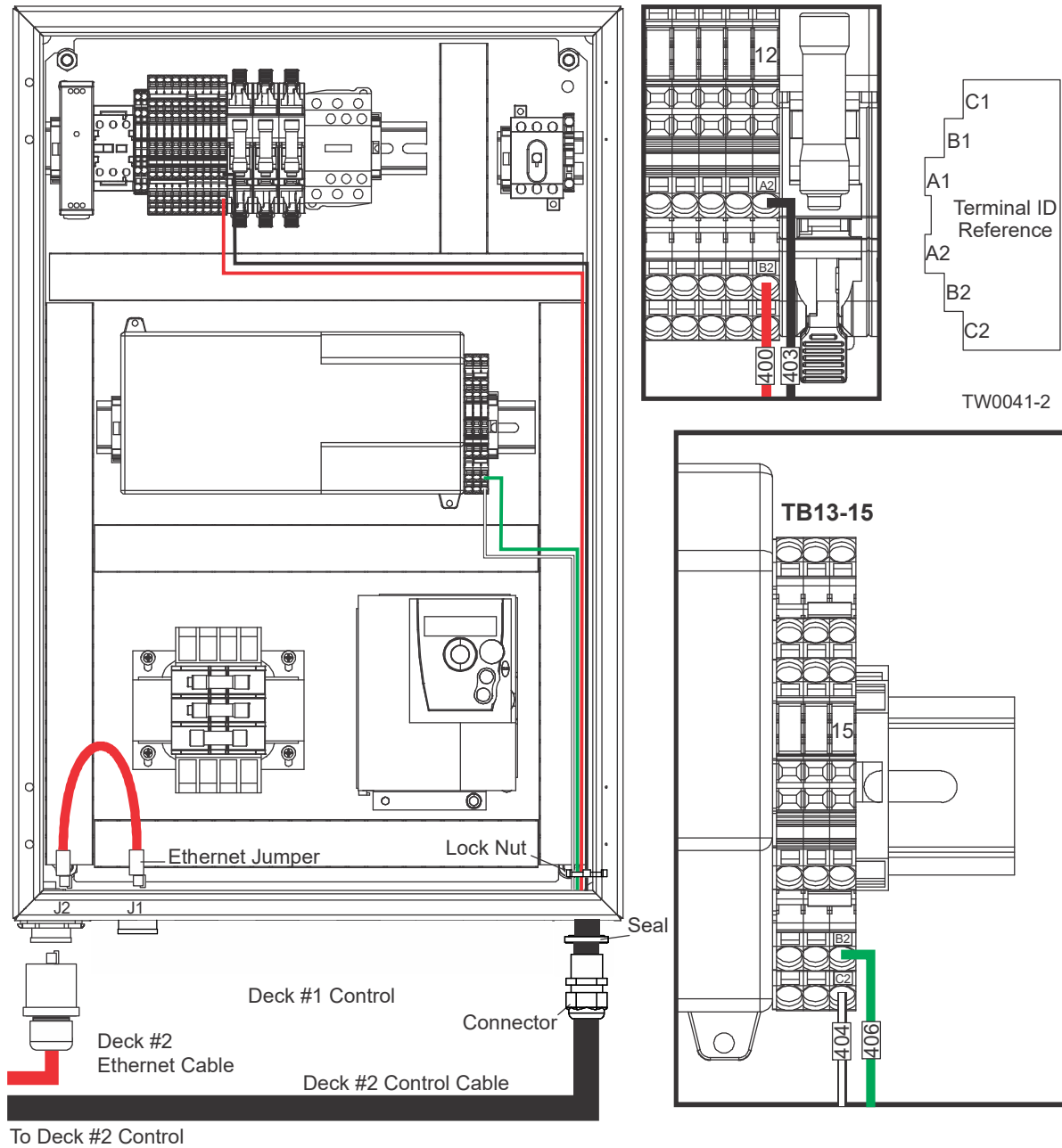


FIG. 2-13

# 2

## Setup & Operation

### Deck #2

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- Connect white wire #404 to terminal block #TB15 C2.
- Connect red wire #400 to terminal block #TB12 B2.
- Connect black wire #403 to terminal block #TB12 A2.
- Connect green wire #406 to terminal block #TB15 B2.

See Figure 2-14. Remove the hole plug in the bottom of deck control box #2 and route deck #2 control cable up into the box. Secure the cable to the box with the provided connector, seal and lock nut. Route the control cable wires to terminal block bank TB13-TB15. Connect the control wires to the control components as described below.

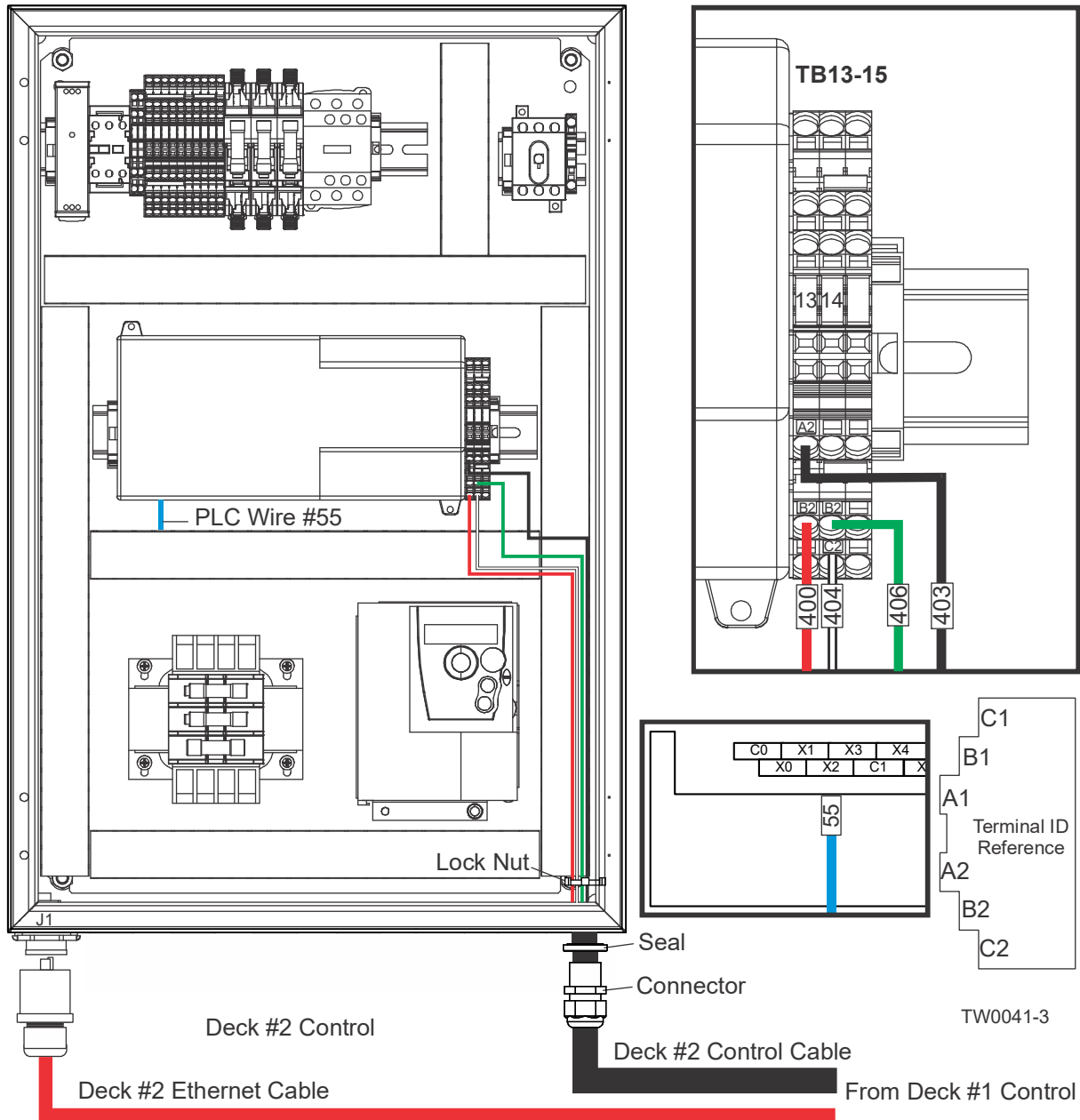


FIG. 2-14

- Connect white wire #404 to terminal block #TB14 C2.
- Connect red wire #400 to terminal block #TB13 B2.
- Connect green wire #406 to terminal block #TB14 B2.
- Connect black wire #403 to terminal block #TB13 A2.
- Move blue PLC wire #55 from terminal X1 to terminal X2.

Secure the power and ethernet cables out of the way of moving parts to avoid damage.

If you are installing a 5-way configuration, set DIP switch #9 in deck control #1 to “OFF” position ([See Section 4.5](#) for DIP switch reference).

Replace the wireway covers in both deck control boxes and close the control box doors. Refer to [Section 2.4.4](#) to install the optional auxiliary E-stop harness, if applicable.



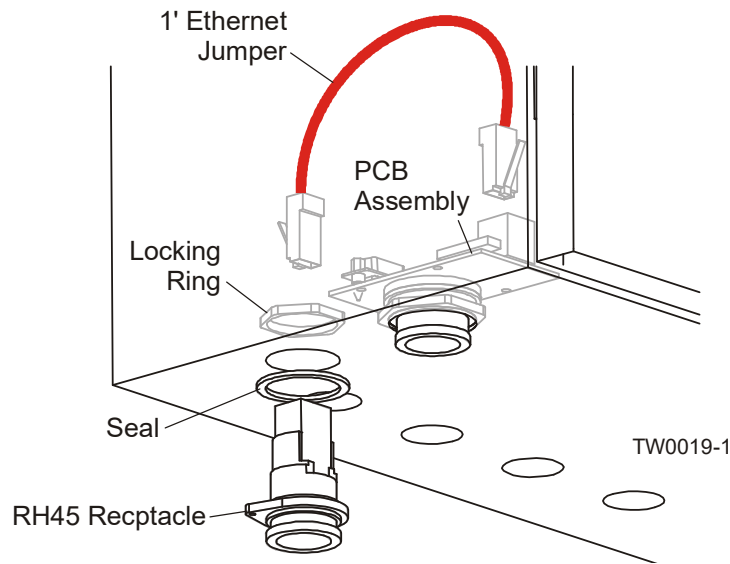
2.3.3 Deck #3



**DANGER!** Disconnect and lock out power supply before servicing! Failure to do so will result in shock, burns or death.

To connect a third deck control for a 7-way configuration, use the communication kit to connect the second deck control to the third deck control.

**See Figure 2-15.** Locate the plugged hole in the bottom of deck #2 control box behind the existing ethernet receptacle. Remove the hole plug and install the provided RJ45 receptacle to the port hole. Orient the receptacle with the housing and seal outside of the box and secure with the threaded locking ring. Connect the receptacle to connector "J2" on the PCB assembly with the 1' ethernet jumper cable. Plug the deck #3 ethernet cable into the receptacle.



**FIG. 2-15**

# 2

## Setup & Operation

### Deck #3

See Figure 2-16. Remove the hole plug in the bottom of deck control box #2 and route deck #3 control cable up into the box. Secure the cable to the box with the provided connector, seal and lock nut. Route the control cable wires to terminal block banks TB3-12 & TB13-TB15. Connect the control wires to the control components as described below.

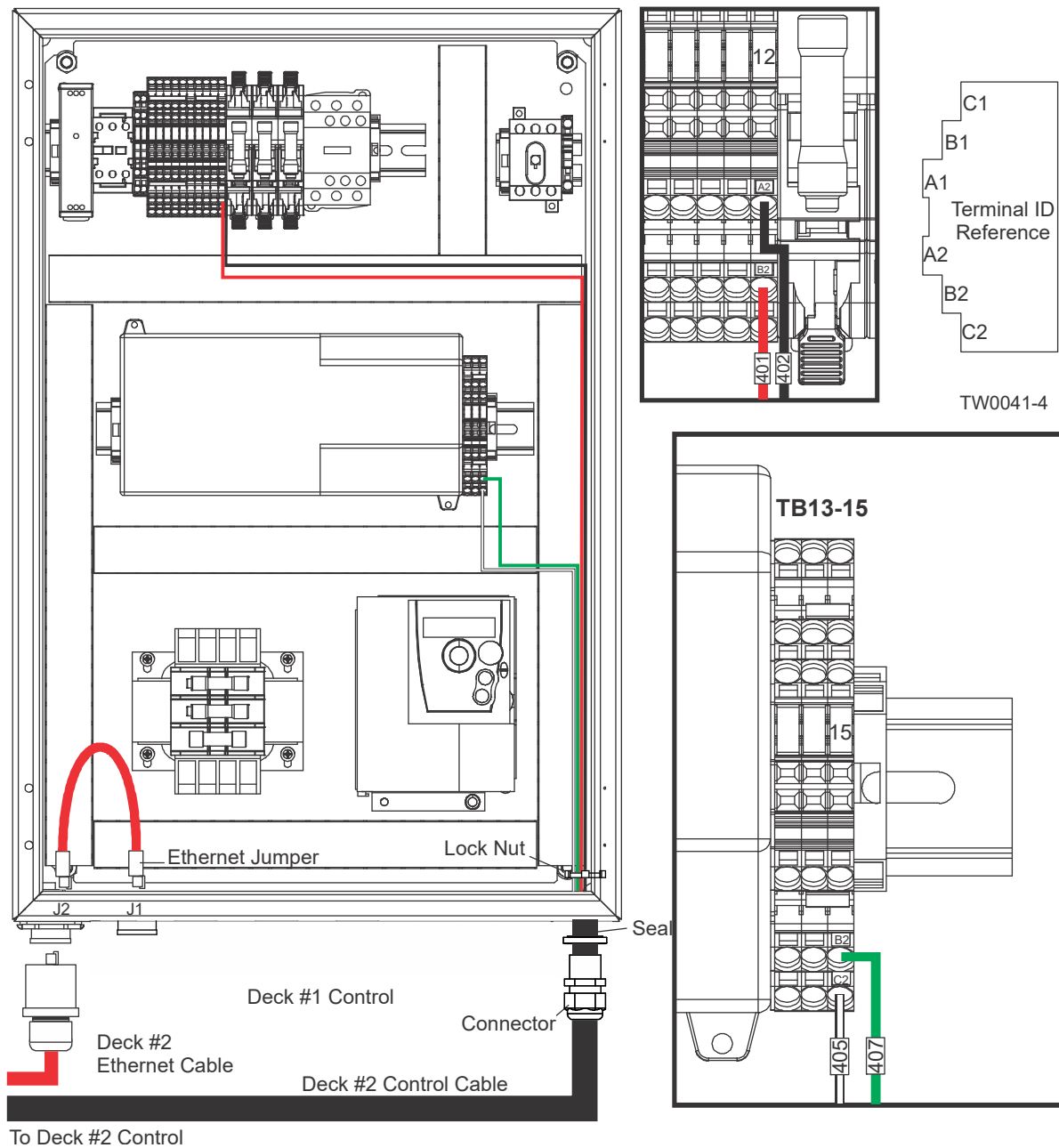


FIG. 2-16

- Connect white wire #405 to terminal block #TB15 C2.
- Connect red wire #401 to terminal block #TB12 B2.
- Connect black wire #402 to terminal block #TB12 A2.
- Connect green wire #407 to terminal block #TB15 B2.

# 2

## Setup & Operation

### Deck #3

See Figure 2-17. Remove the hole plug in the bottom of deck control box #3 and route deck #3 control cable up into the box. Secure the cable to the box with the provided connector, seal and lock nut. Route the control cable wires to terminal block bank TB13-TB15. Connect the control wires to the control components as described below.

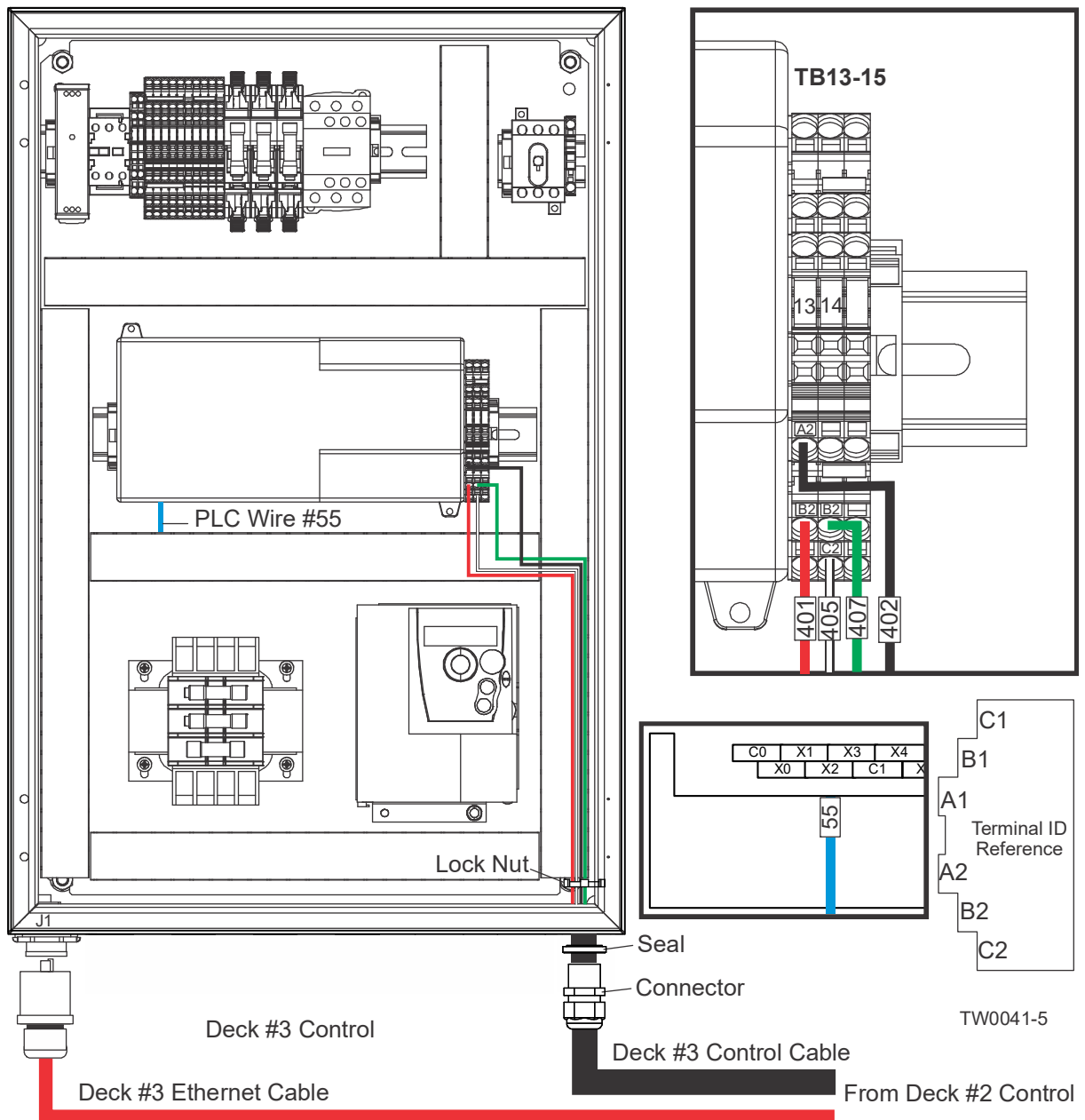


FIG. 2-17

- Connect white wire #405 to terminal block #TB14 C2.
- Connect red wire #401 to terminal block #TB13 B2.
- Connect green wire #407 to terminal block #TB14 B2.
- Connect black wire #402 to terminal block #TB13 A2.
- Move blue PLC wire #55 from terminal X1 to terminal X3.

Secure the power and ethernet cables out of the way of moving parts to avoid damage.

For 7-way deck operation, set DIP switch #9 in deck control #1 and deck control #2 to “OFF” position ([See Section 4.5](#) for DIP switch reference).

Replace the wireway covers in both deck control boxes and close the control box doors. Refer to [Section 2.4.4](#) to install the optional auxiliary E-stop harness, if applicable.

## 2.3.4 Auxiliary E-Stop



**DANGER!** Disconnect and lock out power supply before servicing! Failure to do so will result in shock, burns or death.

See **Figure 2-18**. The TWC deck operator control can be configured so the E-stop(s) interface with the E-stop of other equipment. An optional auxiliary E-stop harness is available to connect the operator control to auxiliary equipment, such as an LT300 sawmill.

**NOTE:** If the TWC deck operator control is installed at the control location of the sawmill, installation of the Auxiliary E-stop harness is required.

To install the harness, remove the operator control panel. Remove the plug from the bottom of the operator control box and route the E-stop harness up into the box. Secure the cable to the box with the provided connector, seal and lock nut.

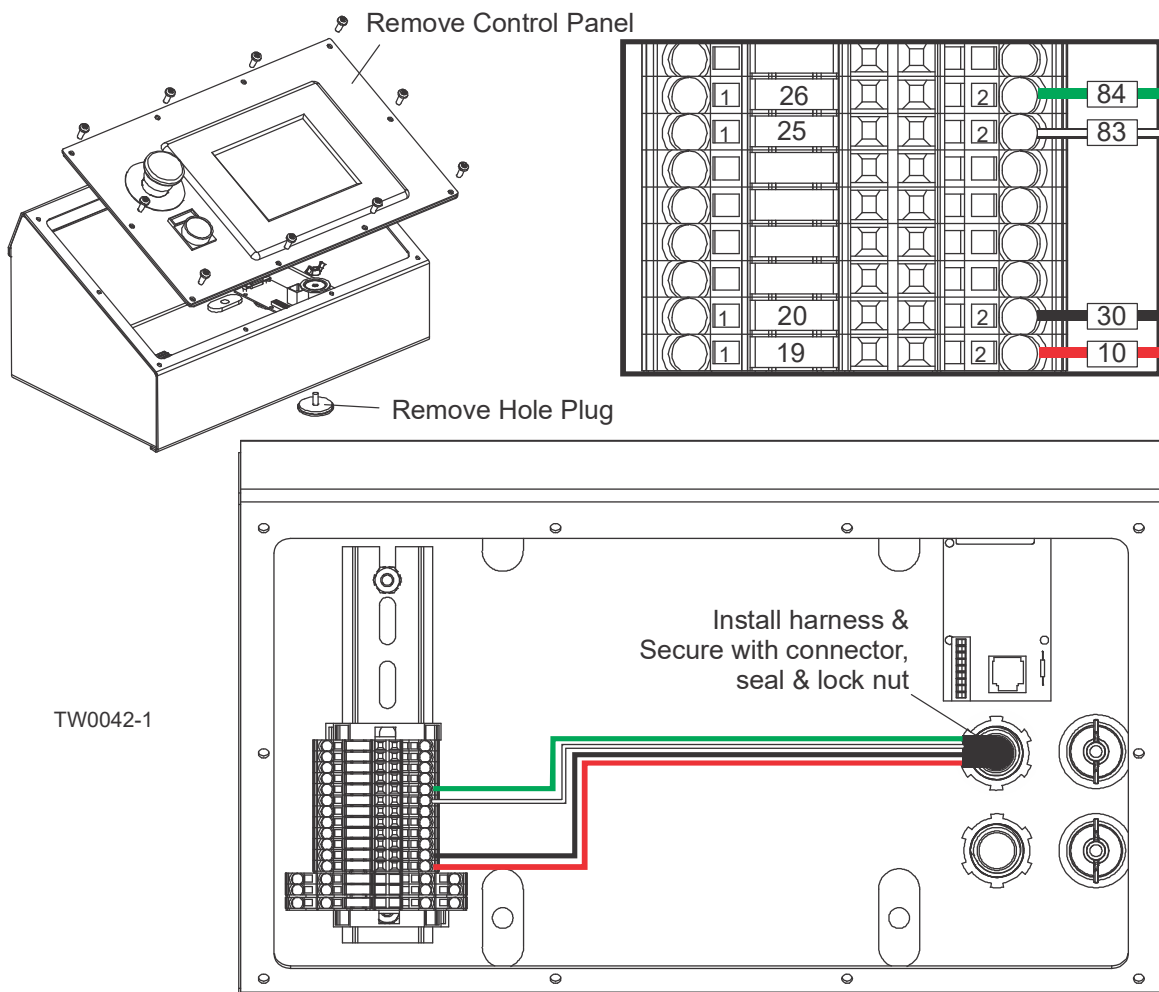


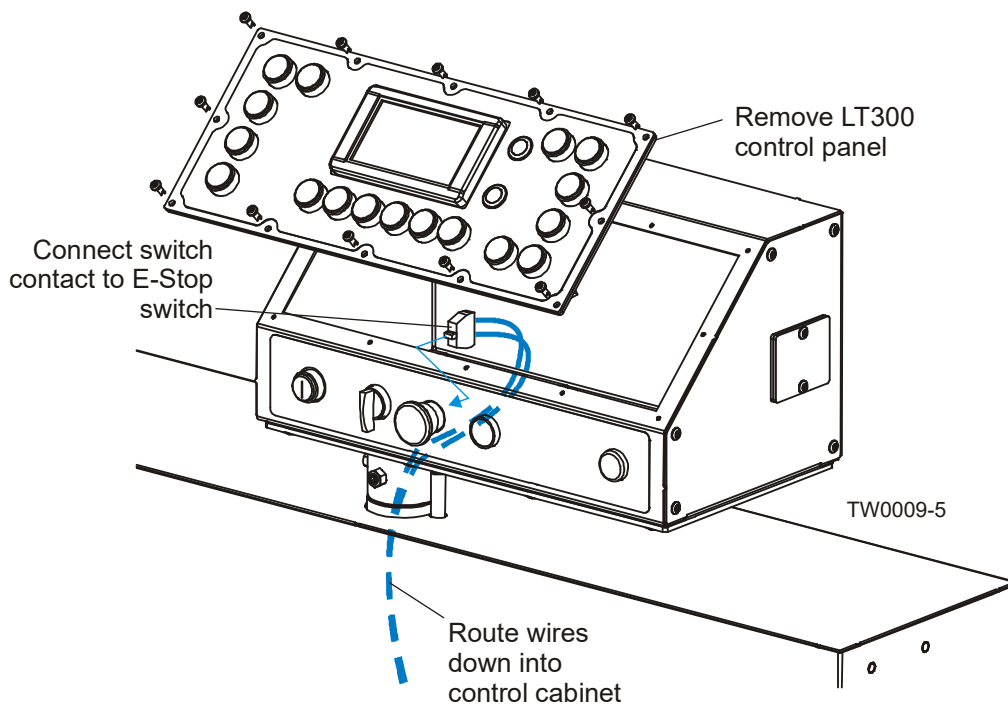
FIG. 2-18

- Remove the jumper wire from terminal block #TB19.2 & #TB20.2.
- Connect red wire #10 to terminal block #TB19.2.
- Connect black wire #30 to terminal block #TB20.2.
- Connect white wire #83 to terminal block #TB25.2
- Connect green wire #84 to terminal block #TB26.2

Replace the operator control panel and route the harness to the control of the auxiliary equipment and connect according to the equipment instructions.

Install the provided switch contact harness to the auxiliary equipment E-Stop.

**See Figure 2-19.** For an LT300 sawmill, remove the control panel, connect the switch contact to the E-Stop switch and route the wires down into the control cabinet. Replace the control panel.



**FIG. 2-19**

# 2

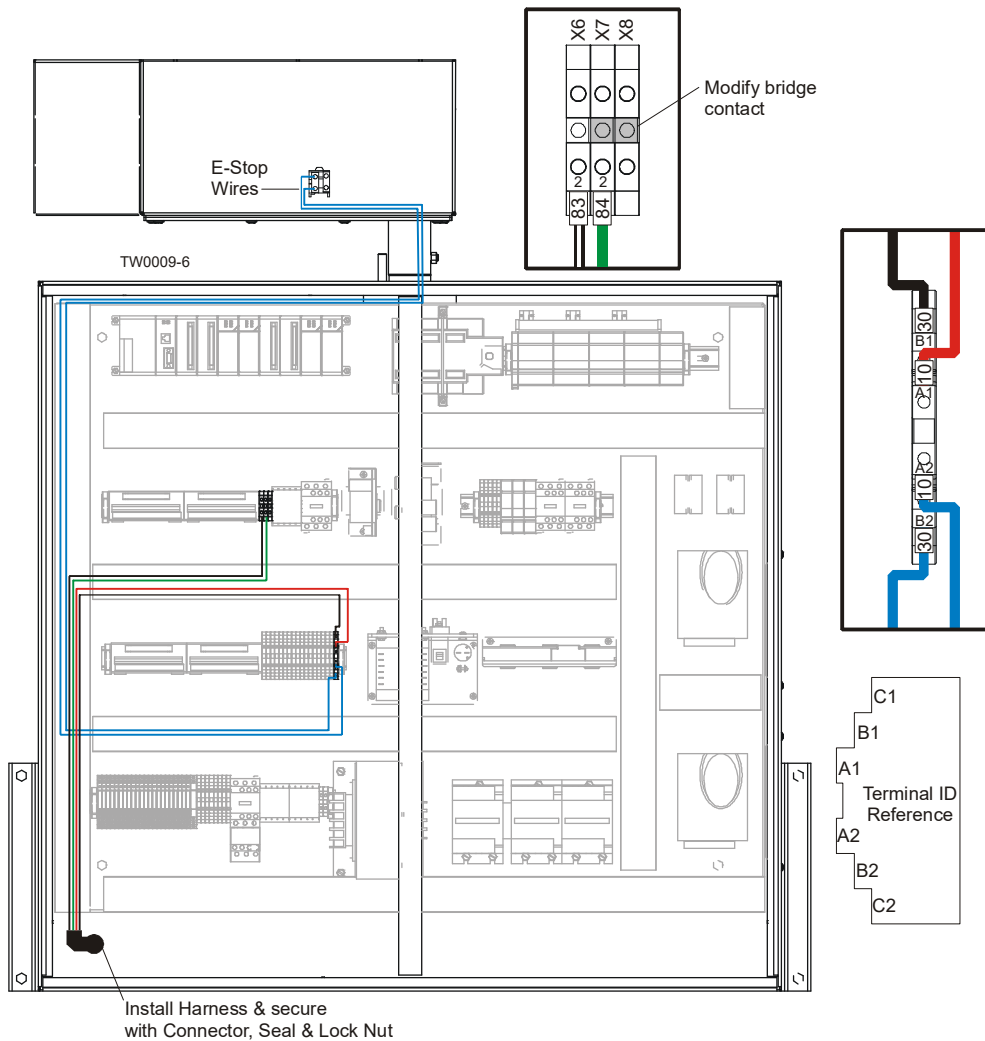
## Setup & Operation

### Auxiliary E-Stop

See **Figure 2-20**. Open the LT300 control cabinet doors. Route the harness from the deck operator box up into the LT300 control cabinet. Secure the cable to the box with the provided connector, seal and lock nut. Install the provided terminal block next to the existing terminal block bank X10-X22 (LT300 Rev. B3.00+) or bank X16-X32 (LT300 prior to Rev. B3.00).

Locate terminal blocks X6-X8. Remove the screws in the center of these terminal blocks and remove the bridge contact connecting the three terminal blocks. Use pliers to break off one segment of the bridge contact. Replace the two segment bridge to connect terminal blocks X7 & X8. Replace the center screws.

Remove the wireway covers and route the E-Stop wires and harness wires to the new terminal block and X6-X7. Connect the E-Stop harness and switch wires as described below.




**FIG. 2-20**




- Connect red wire #10 to new terminal block port #A1.
- Connect black wire #30 to new terminal block port #B1.
- Connect white wire #83 to terminal block #X6.2
- Connect green wire #84 to terminal block #X7.2

Replace the wireway covers and close the control cabinet doors.

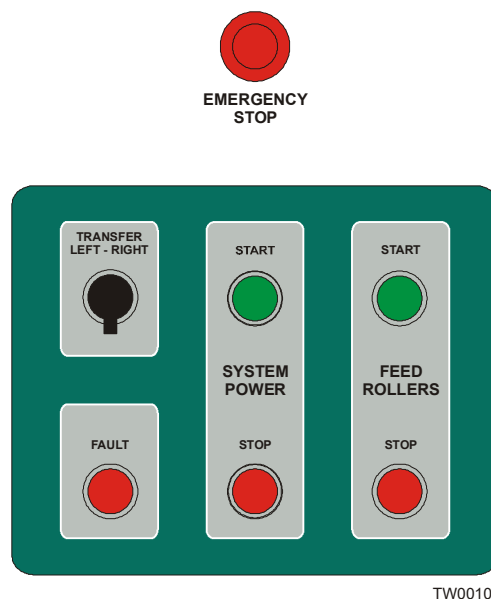
## 2.4 Operation

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

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

The Three-Way Deck can be operated from the deck location with the switches on the deck control box. The deck can also be controlled from the operator control box.

See **Figure 2-21**. The deck control box switches are shown below.



**FIG. 2-21**

**SYSTEM POWER** - Push START to turn the deck power on. This allows operation of the deck table to dump left or right. Push STOP to turn deck power off. If multiple decks are installed, START and STOP will turn all decks on or off.

**FEED ROLLERS** - With the operator control in MANUAL MODE, push START to start feed rollers spinning. Push STOP to stop the feed rollers.

**TRANSFER** - With the operator control in MANUAL MODE, turn switch to LEFT to dump material on the left side of the table (SYSTEM POWER must be on). Turn switch to RIGHT to dump material on the right side of the table.

**FAULT** - Lights when an error has occurred in AUTO mode. Stop SYSTEM POWER and check machine. Place the auxiliary control in MANUAL mode, then back to AUTO to clear the FAULT.

**EMERGENCY STOP** - Push to stop all deck functions. Turn clockwise to release the stop.

See Figure 2-22. The operator control switches are shown below.

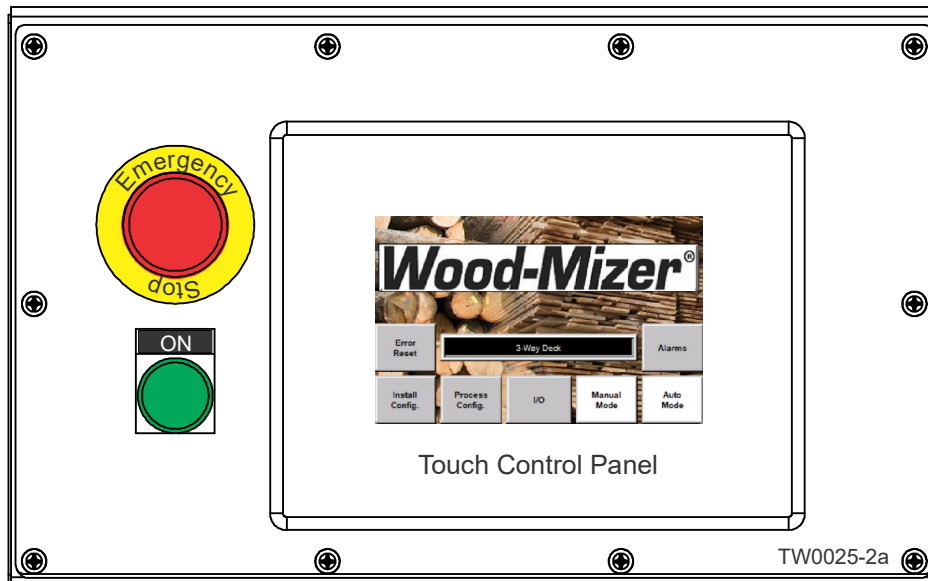


FIG. 2-22

**ON** - Turns deck(s) SYSTEM POWER on. This allows operation of the deck table to dump left or right.

**EMERGENCY STOP** - Push to stop all deck functions. Turn clockwise to release the stop.

See Figure 2-23. The touch control panel main screen is shown below.



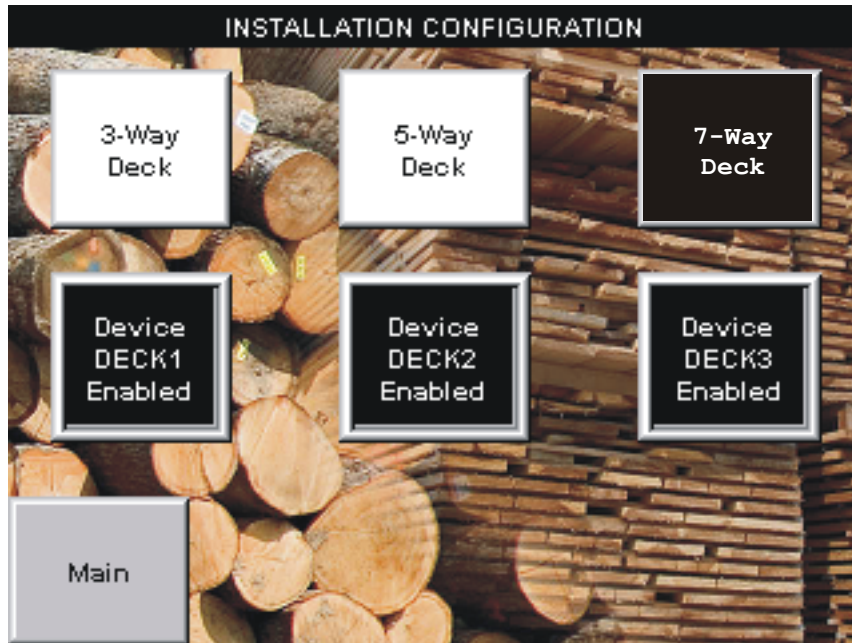
Tw0030a

**FIG. 2-23**

Note that upon initial power-up, the control is configured for 3-way deck configuration. To change the configuration, select INSTALL CONFIG.

**INSTALL CONFIG** - Push to configure the deck(s) for 3-way, 5-way or 7-way configurations. Enter the password '8180' to enter the configuration menu. Choose the appropriate button from the top row to change the configuration. The corresponding buttons in the bottom row should highlight when an allowable configuration is selected.

See Figure 2-24.



TW0031

**FIG. 2-24**

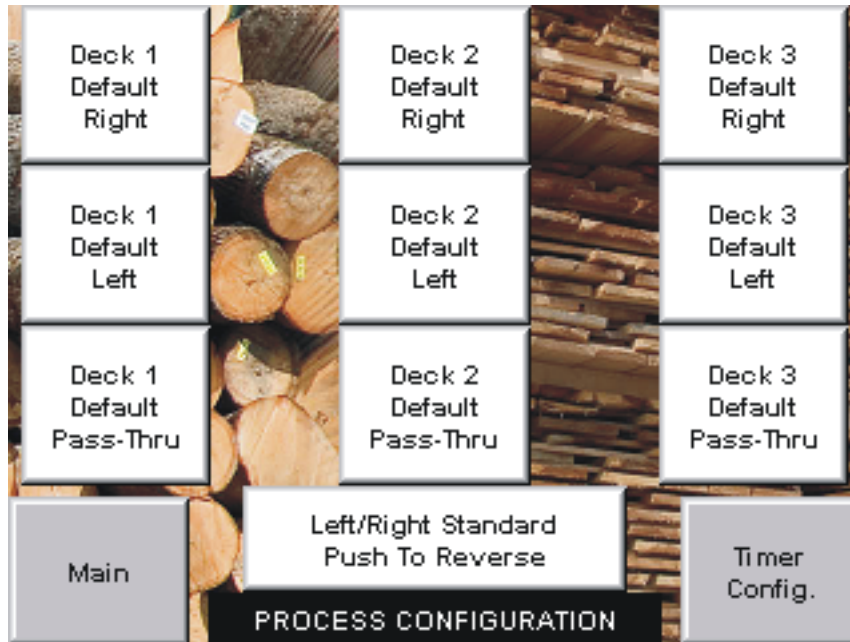
**NOTE:** Choosing a configuration that requires more decks than are installed will cause an error. If this occurs, communication with the control will be slow. Push the correct configuration button and wait until the button is highlighted.

Choosing a configuration that requires less decks than are installed will disable the second or third decks as indicated by the bottom row buttons.

Push MAIN to return to the main menu.

**PROCESS CONFIG** - By default, the left and right orientation of the deck(s) is set as viewed from the front of the deck(s). If your process requires this orientation be reversed, push the PROCESS CONFIG button (system power must be ON).

**See Figure 2-25.** The default left/right orientation of the deck(s) is shown. Use the PUSH TO REVERSE button to reverse the orientation. Note that the right and left deck indicators change.



TW0032

**FIG. 2-25**

**NOTE:** Only the decks installed per the Install Configuration will be displayed.

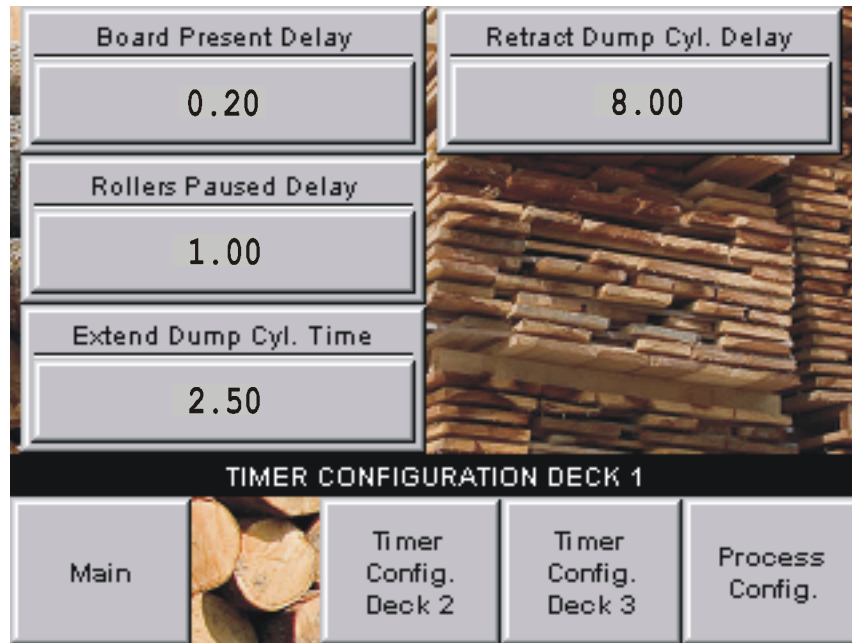
Push the PUSH FOR STANDARD button to return to the default orientation.

Select the default action you want the deck to perform when the board sensor is activated in AUTO MODE.

Push MAIN to return to the Main menu.

**TIMER CONFIG** - From the Process Configuration menu, select the TIMER CONFIG button. This menu allows you to change the timer settings for each function of the deck(s). By default, the timer settings for deck #1 are displayed. These settings can be adjusted to fine-tune the deck operation to your processing system.

**See Figure 2-26.** The timing of four functions can be adjusted for each deck. By default, the settings for Deck #1 are displayed. Select the desired button to adjust the timer settings for that function. The current, maximum and minimum settings for the function are displayed. To change the setting, enter the numerical value and select ENTER. Factory default timer settings are shown below.



TW0033

**FIG. 2-26**

**BOARD PRESENT DELAY** - This setting controls the amount of time the system will pause upon sensing a board before pausing the rollers.

**ROLLERS PAUSE DELAY** - This setting controls the amount of time the system will wait after the rollers have paused before beginning the dump cycle.

**EXTEND DUMP CYL. TIME** - This setting controls the amount of time the system raises the deck table until the table is lowered.

**RETRACT DUMP CYL. DELAY** - This setting controls the amount of time the system will wait to sense the deck table is down before going into fault mode.

Press the **TIMER CONFIG DECK 2** or **TIMER CONFIG DECK 3** buttons to view/adjust the settings for these decks, if applicable.

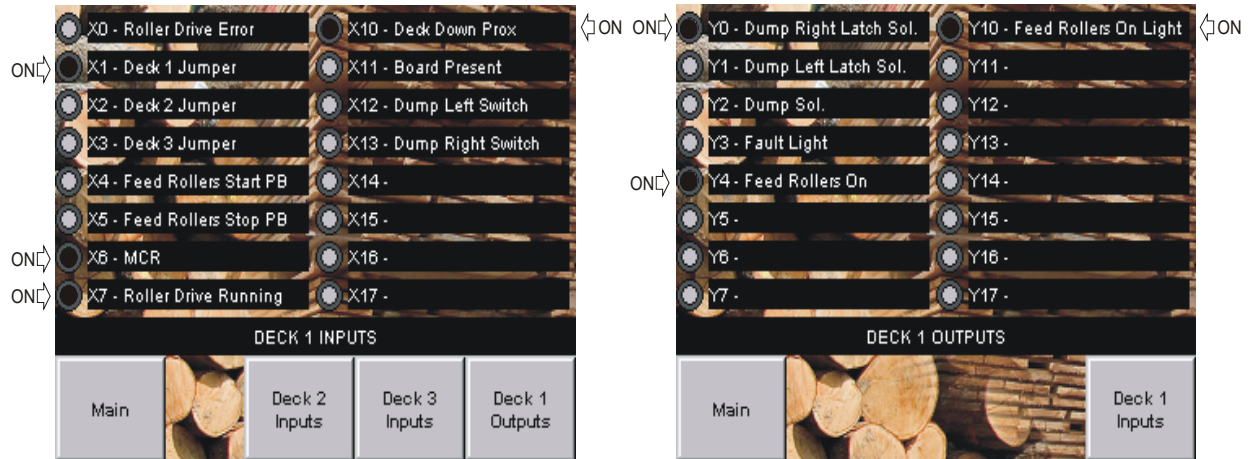
Press **PROCESS CONFIG** to return to the Process Configuration menu or **MAIN** to return to the Main menu.

## 2 Setup & Operation

### Operation

**I/O** - The Input/Output screens allow you to troubleshoot control systems of the deck(s). Pressing I/O will display the input values of Deck #1 by default.

**See Figure 2-27.** A darkened indicator next to each value indicates a received signal from the PLC control. The Input/Output values with the deck in AUTO mode are shown below. As the deck(s) is operated, you can view the action of the inputs.



TW0034

**FIG. 2-27**

Press DECK 1 OUTPUTS to view the Deck 1 Output values.

**NOTE:** If you have setup the PROCESS CONFIG in reverse, the Right Latch and Left Latch outputs will be reversed.

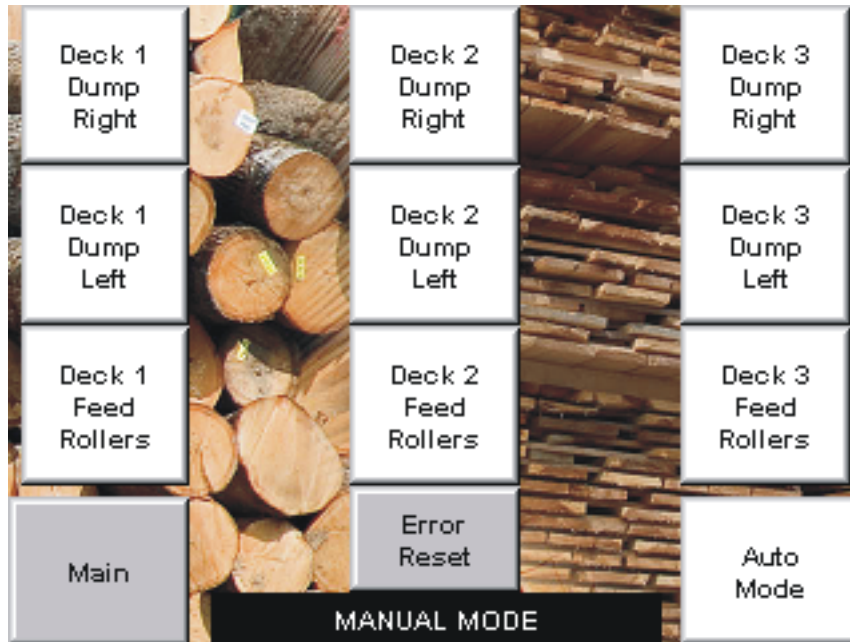
Press DECK 1 INPUTS to return to the Inputs screen, or MAIN to return to the Main menu.

PRESS DECK 2 INPUTS or DECK 3 INPUTS to view the Input values of these decks, if applicable. A DECK 2 OUTPUTS and DECK 3 OUTPUTS button is available from each respective Input screen.

**MANUAL MODE** - In Manual Mode, the rollers and dump functions of each deck can be controlled with the buttons on the touch screen.



**See Figure 2-28.** Press the FEED ROLLERS button to turn on the rollers of each deck. Push the button again to turn off the feed rollers. Push the DUMP RIGHT or DUMP LEFT buttons to raise the table of each deck. Push the button again to lower the deck table.



TW0035

**FIG. 2-28**

**NOTE:** If you have setup the PROCESS CONFIG in reverse, the Dump Right and Dump Left buttons will be reversed. Only the decks installed per the Install Configuration will be displayed.

If an error occurs during operation, press ERROR RESET to clear the error.

Press MAIN to return to the Main menu.

Press AUTO MODE to enter the Auto Mode menu.

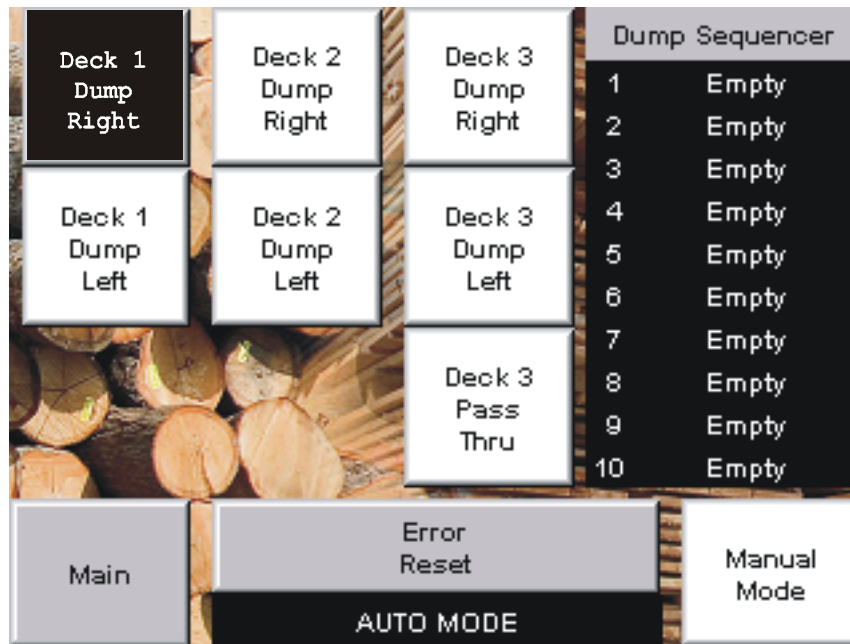
**AUTO MODE** - In Auto Mode, all feed rollers are activated and sensors are used to detect when a board is present. When the sensor is activated, the deck will perform the function as indicated by the buttons selected.

# 2

## Setup & Operation

### Operation

**See Figure 2-29.** By default, Auto Mode will cause the deck to perform the action as set in the PROCESS CONFIG menu when the board sensor is activated. To override the default, push any of the available buttons to enter the function in the Dump Sequencer. Up to 10 functions can be entered and the function will be cleared after it is performed.



TW0036

**FIG. 2-29**

**NOTE:** If you have setup the PROCESS CONFIG in reverse, the Dump Right and Dump Left buttons will be reversed. Only the decks installed per the Install Configuration will be displayed.

If an error occurs during operation, press ERROR RESET to clear the error.

Press MAIN to return to the Main menu.

Press MANUAL MODE to enter the Manual Mode menu.

**Example:** In a 5-way configuration using two decks, the first deck in the process dumps boards to be edged to the right. The second deck dumps finished boards to the left. Slabs to be routed to a chipper are sent straight through.

The log is square on three sides and turned to saw the fourth side. The first cut results in a slab. Press DECK 2 PASS THRU. The next two boards are to be edged. Press DECK 1 DUMP RIGHT twice. The next three boards are finished boards. Press DECK 2 DUMP LEFT three times.

**ALARMS** - The Alarms menu displays a list of messages received by the PLC control. This menu can assist you in troubleshooting problems when they occur.

See Figure 2-30.

Alarm History		Total of 5 Alarms	
Entry No	Alarm No	Message	Confirm
1	1	Message-1	
2	2	Message-2	
3	3	Message-3	
4	4	Message-4	
5	5	Message-5	

		Prev.	Next	Exit Details
Main	Error Reset	Details	Line Up	Line Down
				Clear All

TW0037

**FIG. 2-30**

If an error occurs during operation, press ERROR RESET to clear the error.

Press LINE UP or LINE DOWN to scroll through the Alarm History list.

Press DETAILS to view detailed information for the selected message in the Alarm History. Press NEXT to view the Details of the next entry in the Alarm History list. Press PREV to view the Details of the previous entry.

Press EXIT DETAILS to return to the Alarms menu.

Press CLEAR ALL to clear all items in the Alarm History list.

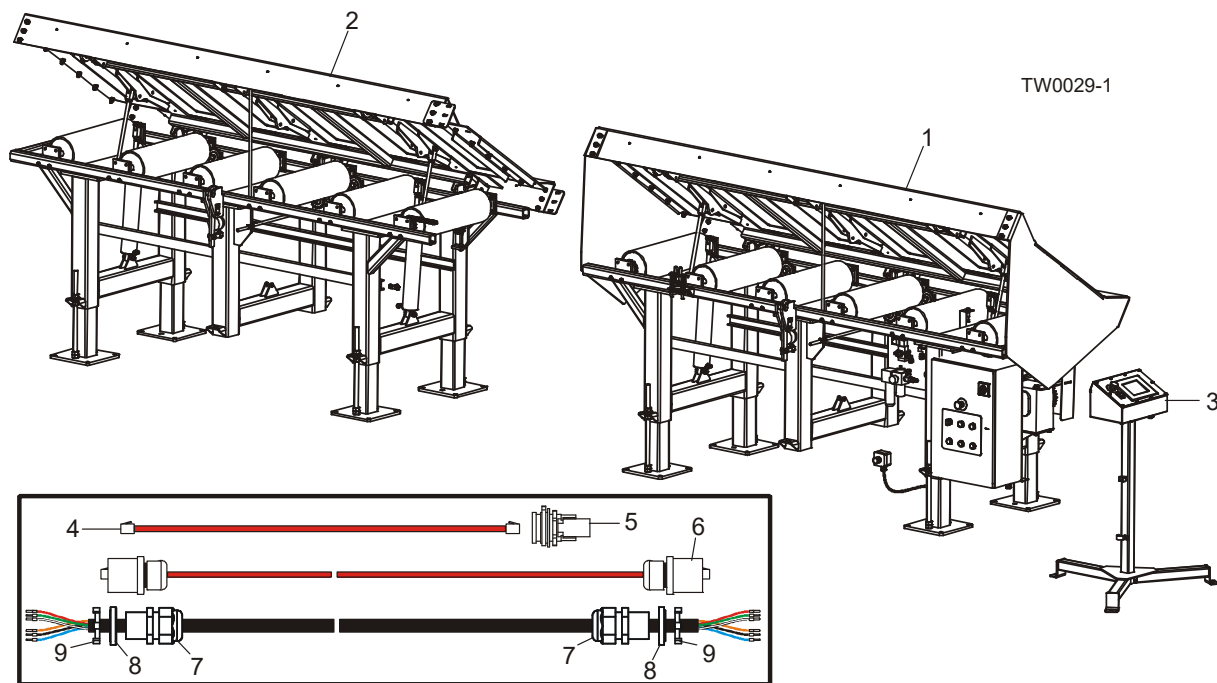
Press MAIN to return to the Main menu.

# 3 Replacement Parts

## Three-Way Deck

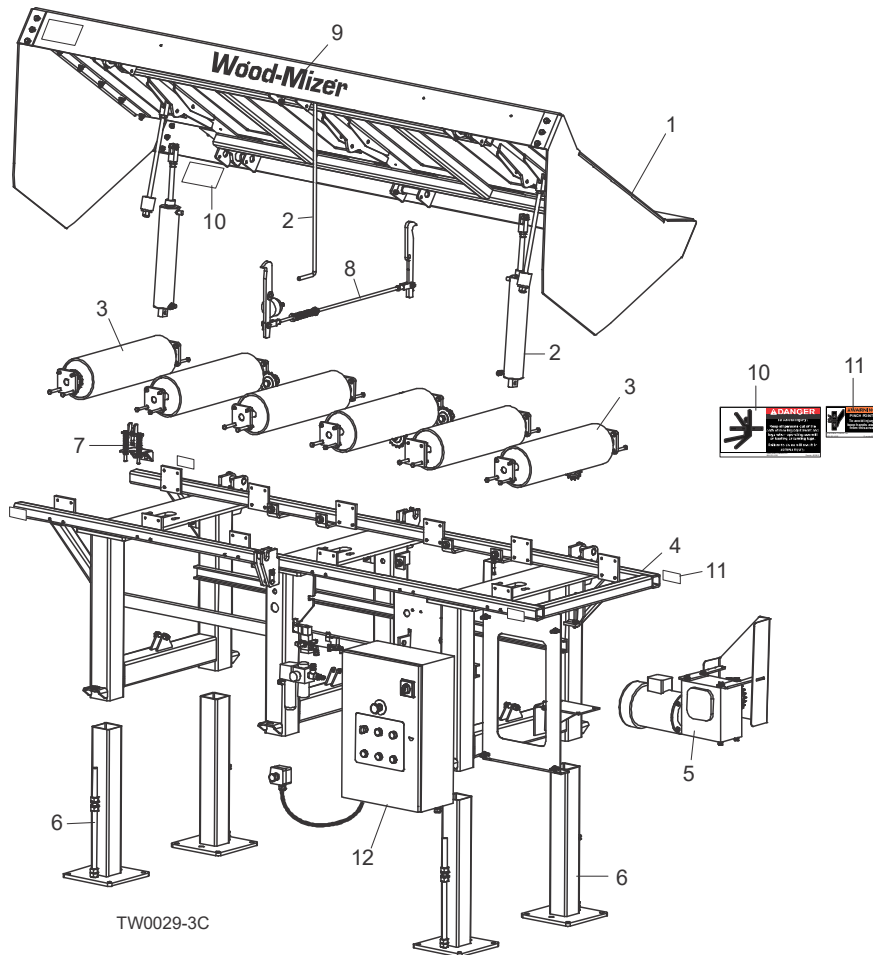
### SECTION 3 REPLACEMENT PARTS

#### 3.1 Three-Way Deck



REF	PART #	DESCRIPTION	COMMENTS	QTY.
1		DRIVE TABLE PARTS ( <a href="#">See Section 3.2</a> )		
2		EXTENSION TABLE PARTS ( <a href="#">See Section 3.3</a> )		
3		OPERATOR CONTROL PARTS ( <a href="#">See Section 3.14</a> )		
	053393	CABLE KIT, FIVE-WAY DECK COMMUNICATION	One 053393 required to connect two decks for 5-way configuration. One 053393 and one 053394 required to connect three decks for 7-way configuration.	1
	053394	CABLE KIT, SEVEN-WAY DECK COMMUNICATION		1
4	052994	Cable, 1' RJ45 Ethernet		1
5	052993	Receptacle, RJ45 Straight Panel Mount		1
6	052989	Cable Assembly, 30' RJ45 Ethernet		1
7	051229	Connector, 1/2" NPT .17-.47 Cable		2
8	E20460	Ring, 1/2" Sealing		2
9	E20461	Nut, 1/2" NPT Connector Lock		2

### 3.2 Drive Table



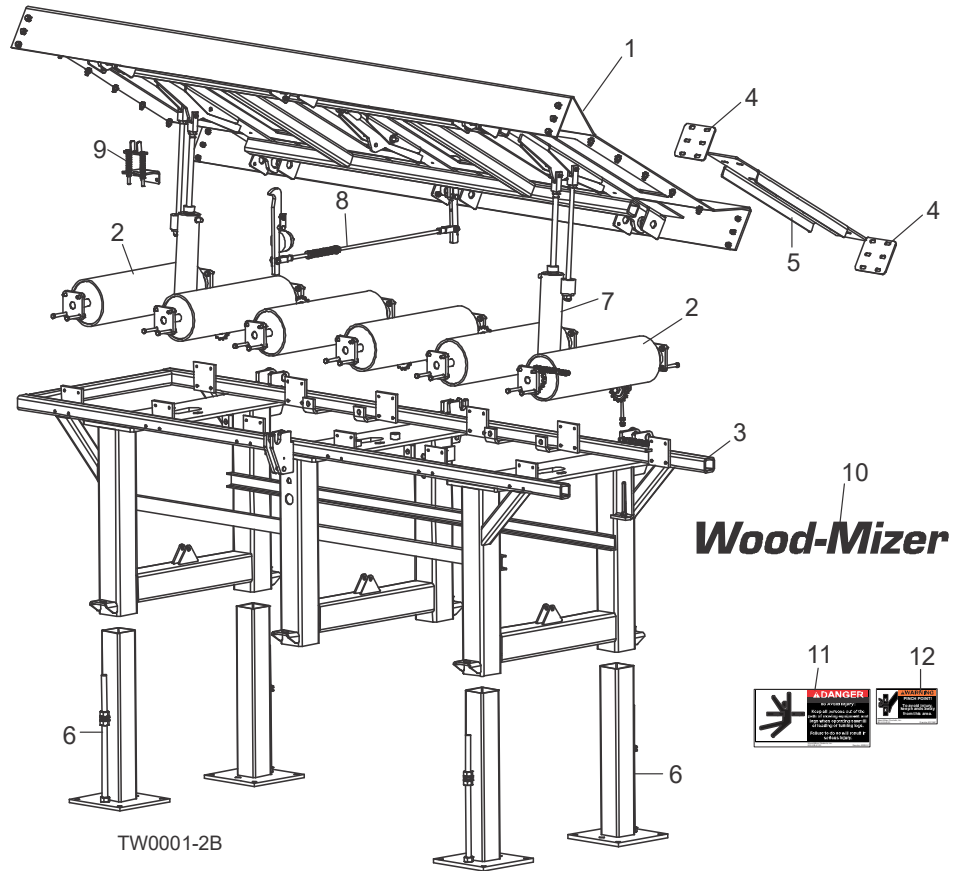
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	TWC	<b>TABLE ASSEMBLY, PRIMARY THREE-WAY DRIVE</b>		1
	047374	Table Assembly, Three-Way Drive		1
1		Pivoting Table Top Parts ( <a href="#">See Section 3.4</a> )		
2		Air Cylinder/Prop Parts ( <a href="#">See Section 3.5</a> )		
3		Table Roller/Sprocket Parts ( <a href="#">See Section 3.7</a> )		
4	047375	Frame Weldment, Three-Way Drive Table		1
5		Drive Parts ( <a href="#">See Section 3.10</a> )		
6		Table Leg Parts ( <a href="#">See Section 3.8</a> )		
7		Table Sensor Bracket Parts ( <a href="#">See Section 3.9</a> )		
8		Pivot Latch Parts ( <a href="#">See Section 3.6</a> )		
9	076281	Decal, 20" Black Wood-Mizer Logo		2

**3****Replacement Parts***Drive Table*

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REF	PART #	DESCRIPTION	COMMENTS	QTY.
10	S09851	Decal, Keep Away Danger		2
11	S12641	Decal, Hand Pinch Point Warning		4
	R01869	Line, 1/4" Air		5.33
	005453	Line, 3/8" Air		8.69
12		Air/Electrical Control Parts ( <a href="#">See Section 3.11</a> )		

### 3.3 Extension Table



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	TWC-EXT	<b>TABLE ASSEMBLY, THREE-WAY EXTENSION</b>		1
	047341	Table Assembly, Three-Way Extension		1
<b>1</b>		Pivoting Table Top Parts ( <a href="#">See Section 3.4</a> )		
<b>2</b>		Table Roller/Sprocket Parts ( <a href="#">See Section 3.7</a> )		
<b>3</b>	047342	Frame Weldment, Three-Way Extension Table		1
<b>4</b>	054139	Plate, Table End Splice		2
<b>5</b>	054149	Plate, Table Bottom Splice		1
<b>6</b>		Table Leg Parts ( <a href="#">See Section 3.8</a> )		
<b>7</b>		Air Cylinder/Prop Parts ( <a href="#">See Section 3.5</a> )		
<b>8</b>		Pivot Latch Parts ( <a href="#">See Section 3.6</a> )		
<b>9</b>		Table Sensor Bracket Parts ( <a href="#">See Section 3.9</a> )		
		Sensor & Cable Parts ( <a href="#">See Section 3.17</a> )		
	R01869	Line, 1/4" Air		10 ft.
	005453	Line, 3/8" Air		11 ft.
<b>10</b>	052287	Decal, 10" AWMV Logo		2

### **3** Replacement Parts

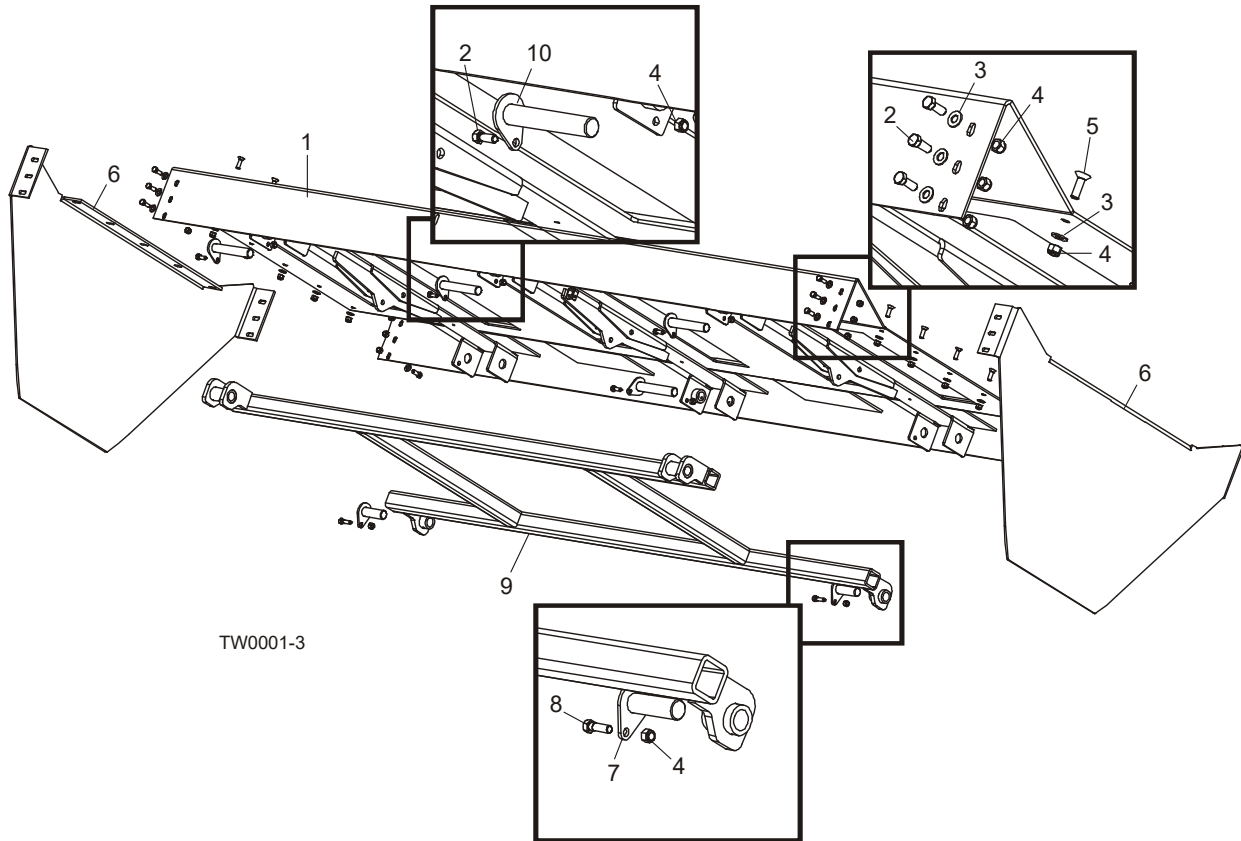
*Extension Table*

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REF	PART #	DESCRIPTION	COMMENTS	QTY.
11	S09851	Decal, Keep Away Danger		2
12	S12641	Decal, Hand Pinch Point Warning		4



### 3.4 Pivot Table Top

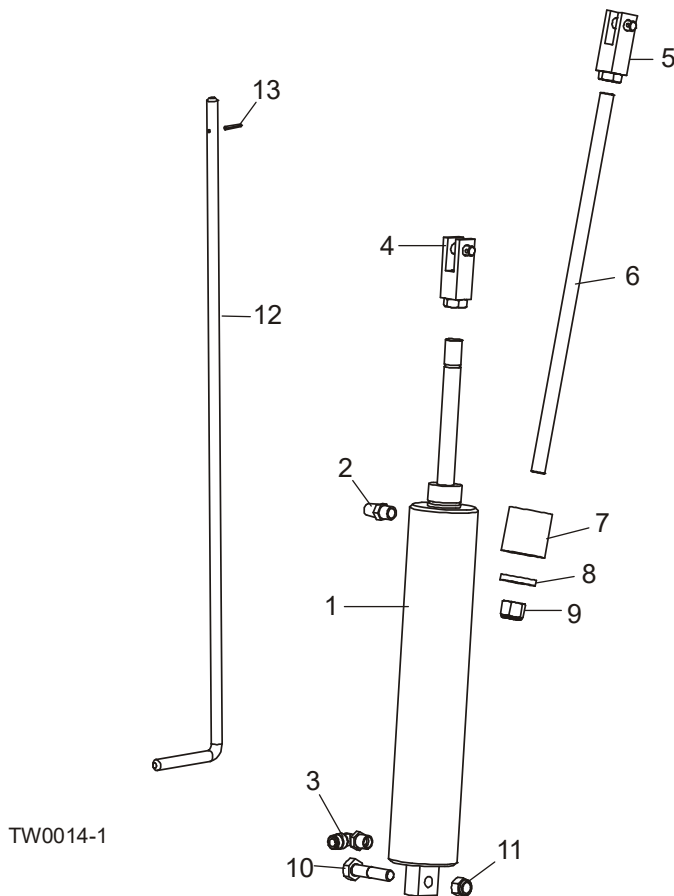


REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	051480	TOP WELDMENT, THREE-WAY PIVOT		1
2	F05007-87	BOLT, 3/8-16 X 1" HEX HEAD GRADE 5		16
3	F05011-3	WASHER, 3/8" SAE FLAT		22
4	F05010-10	NUT, 3/8-16 HEX NYLON LOCK		28
5	F05007-110	BOLT, 3/8-16 X 1" FLAT SOCKET HEAD		10
6	051481	PLATE, TABLE END (DRIVE TABLE ONLY)		2
7	047372	PIN WELDMENT, FRAME PIVOT		2
8	F05007-123	BOLT, 3/8-16 X 1 1/4" HEX HEAD GRADE 5		2
9	047349	FRAME WELDMENT, PIVOT TABLE		1
10	054157	PIN WELDMENT, TABLE PIVOT		4

# 3 Replacement Parts

## Air Cylinder/Prop

### 3.5 Air Cylinder/Prop



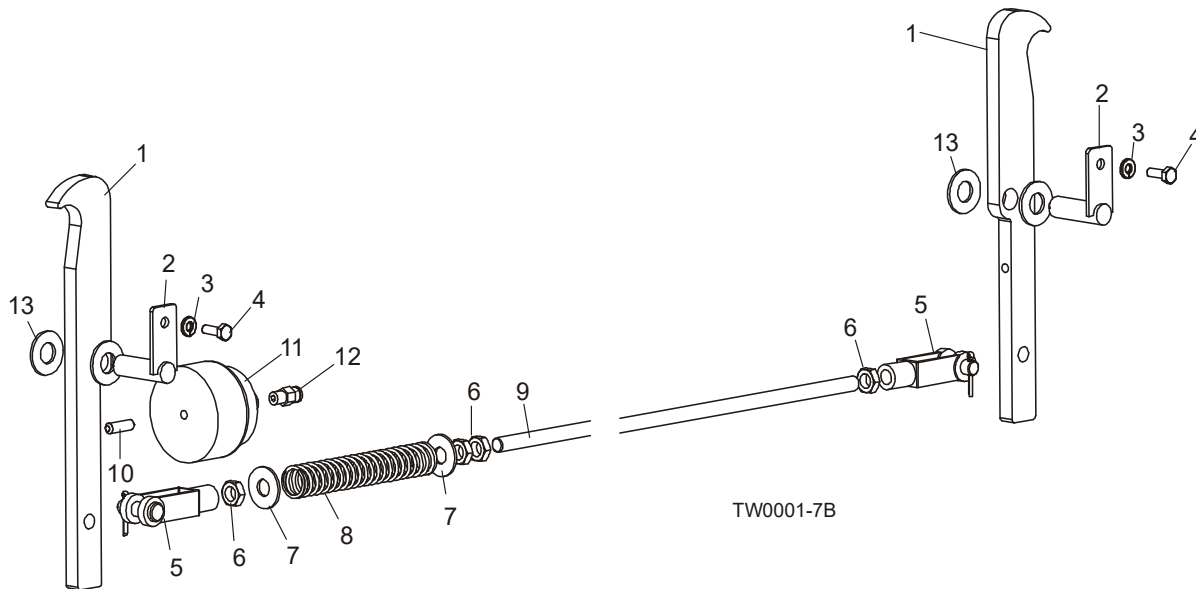
REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	051455	CYLINDER, 3" X 12" PNEUMATIC		2
2	P21528	MUFFLER, 3/8" NPT AIR CEC-3		2
3	P21526	FITTING, 3/8" NPT X 3/8" TUBE 90° ELBOW		2
4	051456	CLEVIS, 5/8-18 X 2 1/4"		2
	054177	ROD ASSEMBLY, TABLE TOP STOP		2
5	051456	Clevis, 5/8-18 x 2 1/4"		1
6	054161	Rod, Table Top Stop		1
7	014828	SPRING, RUBBER STOP		2
8	034685	WASHER, 21/32" X 1 5/8" X 1/4"		2
9	F05010-71	NUT, 5/8-18 NYLON LOCK		2
10	F05008-124	BOLT, 1/2-13 X 2 1/4" HEX HEAD		2
11	F05010-8	NUT, 1/2-13 HEX NYLON LOCK		2
12	054679	ROD, TABLE TOP PROP		1
13	F05012-34	PIN, 1/8" X 1" ROLL		1



# 3 Replacement Parts

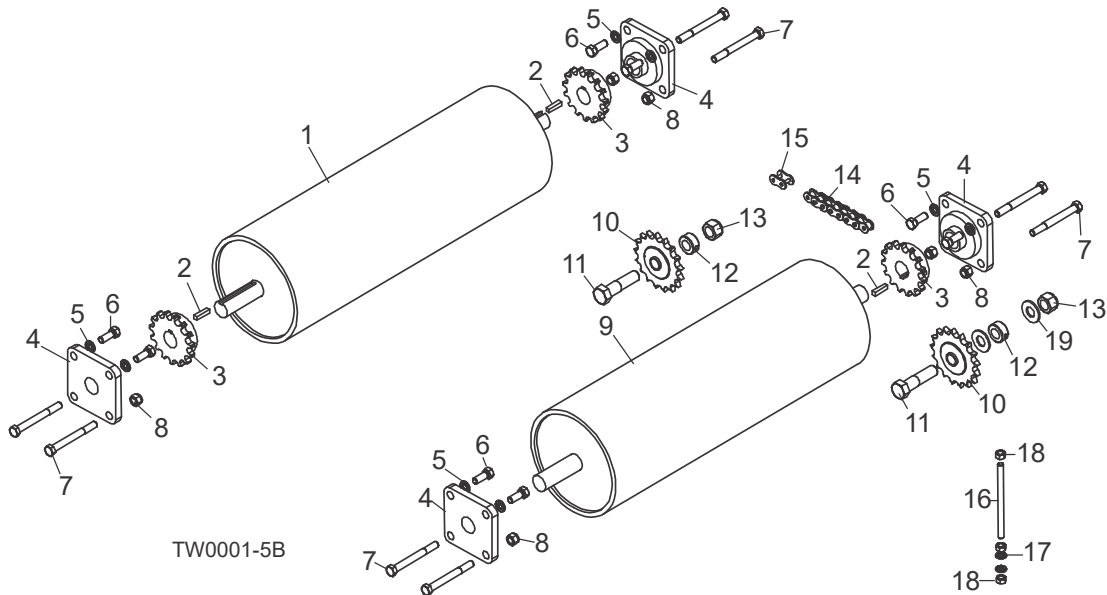
## Pivot Latch

### 3.6 Pivot Latch



REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	051454	PLATE, PIVOT LATCH		2
2	051458	PIN WELDMENT, LOCK		2
3	F05011-14	WASHER, 1/4" SPLIT LOCK		2
4	F05005-1	BOLT, 1/4-20 X 3/4" HEX HEAD FULL THREAD		2
5	054176	CLEVIS, 7/16-20 X 2 7/8"		2
6	F05010-38	NUT, 7/16-20 HEX JAM		4
7	F05011-35	WASHER, 7/16" STANDARD FLAT		2
8	051535	SPRING, 7/8" OD X 5 5/8" LONG X .1" WIRE COMPRESSION		1
9	054175	ROD, 7/16-20 X 32 1/2" THREADED		1
10	F05006-122	SCREW, 5/16-18 X 1" STAINLESS STEEL FLAT POINT SET		1
11	092045	BAG, AIR BRAKE		1
12	P03078	FITTING, 1/8" NPT X 1/4" TUBE		1
13	F05011-5	WASHER, 5/8" SAE FLAT		4

### 3.7 Rollers, Sprockets & Chain



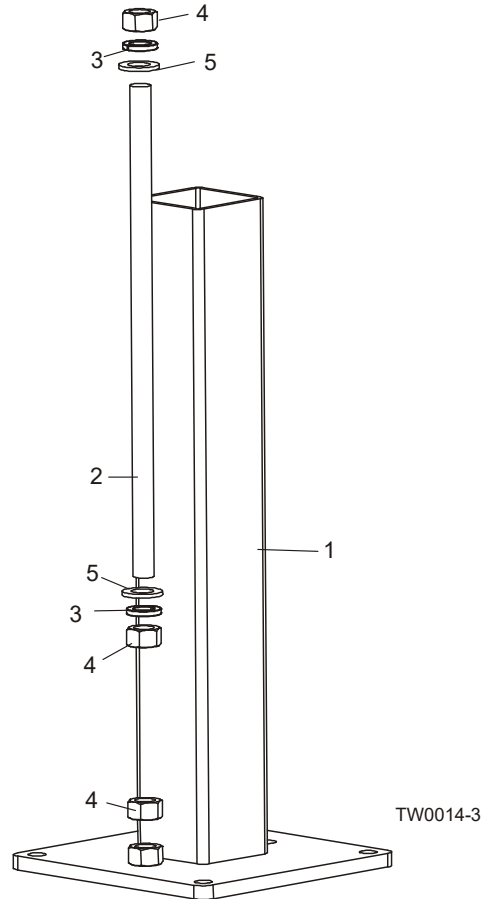
REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	051464	ROLLER WELDMENT, DUAL KEY TABLE		1
2	S21486	KEY, 1/4" X 1"		7
3	054172	SPROCKET, #50 15 TOOTH X 1" BORE		7
4	014090	BEARING, VF4S-216		12
5	F05011-4	WASHER, 3/8" SPLIT LOCK		24
6	F05007-87	BOLT, 3/8-16 X 1" HEX HEAD GRADE 5		24
7	F05007-6	BOLT, 3/8-16 X 3 1/2" HEX HEAD GRADE 8		24
8	F05010-10	NUT, 3/8-16 NYLON LOCK		24
9	051464	ROLLER WELDMENT, DUAL KEY TABLE		5
10	P21504	SPROCKET, #50BB X 17H TOOTH X 5/8" BORE IDLER		8
11	F05009-20	BOLT, 5/8-11 X 2 1/2" HEX HEAD GRADE 5		8
12	P05035	COLLAR, 5/8" LOCK		8
13	F05010-34	NUT, 5/8-11 NYLON LOCK		8
14	054182	CHAIN, #50 X 45" (CONNECTS EXTENSION/DRIVE TABLES)		1
	036643	CHAIN, #50 X 220" (EXTENSION TABLE)		1
	054194	CHAIN, #50 X 230" (PRIMARY/SECONDARY DRIVE TABLE)		1
15	P20208	LINK, #50 MASTER		2
	036648	LINK, #50 HALF		3
16	036743	ROD, 5/16-18 X 5" THREADED		1
17	F05011-13	WASHER, 5/16" SPLIT LOCK		2
18	F05010-17	NUT, 5/16-18 HEX		3

**3****Replacement Parts***Rollers, Sprockets & Chain*

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REF	PART #	DESCRIPTION	COMMENTS	QTY.
19	F05011-5	WASHER, 5/8" SAE FLAT (FRONT SPROCKET ONLY)		2

### 3.8 Table Legs

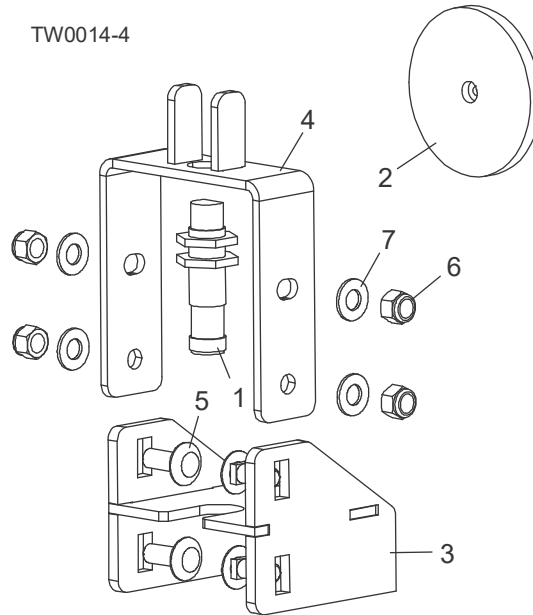


REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	051478	LEG WELDMENT, THREE-WAY DECK TABLE		4
2	054147	ROD, THREADED LEG ADJUSTMENT		4
3	F05011-6	WASHER, 3/4" SPLIT LOCK		8
4	F05010-7	NUT, 3/4-10 HEX		12
5	F05011-62	WASHER, 3/4" SAE FLAT		8

# 3 Replacement Parts

## Sensor Bracket

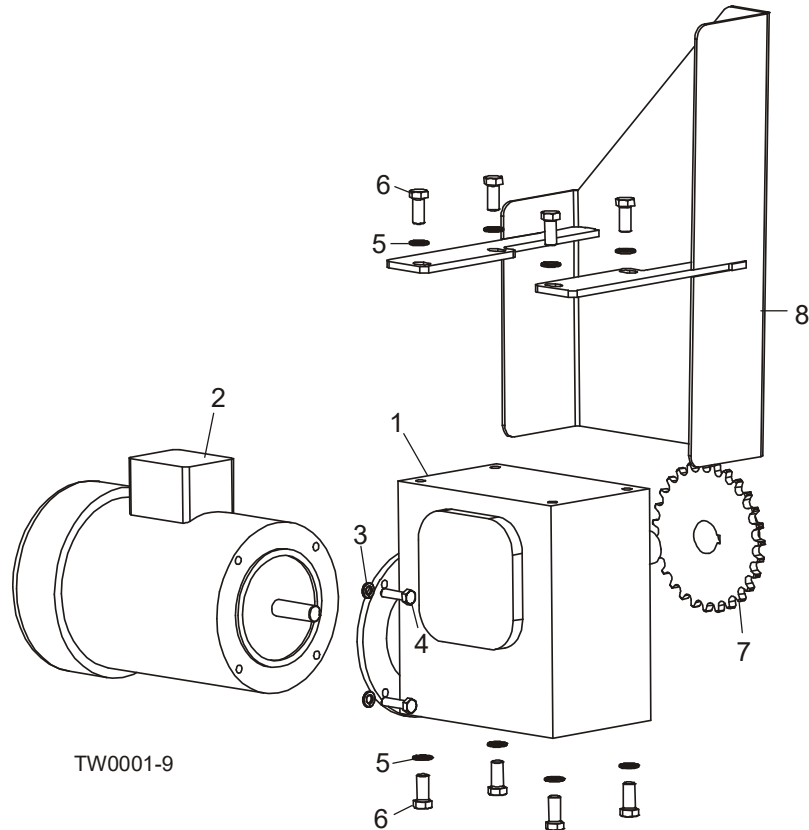
### 3.9 Sensor Bracket



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	054165	<b>BRACKET ASSEMBLY, SENSOR MOUNT</b>		1
1	051831	Sensor, Photo RA 18mm PNP		1
2	074771	Reflector, IEC IP67 84mm		1
3	079358	Mount Weldment, Sensor		1
4	079360	Plate Weldment, Upper Mount		1
5	F05007-165	Bolt, 3/8-16x1 Carriage Grade 5		4
6	F05010-10	Nut, 3/8-16 Nylon Lock		4
7	F05011-3	Washer, 3/8" SAE Flat		4



3.10 Drive

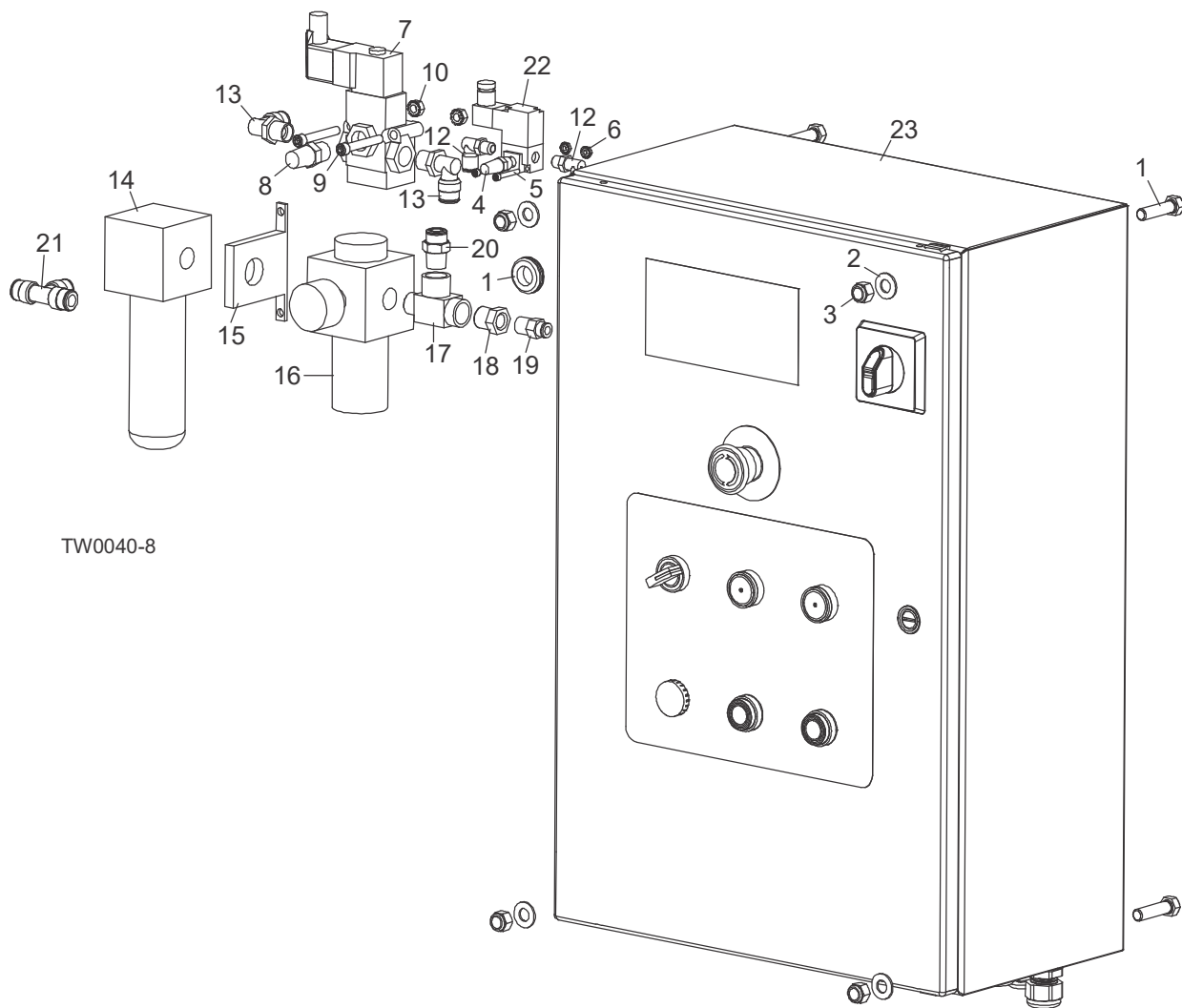


REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	047417	GEARBOX, 90° RIGHT BMQ230		1
2	079197	MOTOR, 2HP 3P 230/460 56C PREMIUM EFF		1
3	F05011-13	WASHER, 5/16" SPLIT LOCK		4
4	F05006-93	BOLT, 5/16-18 X 1 1/4" HEX HEAD GRADE 5 FULL THREAD		4
5	F05011-48	WASHER, 7/16" SPLIT LOCK		8
6	F05007-145	BOLT, 7/16-14 X 1" HEX HEAD GRADE 5		8
7	047418	SPROCKET, #50 X 27T X 1 1/4" BORE		1
8	047376	GUARD WELDMENT, DRIVE CHAIN		1

# 3 Replacement Parts

## Air/Electrical Controls

### 3.11 Air/Electrical Controls



TW0040-8

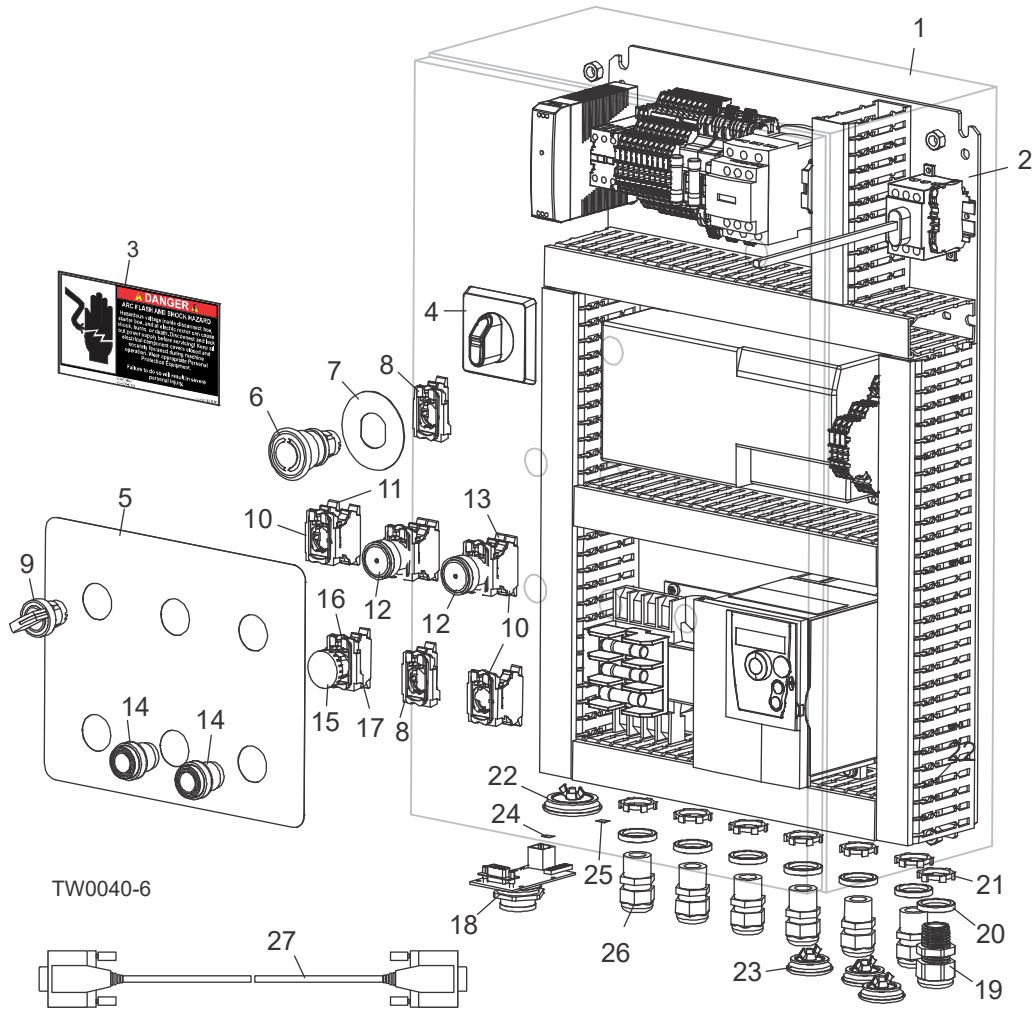
REF	PART #	DESCRIPTION	COMMENTS	QTY.
1	F05007-17	BOLT, 3/8-16 X 1 1/2" HEX HEAD FULL THREAD		4
2	F05011-3	WASHER, 3/8" SAE FLAT		4
3	F05010-10	NUT, 3/8-16 NYLON LOCK		4
4	P20902	MUFFLER, 1/8" NPT AIR		1
5	F05004-70	SCREW, #6-32 X 1" SOCKET HEAD		2
6	F05010-59	NUT, #6-32 SELF-LOCKING HEX		2
7	042659	VALVE, 3/8" NPT AIR		1
8	P21528	MUFFLER, 3/8" NPT AIR		1
9	F05005-156	SCREW, 1/4-20 X 1 3/4" SOCKET HEAD		2
10	F05010-9	NUT, 1/4-20 SELF-LOCKING HEX		2

REF	PART #	DESCRIPTION	COMMENTS	QTY.
11	P11764	GROMMET, 5/8" ID RUBBER		1
12	P09736	FITTING, 1/8" NPT X 1/4" TUBE SWIVEL ELBOW		2
13	P21526	FITTING, 3/8" NPT X 3/8" TUBE ELBOW		2
14	036750	FILTER, AIR F18-03-SK00		1
15	036752	BRACKET, AIR FILTER/REGULATOR MOUNT		1
16	036751	REGULATOR, AIR R18-03-F0G0		1
17	016822	FITTING, 3/8" NPT MALE RUN T		1
18	015490	FITTING, 3/8" NPT X 1/4" NPT REDUCER		1
19	P20903	FITTING, 1/4" NPT X 1/4" TUBE		1
20	P21527	FITTING, 3/8" NPT X 3/8" TUBE		1
21	P21529	FITTING, 3/8" TUBE 'T'		1
22	045225	VALVE, 1/8" NPT DIN C AIR		1
23		STANDALONE THREE-WAY DRIVE CONTROL ASSEMBLY ( <a href="#">See Section 3.12</a> )		
	051831	SENSOR, PHOTO RA 18MM PNP W/REFLECTOR		1
	051439	SENSOR, IND PROX M12 PNP NS EX		1

# 3 Replacement Parts

## Main Control Assembly

### 3.12 Main Control Assembly



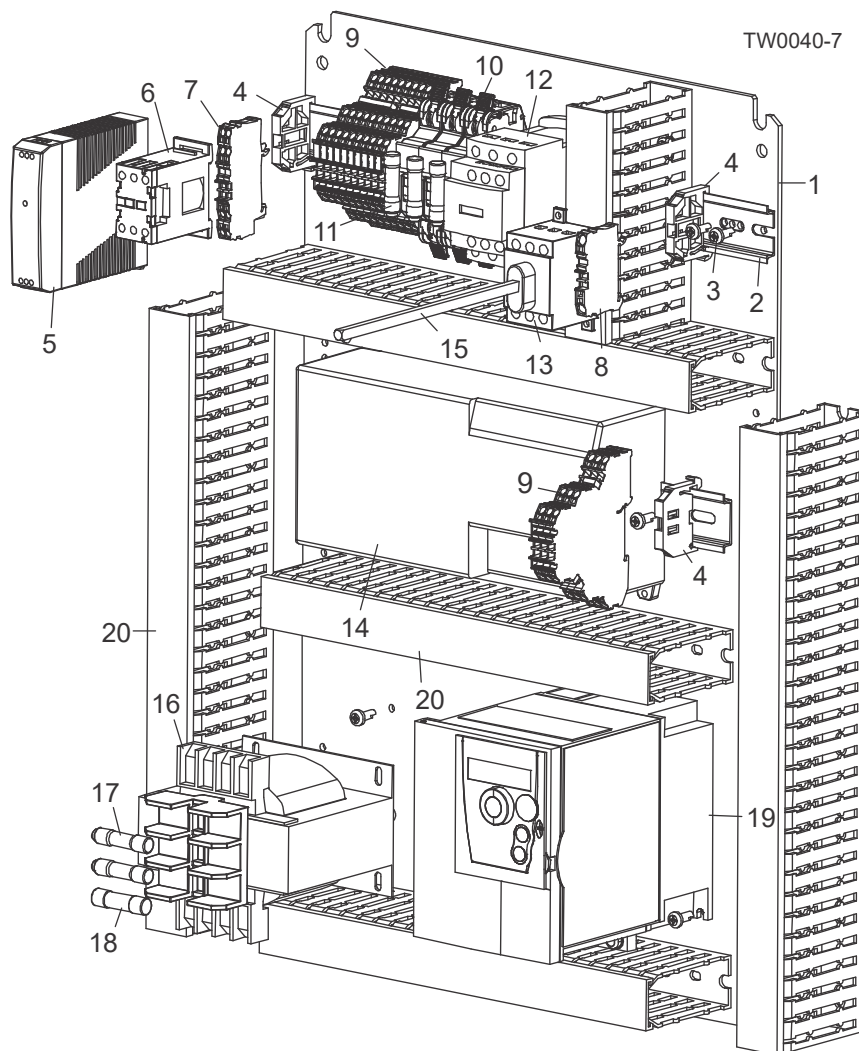
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	078346	<b>CONTROL ASSEMBLY, STANDALONE THREE-WAY DRIVE</b>		1
1	051678	Box, 3-Way Control Enclosure		1
2		TWC Control Panel Assembly(See Section <a href="#">3.13</a> )		
3	S20061	Decal, Electrical Hazard Danger		1
4	050883-1	Switch, Disconnect Red/Yellow 6mm		1
5	052214	Decal, TWC Control Box		1
6	068940	Push-Button, Mshrm Mntnd Red TrnRI ZB5		1
7	050992	Legend, Round Yellow E-Stop		1
8	068950	Collar, Mount 1NC ZB5		1
9	068945	Switch, 3Pos Momentary ZB5		1

REF	PART #	DESCRIPTION	COMMENTS	QTY.
10	068952	Collar, Mount 1NO ZB5		4
11	068920	Contact Block, NO ZB5		1
12	052503	Switch Head, PB Green Flush Illum ZB5		2
13	068910	Light Module, Green ZB5		2
14	068900	Push-Button, Ext Red ZB5		2
15	068930	Pilot Light, Red ZB5		1
16	068951	Switch Collar, Mount ZB5		1
17	068911	Light Module, Red ZB5		1
18	052937	PCB Assembly, TWC Modbus Adaptor		1
19	078130	Connector, 1/2" NPT .23-.546 Cord Grip		1
20	E20460	Ring, 1/2 Sealing		7
21	E20461	Nut, 1/2 npt Connector Lock		7
22	E22762	Plug, AS100 Oiltite		1
23	024685	Plug, AS050 Oiltite		3
24	024368	Decal, Connector ID (J1)		1
25	024369	Decal, Connector ID (J2)		1
26	051299	Connector, 1/2" NPT .17-.47		6
27	052992	Cable, 2.5' HD15 Male/Female		1
	078351	Cable Assembly, TWC Board Sensor		1
	078352	Cable Assembly, TWC Deck Prox		1
	078353	Cable Assembly, TWC Deck Solenoid		1
	078357-1	Cable Assembly, TWC Roller Motor		1

# 3 Replacement Parts

## Main Control Insert Assembly

### 3.13 Main Control Insert Assembly



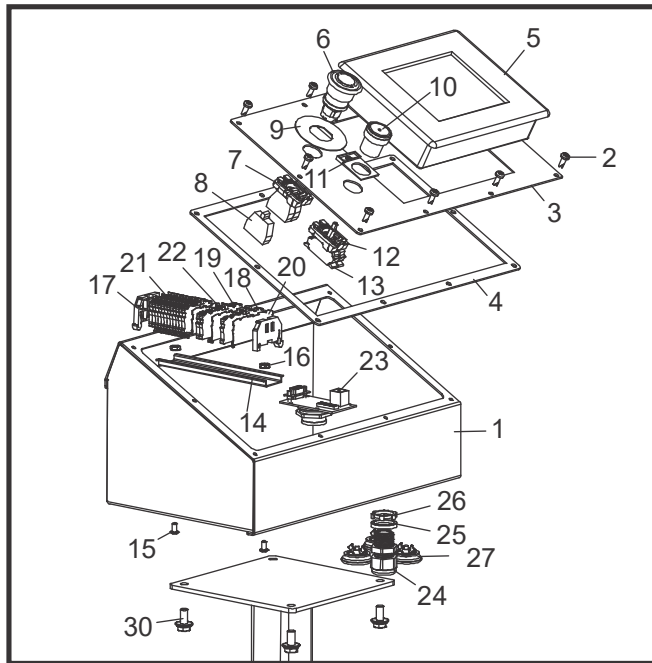
REF	PART #	DESCRIPTION	COMMENTS	QTY.
	078348	<b>INSERT ASSEMBLY, TWC STANDALONE MAIN</b>		1
1	078349	Insert, TWC Standalone Main		1
2	024474	Rail, 355mm x 7.5mm x 14" Steel DIN		3
3	F05015-17	Screw, #10-24 x 1/2" Phillips Pan Head Type 23		14
4	051986	Din Clamp, Screwless		3
5	053118	Power Supply, 1A 24VDC Meanwell		1
6	051684	Relay, IEC Control 2 NO 24VDC		1
7	068104	Terminal Block, 4Pos 1.5mm GND Clamp		2
8	068107	Terminal Block, 2Pos 4mm GND Clamp		1
9	068109	Terminal Block, 3 Tier 2.5mm Clamp		13

REF	PART #	DESCRIPTION	COMMENTS	QTY.
10	068067	Fuse Holder, 3P Class CC Wire Clamps		1
11	051957	Fuse, 10A 600V Class CC Delay		3
12	024890	Contactor, 9A 3P 24VDC Coil		1
13	050903-1	Disconnect, 40A 3PH Non-Fused 6mm		1
14	053361	PLC Assembly, Standalone TWC w/Software		1
15	051673-1	Shaft, Disconnect 180mm x 6mm		1
16	051682	Transformer, 208/240/480 Primary 115Sec 150VA w/Fuse		1
17	051686-1_5	Fuse, 1.5A Class CC Time Delay Rejection		2
18	051761	Fuse, 3A Midget Slo-Blow 250VAC		1
19	051676-1	Drive Assembly, TWC Roller AC w/Software		1
20	050735	Cable Duct, 3H x 1W x 72L Open Slot Wht		6

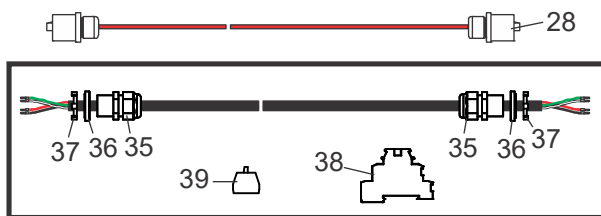
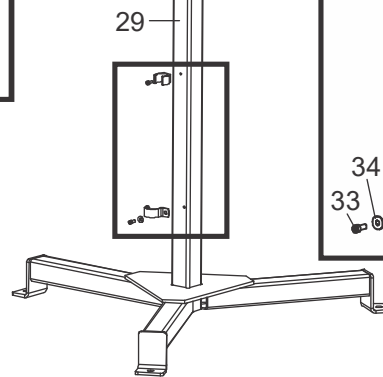
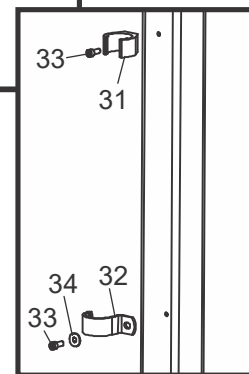
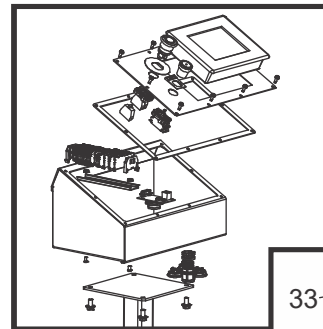
# 3 Replacement Parts

## Operator Control

### 3.14 Operator Control



TW0040-2



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	TWC-OP	<b>CONTROL KIT, THREE-WAY DECK OPERATOR</b>		1
	078347	Control Assembly, Three-Way Deck Operator		1
1	061509	Box Weldment, TWC Operator Control		1
2	F05015-17	Screw, #10-24 x 1/2" Phillips Pan Head Type 23		10
	078358	Control Assembly, TWC Standalone HMI		1
3	061512	Plate, TWC Operator Control Panel		1
4	006891	Gasket, TWC Control Panel		1
5	053364-1	Display Assembly, TWC Operator Control		1
6	068940	Push-Button, Mshrm Mntnd Red TrnRI ZB5		1
7	068951	Switch Collar, Mount ZB5		1
8	050540	Contact, NC ZBE102		4



REF	PART #	DESCRIPTION	COMMENTS	QTY.
9	050992	Legend, Round Yellow E-Stop		1
10	052503	Switch Head, PB Green Flush Illum ZB5		1
11	050531	Legend, ON		1
12	068952	Collar, Mount 1NO ZB5		1
13	068910	Light Module, Green ZB5		1
14	024474-6	Rail, 35mm x 7.5mm x 6" Steel DIN		1
15	F05004-218	Screw, #10-24 x 3/8" Button Socket Head Stainless		2
16	F05010-14	Nut, #10-24 Hex Self-Locking		2
17	051986	Din Clamp, Screwless		2
18	068104	Terminal Block, 4Pos 1.5mm GND Clamp		1
19	068103	Terminal Block, 4Pos 1.5mm Com Clamp		2
20	068105	Terminal Block, 4Pos 1.5mm End Plate		1
21	068100	Terminal Block, 2Pos 1.5mm Clamp		12
22	068102	Terminal Block, 2Pos 2.5mm End Plate		1
23	052937	PCB Assembly, TWC Modbus Adaptor		1
24	078130	Connector, 1/2" NPT .23-.546 Cord Grip		1
25	E20460	Ring, 1/2 Sealing		1
26	E20461	Nut, 1/2 nPT Connector Lock		1
27	024685	Plug, AS050 Oiltite		3
	078361	Cable Assembly, TWC HMI Comms		1
	078345	Cable Assembly, TWC Standalone Op		1
	068214	Cable Assembly, Ind. Mill Aux Estop		1
28	052988	Cable Assembly, 100' RJ45 Ethernet		1
	006903	Stand Assembly, Three-Way Deck Operator Control		1
29	061519	Stand Weldment, TWC Operator Control		1
30	F05006-101	Bolt, 5/16-18 x 3/4" Hex Head w/Flat & Lock Washer		4
31	038752	Bracket, 3/4" Flex Mounting		1
32	P05436	Clamp, 1" EMT		1
33	F05004-26	Screw, #10-24 x 1/2" Socket Head		2
34	F05011-18	Washer, #10 SAE Flat		1
	053395	Parts Kit, Three-Way Auxiliary E-Stop		1
35	051299	Connector, 1/2" NPT .17-.47 Cable		2
36	E20460	Ring, 1/2" Sealing		2
37	E20461	Nut, 1/2" NPT Connector Locking		2
38	024908	Terminal Block, 3-Tier		1
39	050540	Contact, NC ZBE102		1

# 4 Electrical Information

## Electrical Symbol Diagram (TWC)

### SECTION 4 ELECTRICAL INFORMATION

#### 4.1 Electrical Symbol Diagram (TWC)

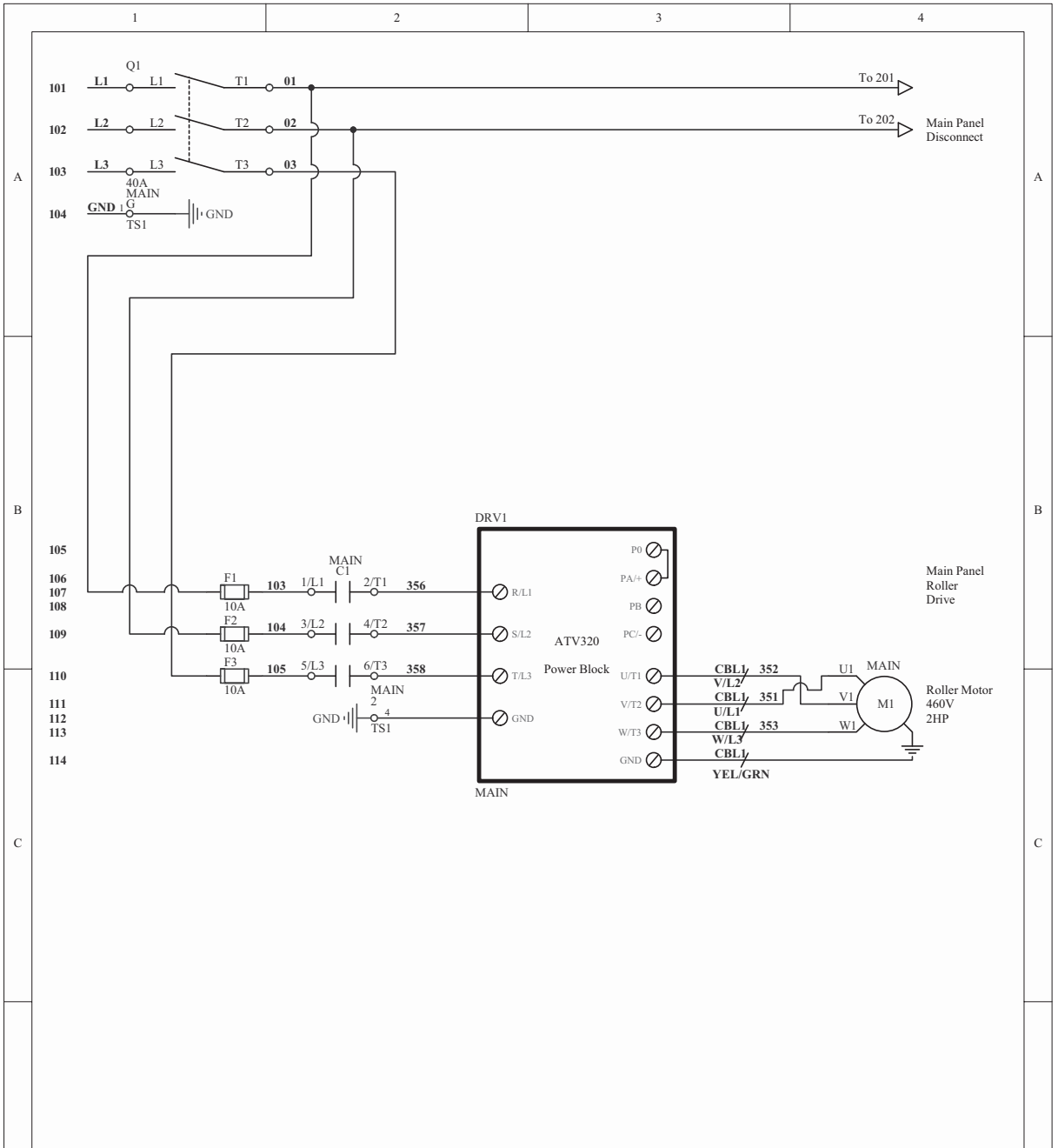


FIG. 4-1 (PAGE 1 OF 13)

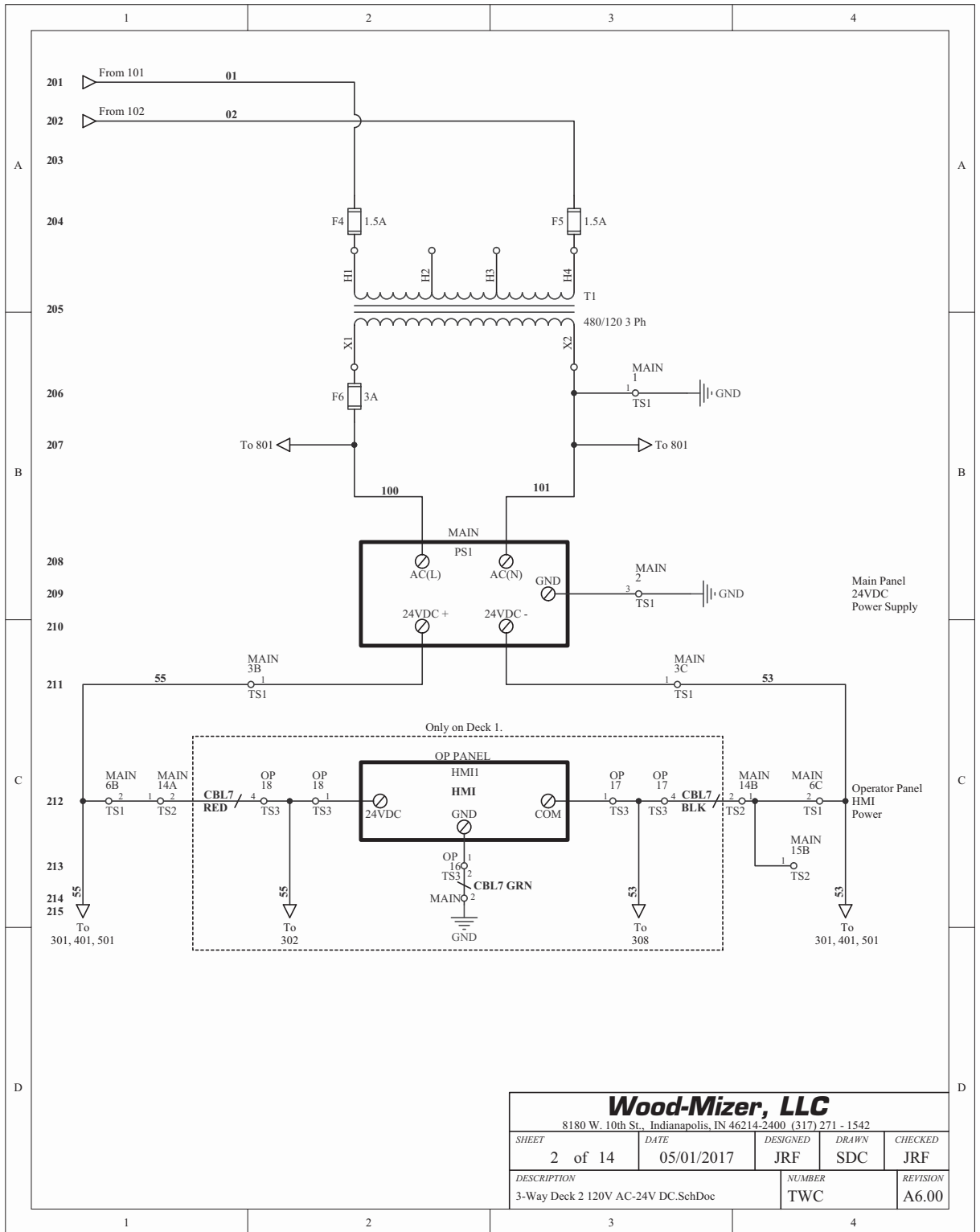
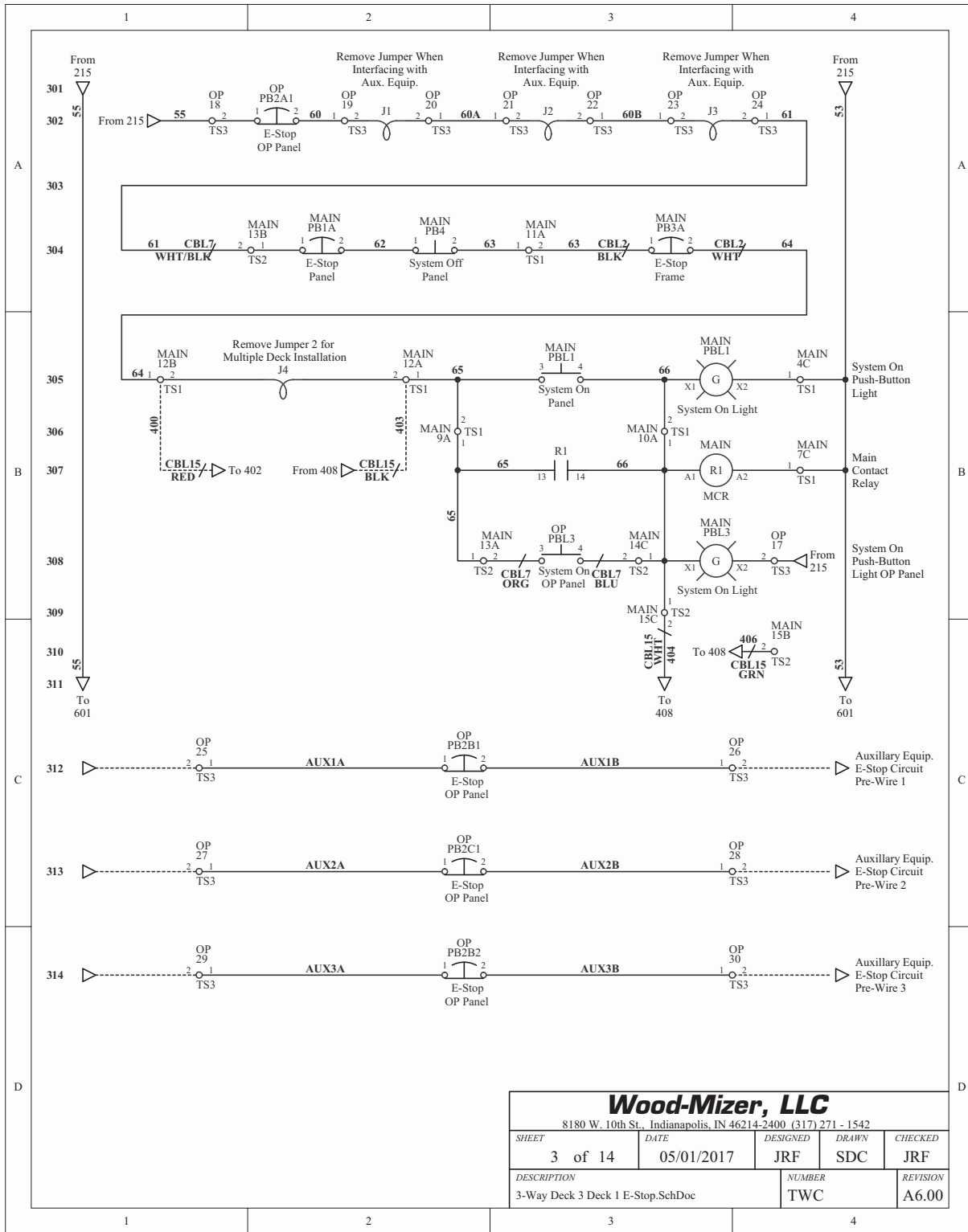


FIG. 4-2 (PAGE 2 OF 13)



**Wood-Mizer, LLC**  
8180 W. 10th St., Indianapolis, IN 46214-2400 (317) 271 - 1542

SHEET	DATE	DESIGNED	DRAWN	CHECKED
3 of 14	05/01/2017	JRF	SDC	JRF
DESCRIPTION			NUMBER	REVISION
3-Way Deck 3 Deck 1 E-Stop.SchDoc			TWC	A6.00

**FIG. 4-3 (PAGE 3 OF 13)**

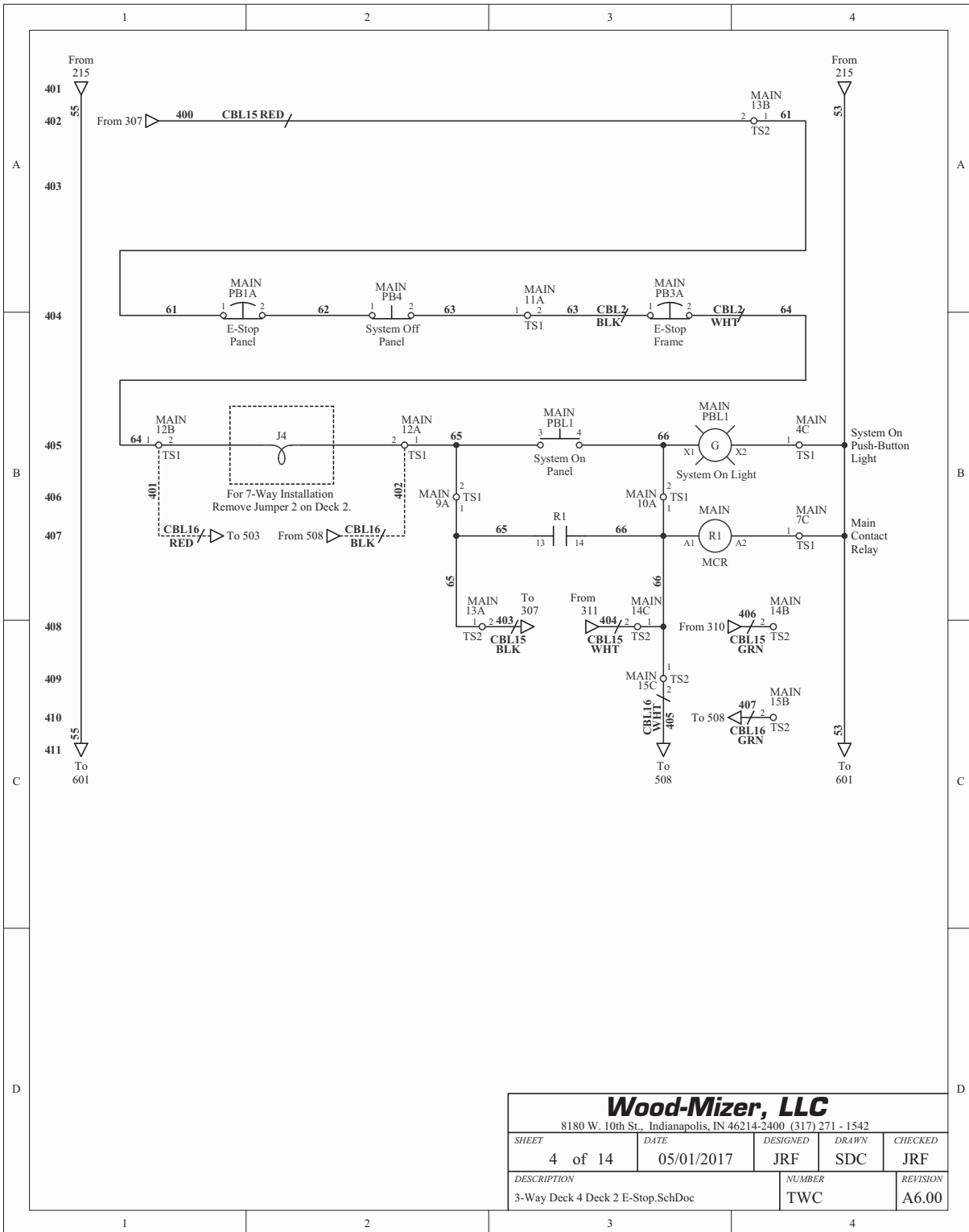
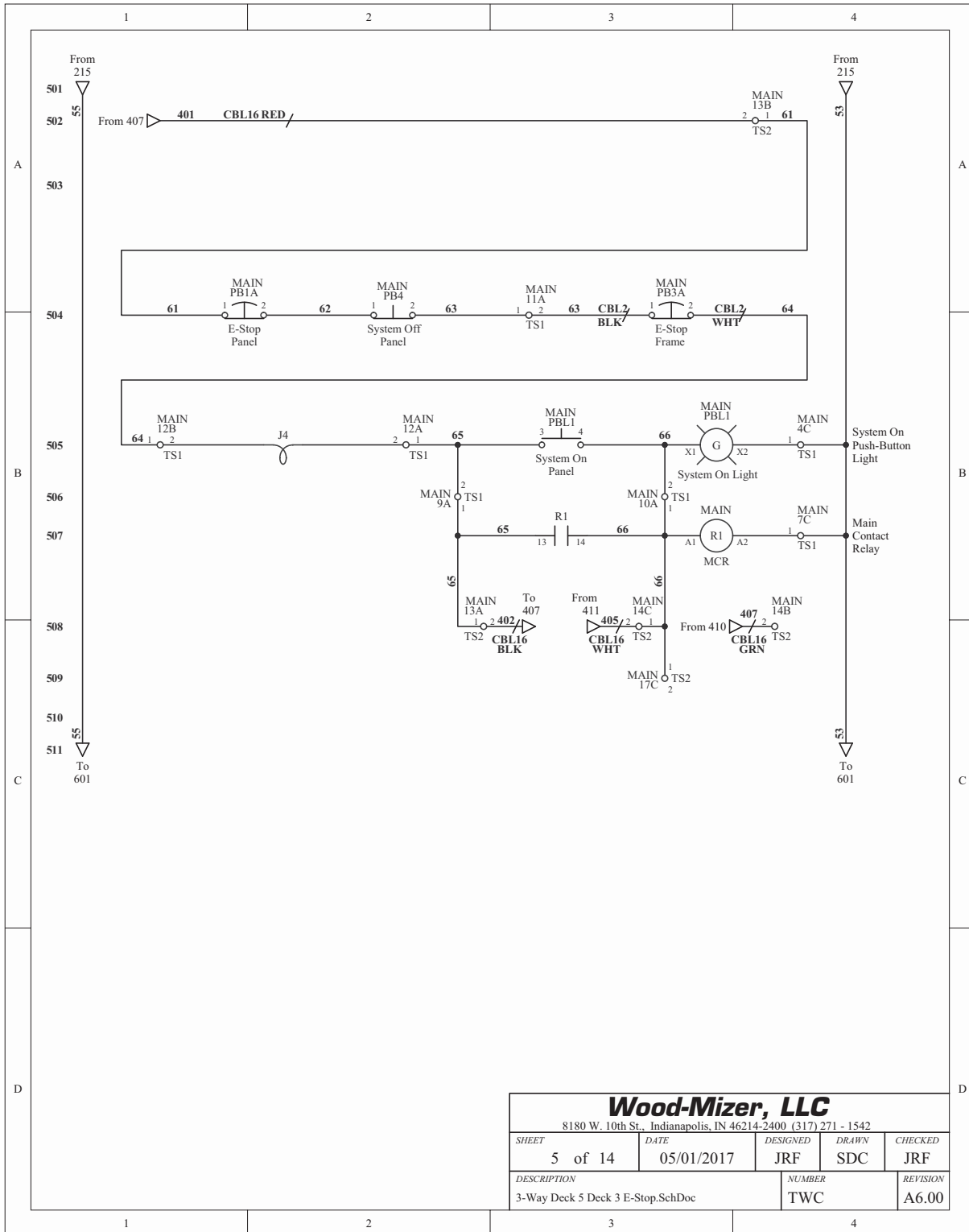


FIG. 4-4 (PAGE 4 OF 13)



**FIG. 4-5 (PAGE 5 OF 13)**

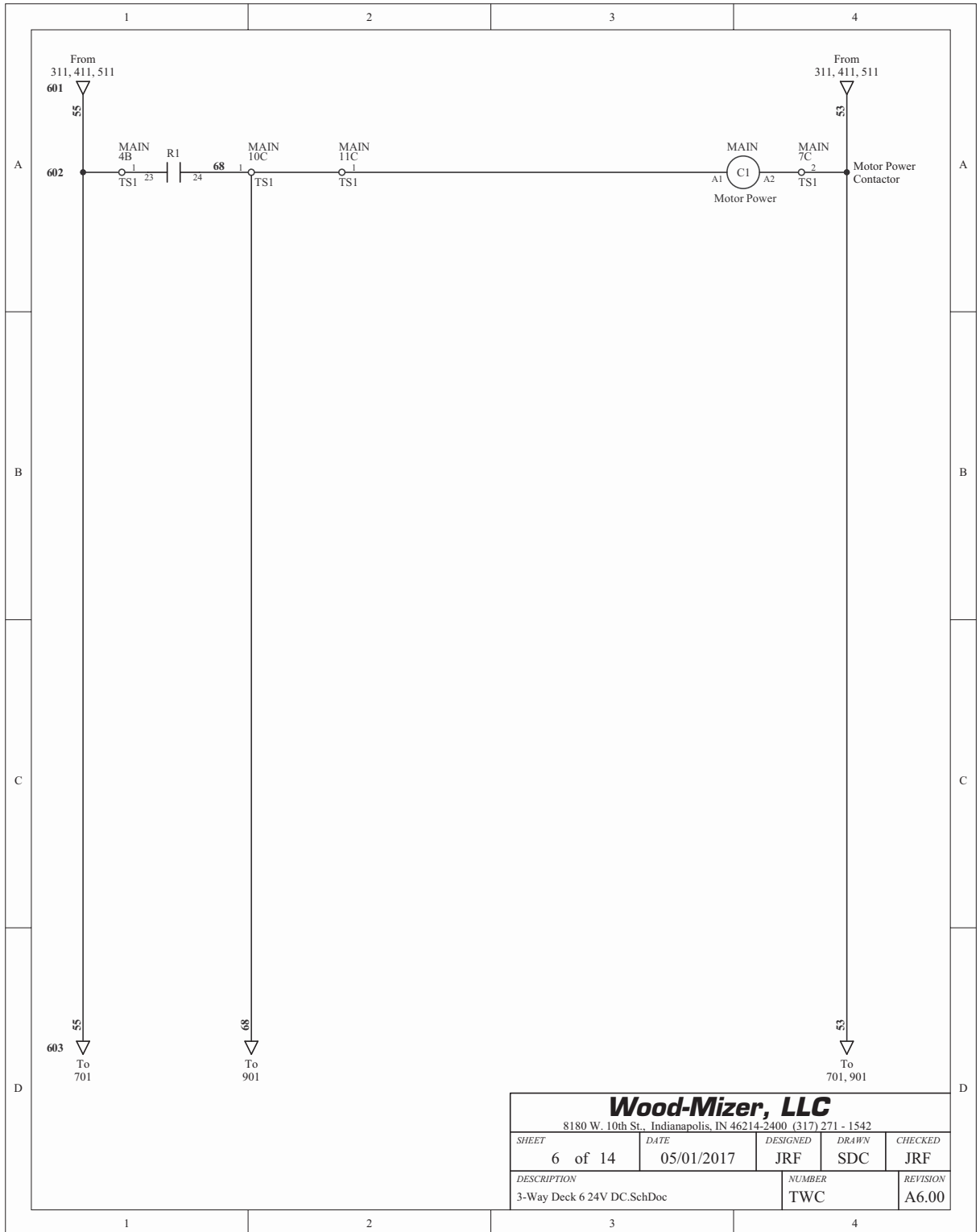


FIG. 4-6 (PAGE 6 OF 13)

# 4

## Electrical Information Electrical Symbol Diagram (TWC)

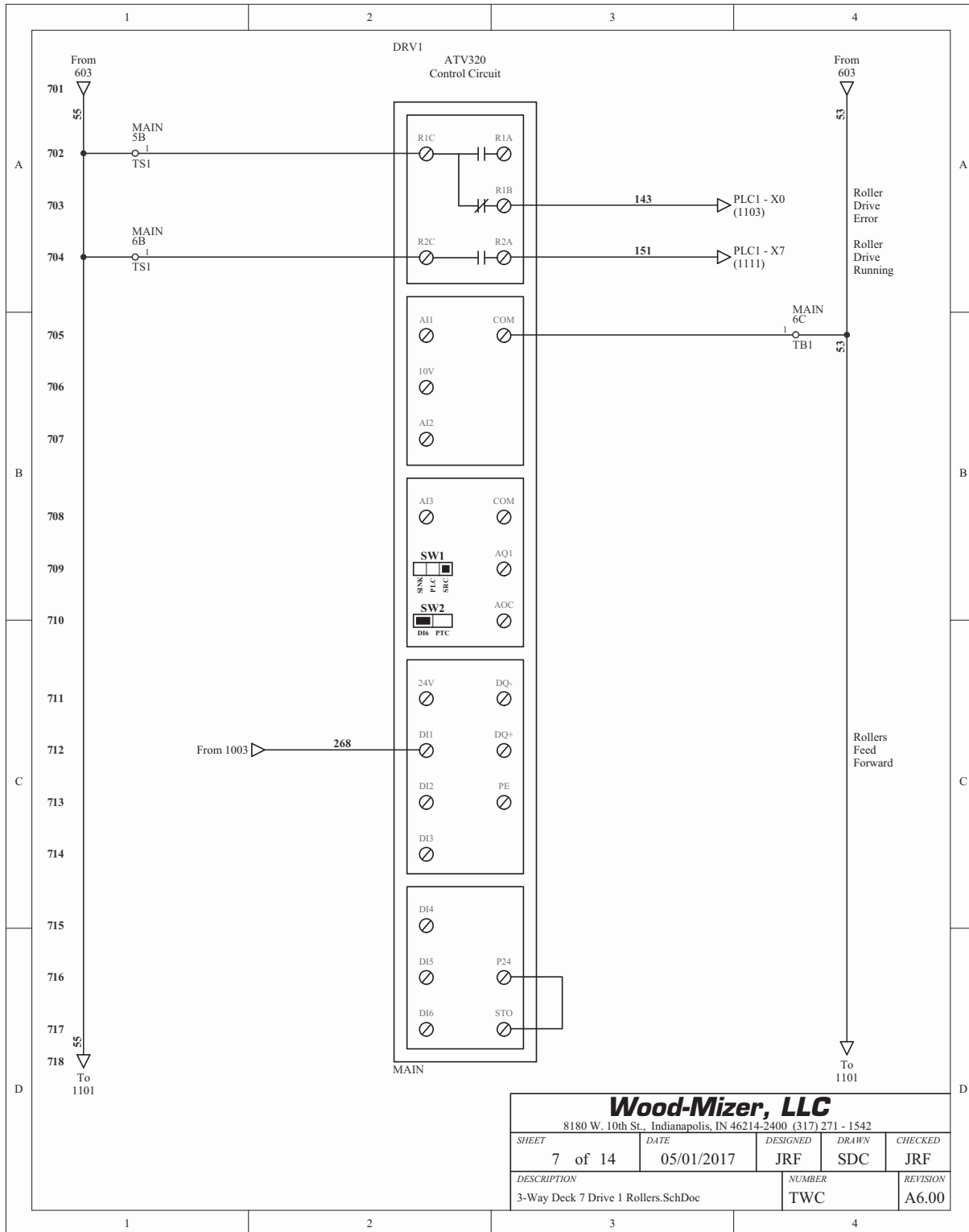


FIG. 4-7 (PAGE 7 OF 13)



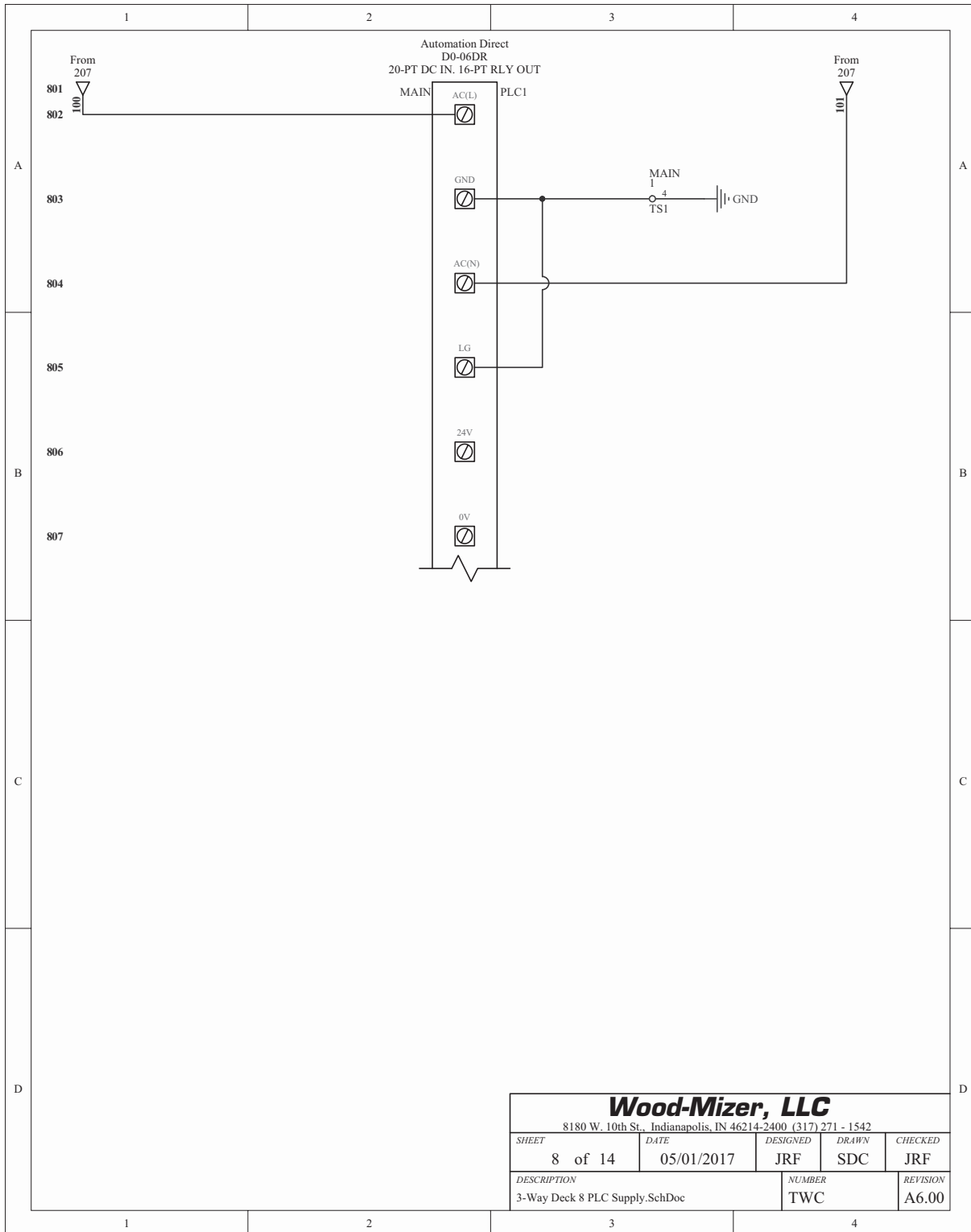


FIG. 4-8 (PAGE 8 OF 13)

# 4

## Electrical Information

### Electrical Symbol Diagram (TWC)

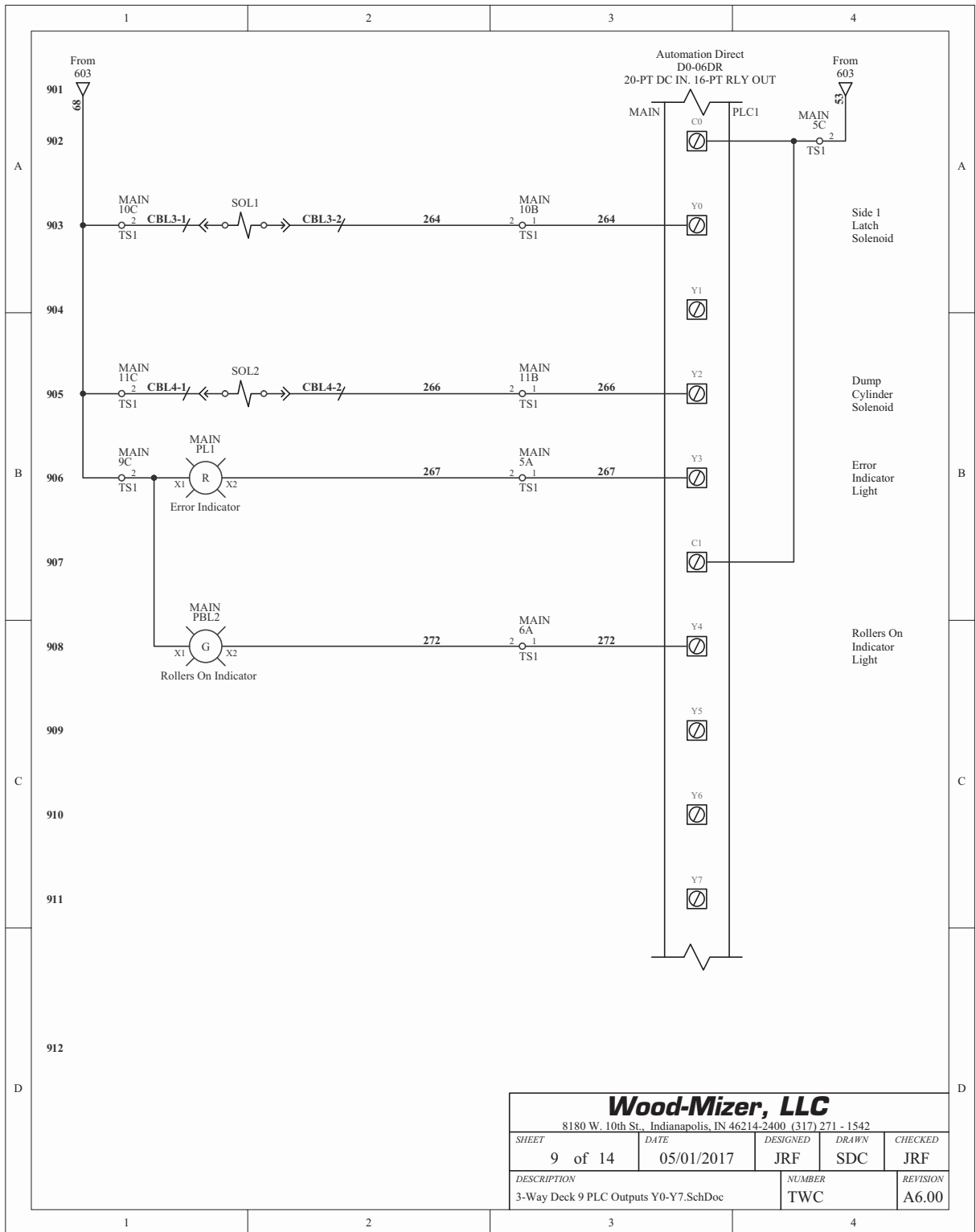


FIG. 4-9 (PAGE 9 OF 13)

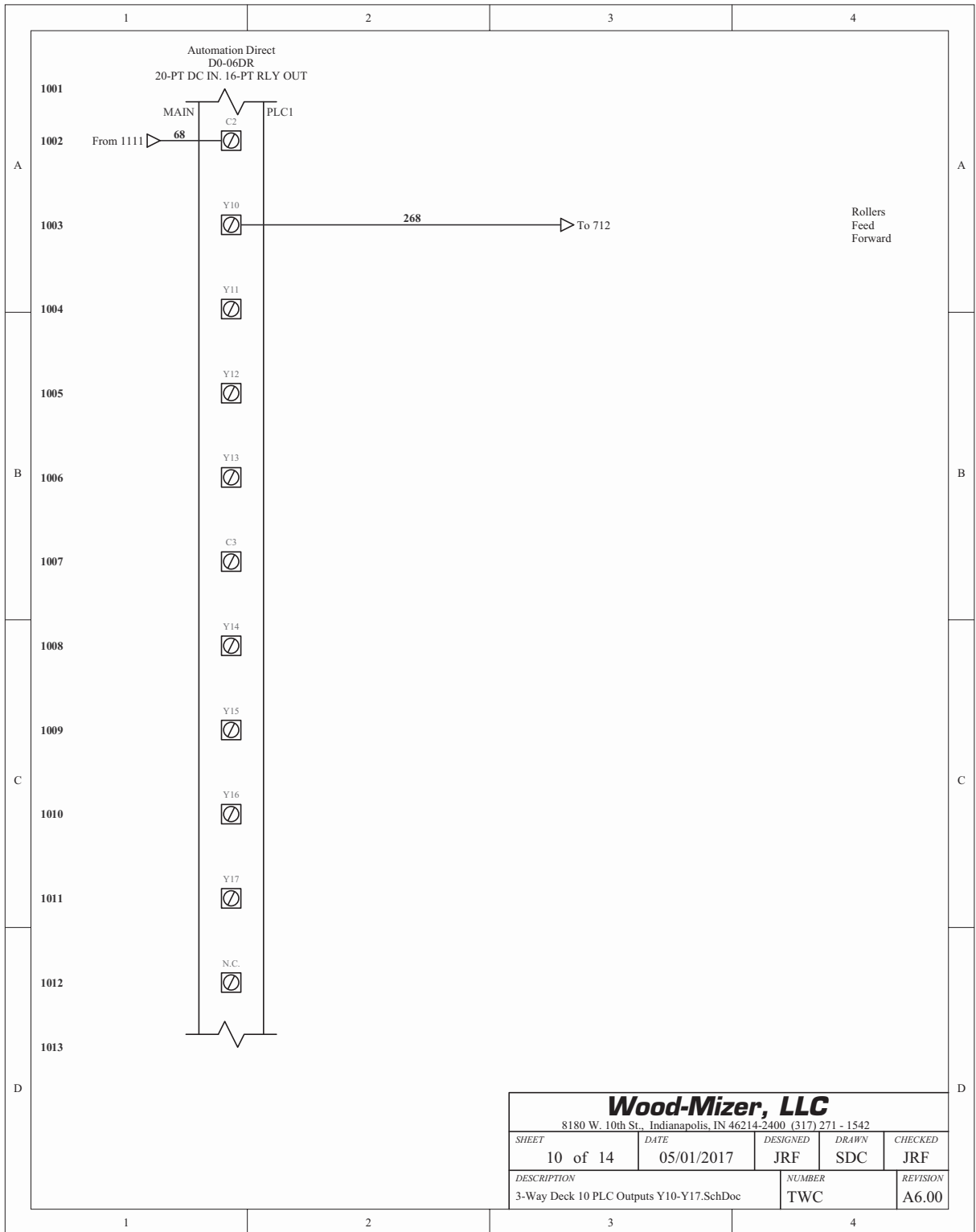


FIG. 4-10 (PAGE 10 OF 13)

# 4

## Electrical Information

### Electrical Symbol Diagram (TWC)

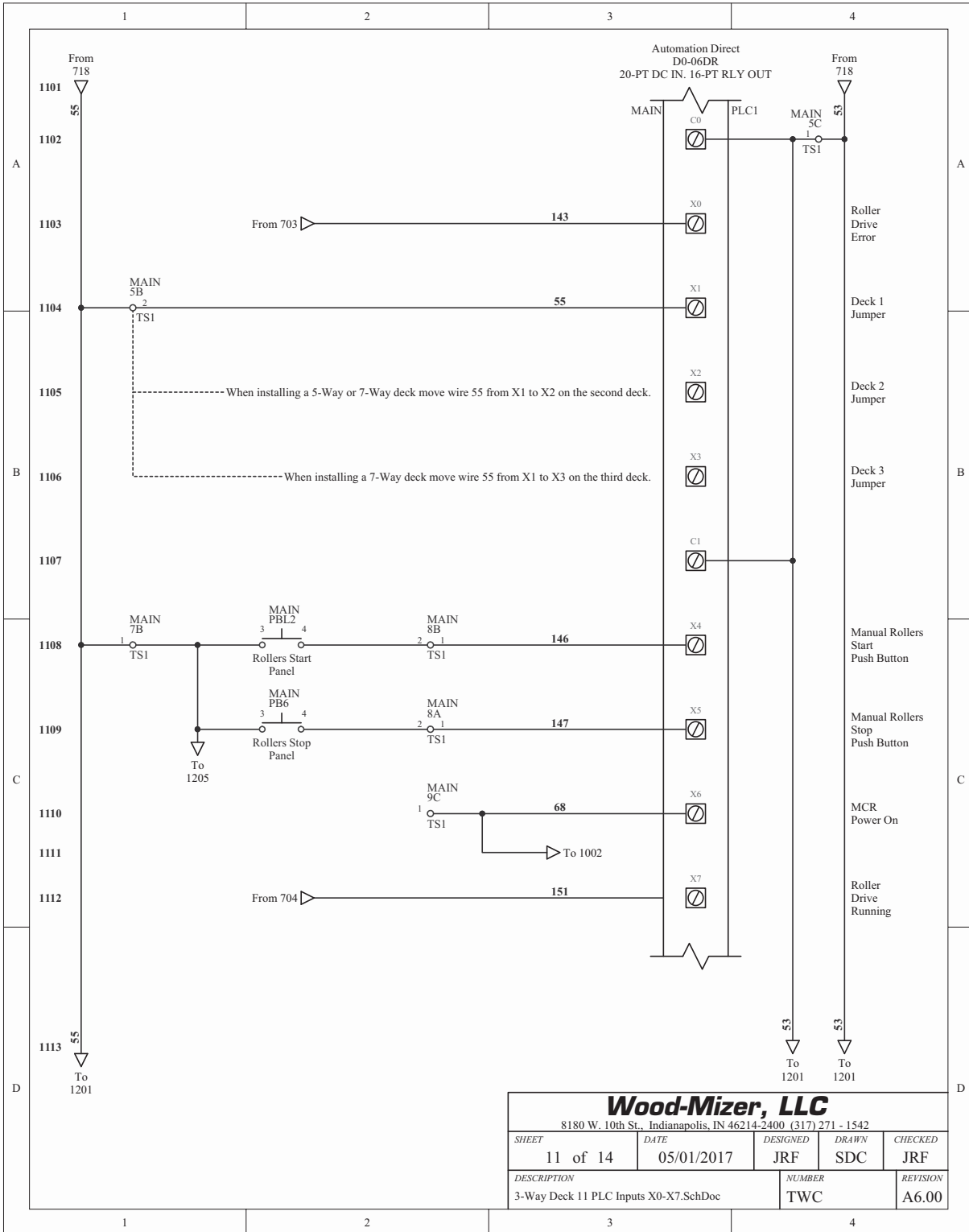


FIG. 4-11 (PAGE 11 OF 13)

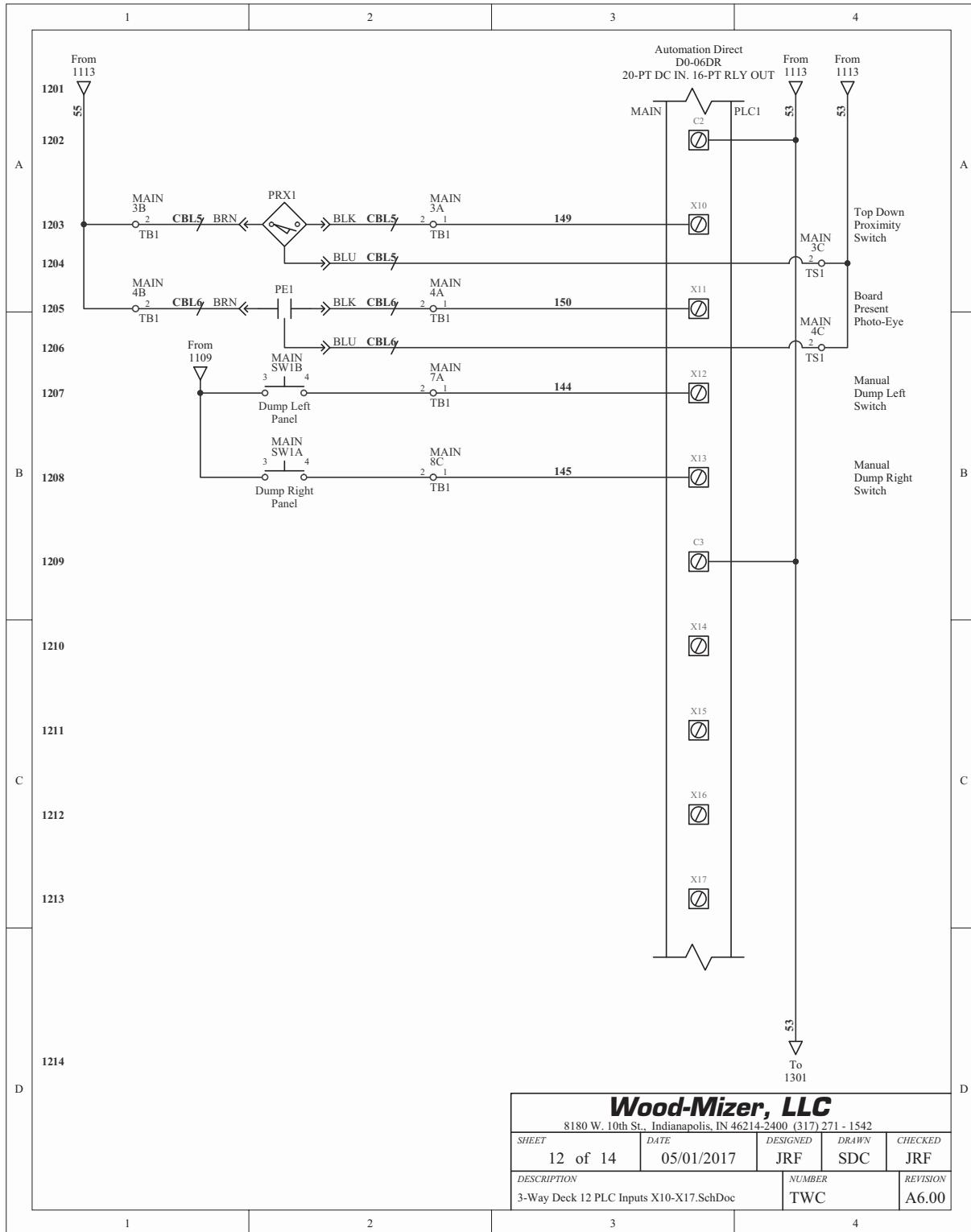
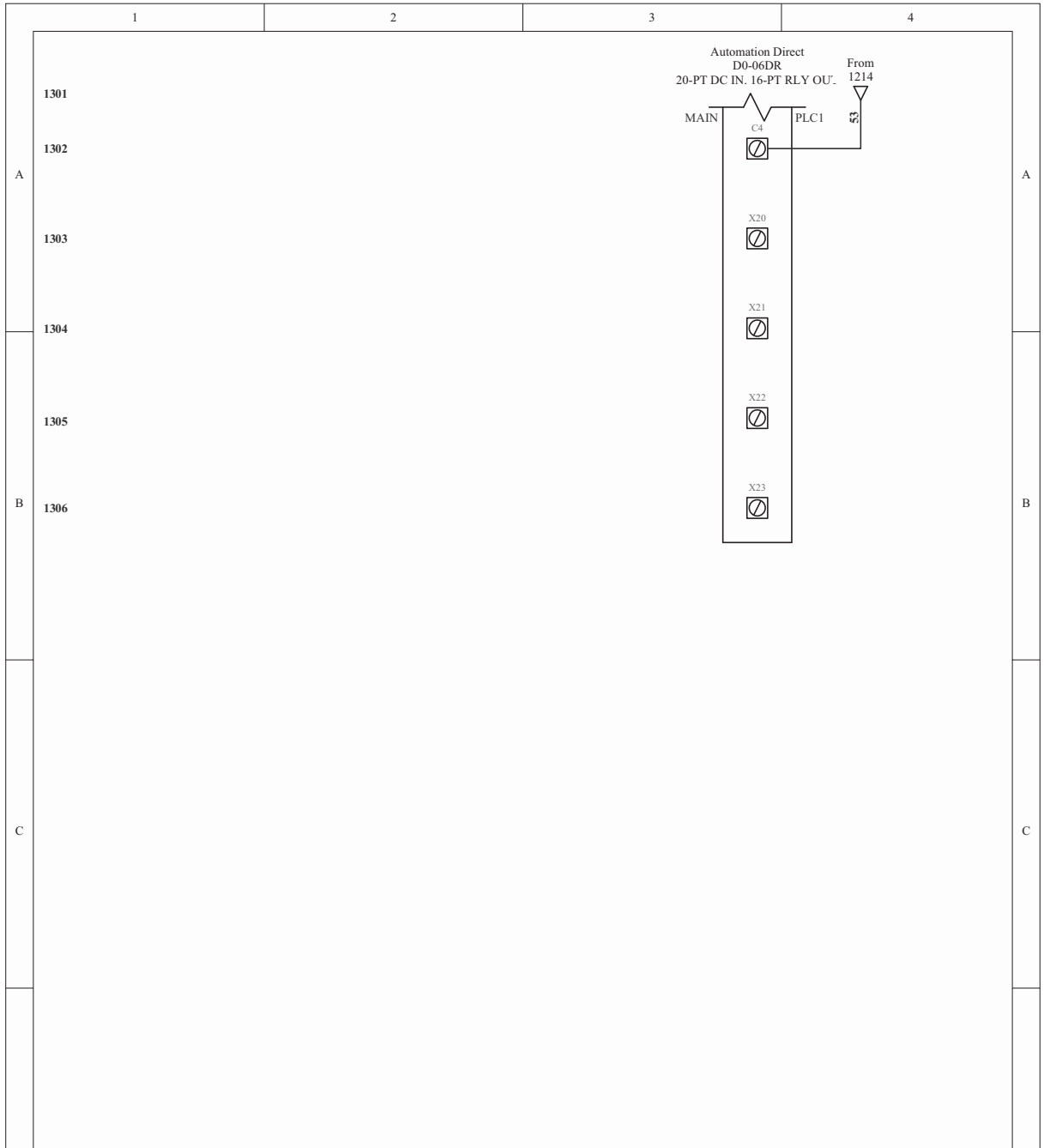


FIG. 4-12 (PAGE 12 OF 13)



**FIG. 4-13 (PAGE 13 OF 13)**

4.2 Electrical Symbol Diagram (PCB Modbus)

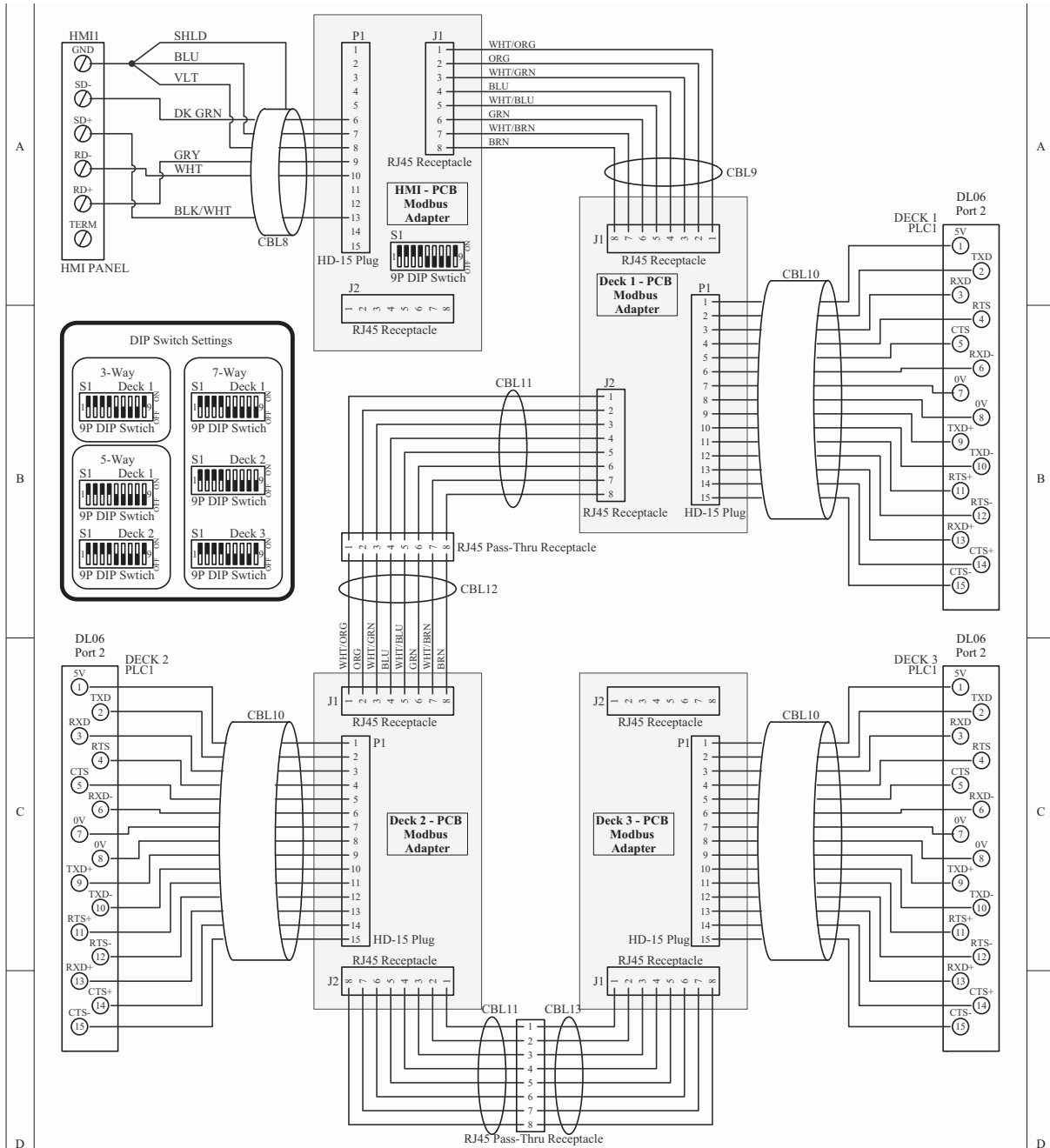


FIG. 4-14

# 4 Electrical Information

## Component Layout Diagram (Control Box)

### 4.3 Component Layout Diagram (Control Box)

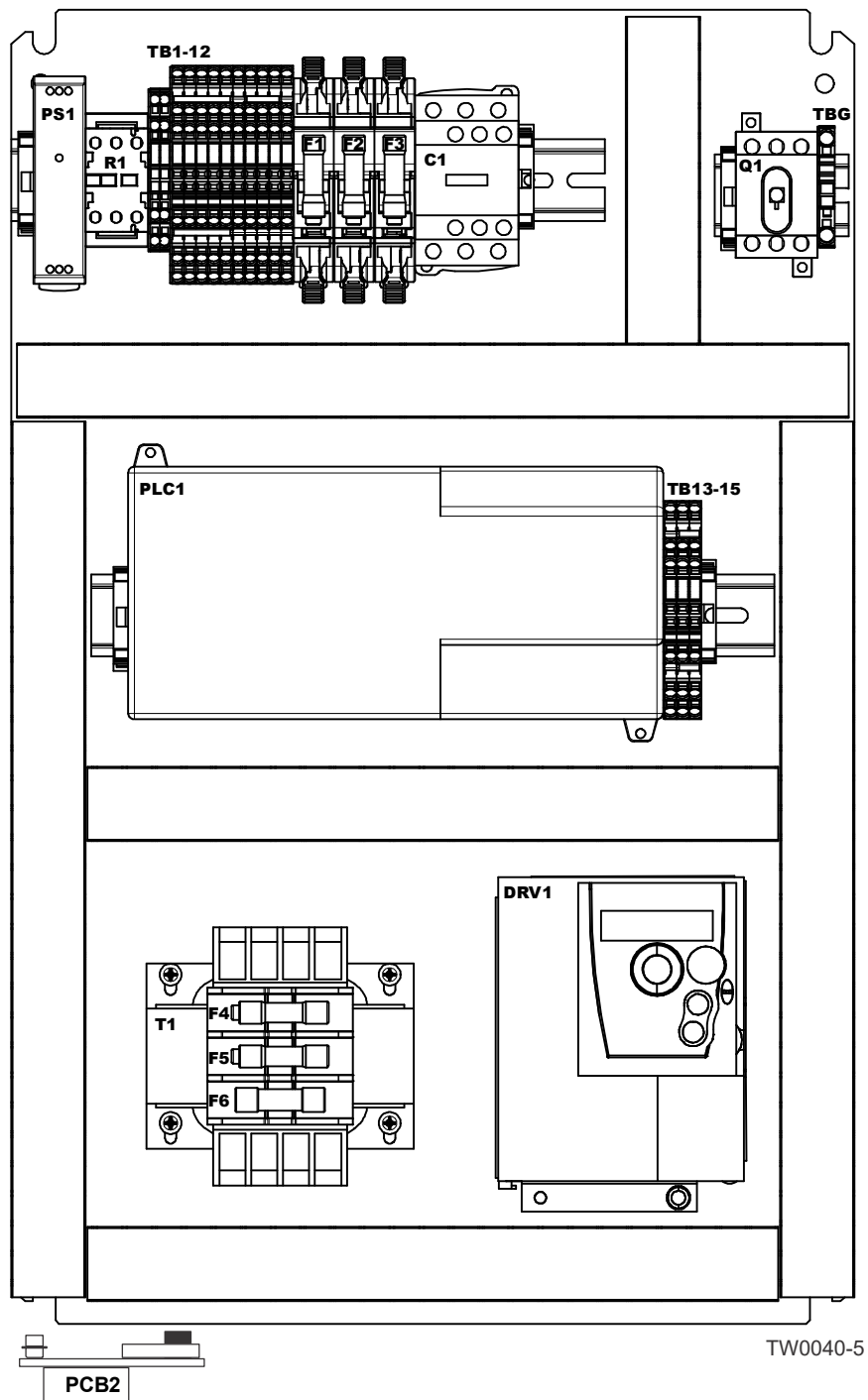


FIG. 4-15



### 4.4 Component Layout Diagram (Control Buttons)

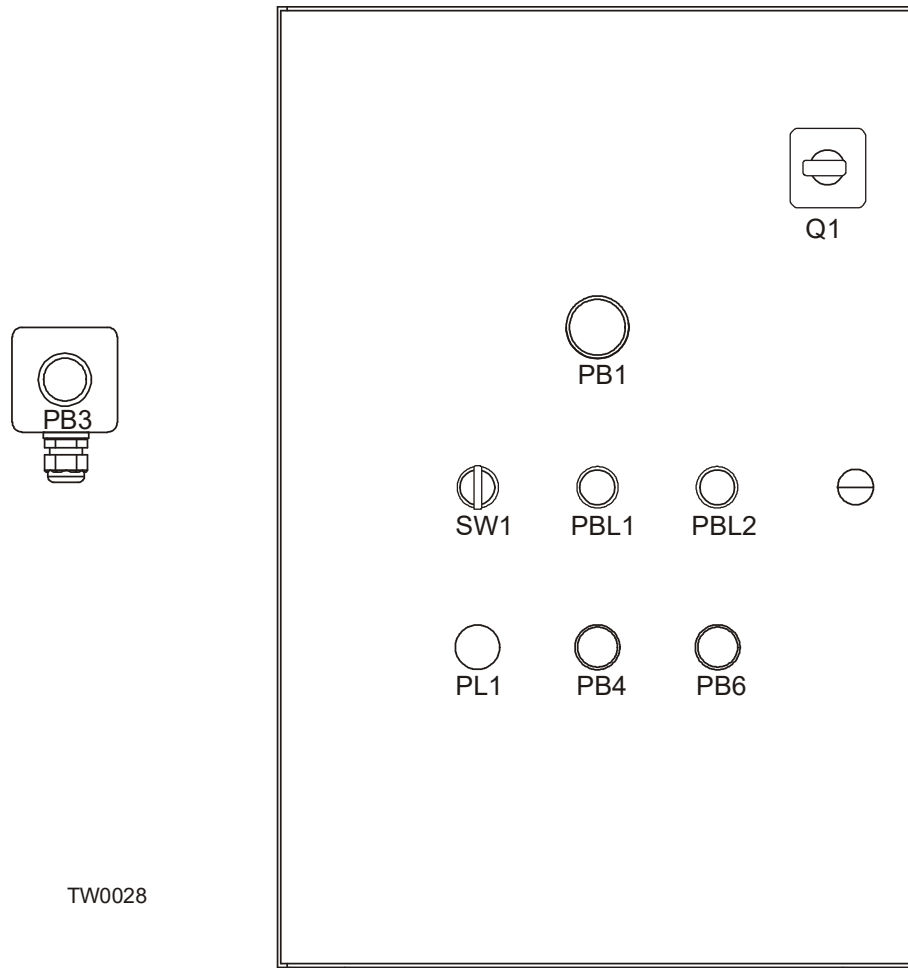
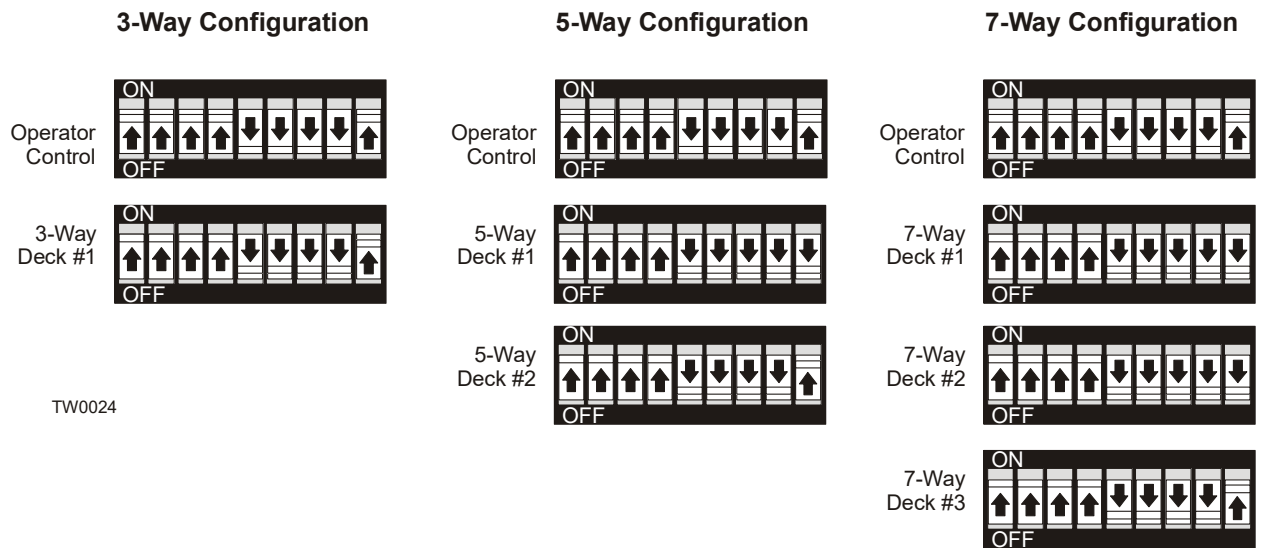


FIG. 4-16

### 4.5 DIP Switch Settings



**FIG. 4-17**

### 4.6 Component Layout Diagram (Operator Control)

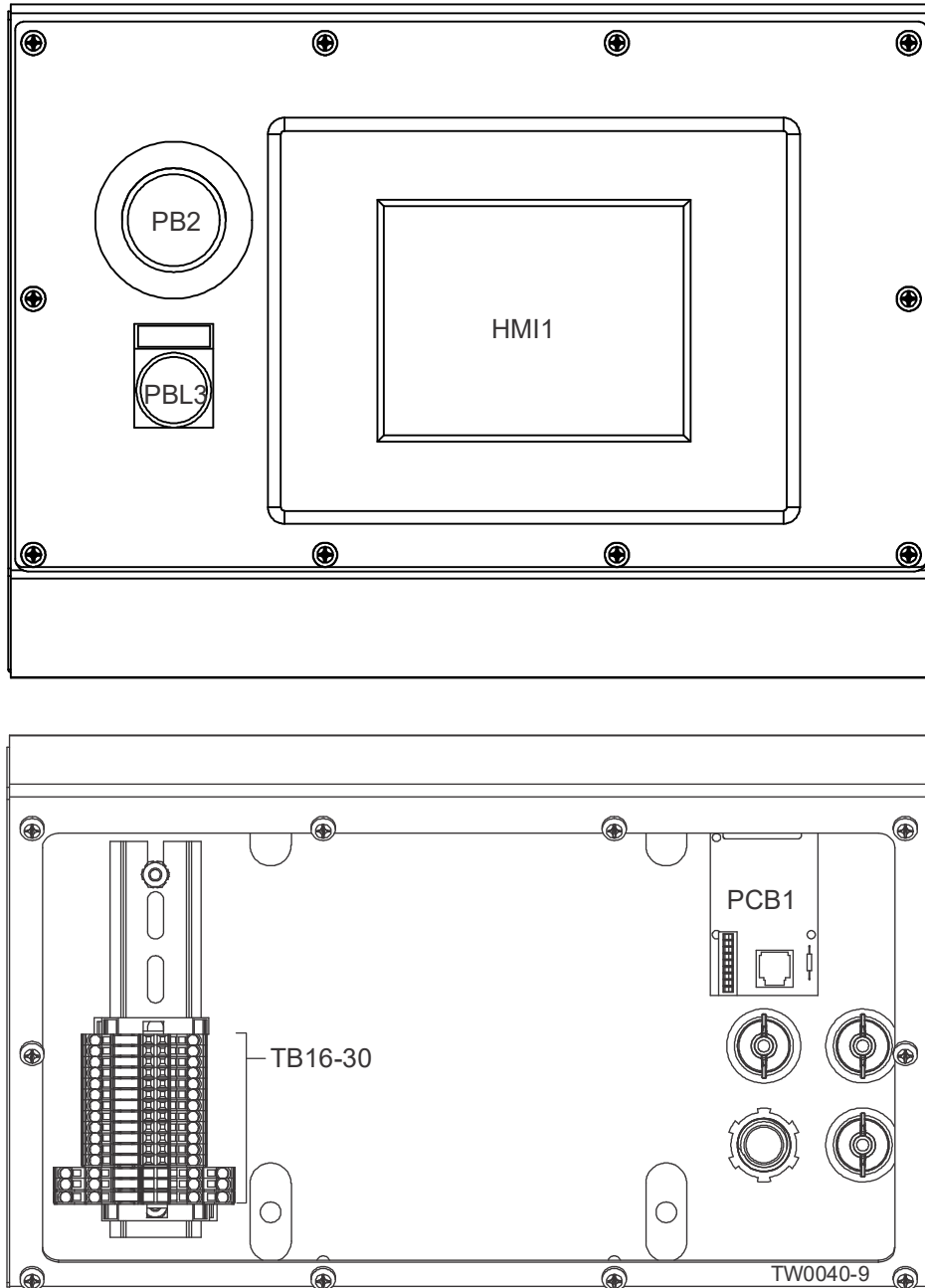


FIG. 4-18

## 4.7 Electrical Component List

Component	Wood-Mizer Part No.	Description
C1	024890	Contactora, 3 Pole 9A 24VDC Coil LP4D09
---	068214	Cable Assembly, Ind. Mill Aux Estop (part of Control Assembly)
CBL1	078357	Cable Assembly, TWC Roller Motor
CBL2	078356	Cable Assembly, TWC RMT E-Stop
CBL3	078354	Cable Assembly, TWC Latch Solenoid
CBL4	078353	Cable Assembly, TWC Deck Solenoid
CBL5	078352	Cable Assembly, TWC Deck Prox
CBL6	078351	Cable Assembly, TWC Board Sensor
CBL7	078345	Cable Assembly, TWC Standalone Op
CBL8	078361	Cable Assembly, TWC HMI Comms
CBL9	052988	Cable Assembly, 100' RJ45 Ethernet
CBL10	052992	Cable, 2.5' HD15 Male/Female
CBL11	052994	Cable Assembly, 1' RJ45 Ethernet
---	078364	Kit, TWC 5-Way Cables (Includes CBL12 & CBL15)
CBL12	052989	Cable Assembly, 30' RJ45 Ethernet
CBL15	078362	Cable Assembly, TWC Deck 1 to Deck 2
---	078365	Kit, TWC 7-Way Cables (Includes CBL12, CBL13, CBL15 & CBL16)
CBL12	052989	Cable Assembly, 30' RJ45 Ethernet
CBL13	052989	Cable Assembly, 30' RJ45 Ethernet
CBL15	078362	Cable Assembly, TWC Deck 1 to Deck 2
CBL16	078363	Cable Assembly, TWC Deck 2 to Deck 3
CBL17	053395	Harness Assembly, LT300 E-Stop (Optional)
HMI1	053364	Display, 3-Way Operator Control w/Software
DRV1	051676-1	AC Drive Assembly, 3-Way Deck w/Software (Altivar 320)
F1 - F3	051957	Fuse, 10A Class CC Time Delay Rejection
F4 - F5	051686-1_5	Fuse, 1.5A Class CC Time Delay Rejection
F6	051761	Fuse, 3A Midget Slo-Blow 250VAC
M1	042390	Motor, 2HP 230/460V 3P
PB1	068940	Push-Button, Mshrm Mntnd Red TrnRI ZB5
	050992	Label, E-Stop
	068950	Collar, Mount 1NC ZB5
PB2	068940	Push-Button, Mshrm Mntnd Red TrnRI ZB5
	050992	Label, E-Stop
	068951	Switch Collar, Mount ZB5
	050540	Contact, 10A NC AENL Series
PB3	053366	Box Assembly, Three-Way Deck Remote E-Stop
PB4	068900	Push-Button, Ext Red ZB5
	068950	Collar, Mount 1NC ZB5

<b>PB6</b>	068900	Push-Button, Ext Red ZB5
	068952	Collar, Mount 1NO ZB5
<b>PCB1 - PCB2</b>	052937	PCB Assembly, 3/5-Way Modbus Adaptor
<b>PBL1 - PBL3</b>	052503	Switch Head, PB Green Flush Illum ZB5
	068952	Collar, Mount 1NO ZB5
	068910	Light Module, Green ZB5
<b>PE1</b>	051831	Sensor, Photo RA 18MM PNP w/Reflector
<b>PL1</b>	068930	Pilot Light, Red ZB5
	068911	Light Module, Red ZB5
<b>PLC1</b>	053361	PLC Assembly, 3-Way Deck w/Software (TWC)
<b>PRX1</b>	051439	Sensor, Proximity M12 PNP NS Ex
<b>PS1</b>	053118	Power Supply, 1A 24VDC Meanwell
<b>Q1</b>	050903-1	Switch, 40A 3P Non-Fused Disconnect 6mm
	051673-1	Shaft, Disconnect 180mm x 6mm
	050883-1	Switch, Disconnect Red/Yellow 6mm
<b>R1</b>	051684	Relay, 24VDC 2 NO IEC Control
<b>SOL1</b>	045225	Valve 1/8" NPT Air Solenoid (Pivot Latch)
<b>SOL2</b>	042659	Valve, 3/8" NPT Air Solenoid (Table Dump)
<b>SW1</b>	068945	Switch, 3Pos Momentary ZB5
	068952	Collar, Mount 1NO ZB5
	068920	Contact Block, NO ZB5
<b>T1</b>	051682	Transformer, 208/240/480 150VAC 115sec
<b>TB1 - TB2</b>	068104	Terminal Block, 4Pos 1.5mm GND Clamp
<b>TB3 - TB15</b>	068109	Terminal Block, 3 Tier 2.5mm Clamp
<b>TB16</b>	068104	Terminal Block, 4Pos 1.5mm GND Clamp
<b>TB17 - TB18</b>	068103	Terminal Block, 4Pos 1.5mm Com Clamp
<b>TB19 - TB30</b>	068100	Terminal Block, 2Pos 1.5mm Clamp
<b>TBG</b>	068107	Terminal Block, 2Pos 4mm GND Clamp

# INDEX

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