

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

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**TWC**

**rev. A1.00 - A6.00**

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

*April 2005*

*Form #1208*

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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 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+**

|                                 |   |
|---------------------------------|---|
| <b>Dimensions:</b>              | Length (per table): 9'-1 3/4"<br>Width: 3'- 6 3/4"<br>Height (Table Down): 2'-11 5/16" min. - 4'-2 5/16" max. (up to 15" leg adjustment)<br>Height (Table Up): 4'-6 3/16" min. - 5'-9 3/16" max. (up to 15" leg adjustment)<br>Height (Ground To Top of Roller): 2'-9 1/2" min. - 3'-11 1/2" max. |
| <b>Weight:</b>                  | Basic Unit: lbs.  |
| <b>Drive Motor:</b>             | 2HP 230/460V 3 Phase  |
| <b>Capacity:</b>                | Per 9' table w/standard 2 air cylinders: 1000 lbs.<br>Per 9' table w/optional 3 air cylinders: 1400 lbs.  |
| <b>Electrical Requirements:</b> | Electrical Service: 460V 30A 3 Phase<br>Fused Disconnect: 30A<br>Time Delay Fuse: 5A<br>Suggested Wire Size (50' max.): 16AWG   |
| <b>Air Requirements:</b>        | Shop Air Supply: Regulated @ 100 psi<br>1.44 cfm required per air cylinder (2 per table standard, 3 per table optional)<br>Minimum 50 gal. reserve tank and 3/4" supply line required.  |

**FIG. 2-1**

## 2 Setup & Operation

### Overview

#### 2.1.2 Dimensions

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

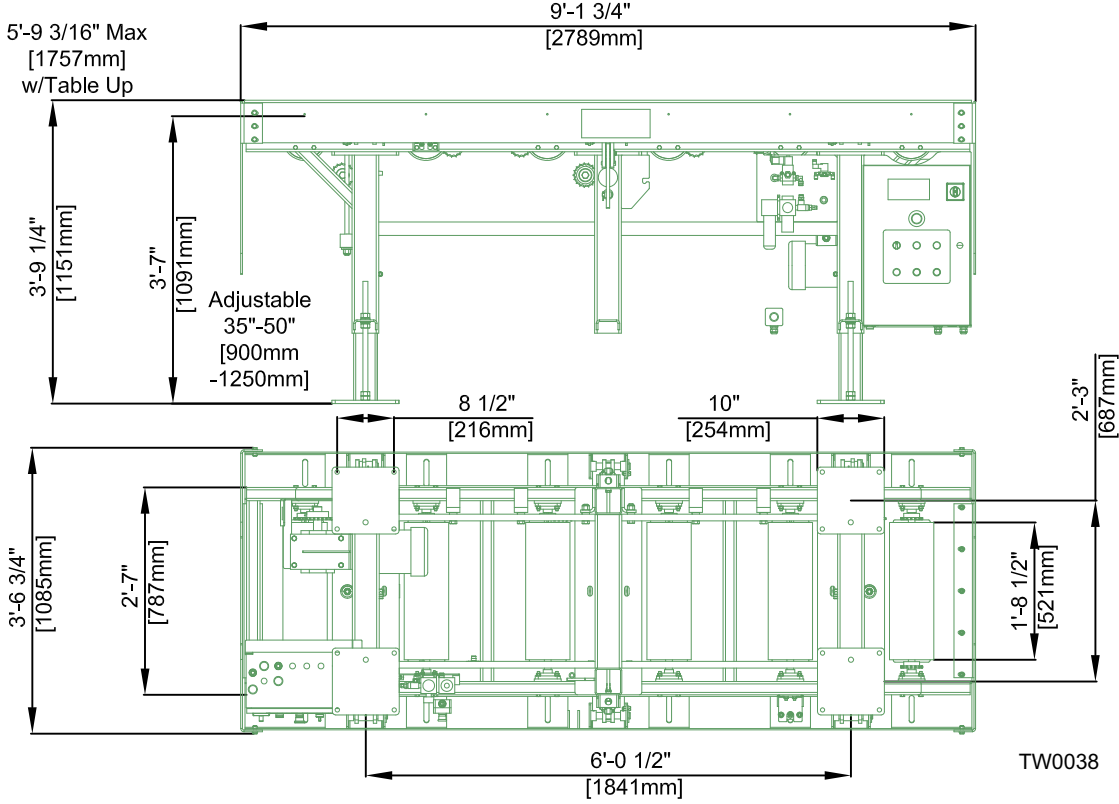


FIG. 2-2

2.1.3 Rev. A4.00+

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).

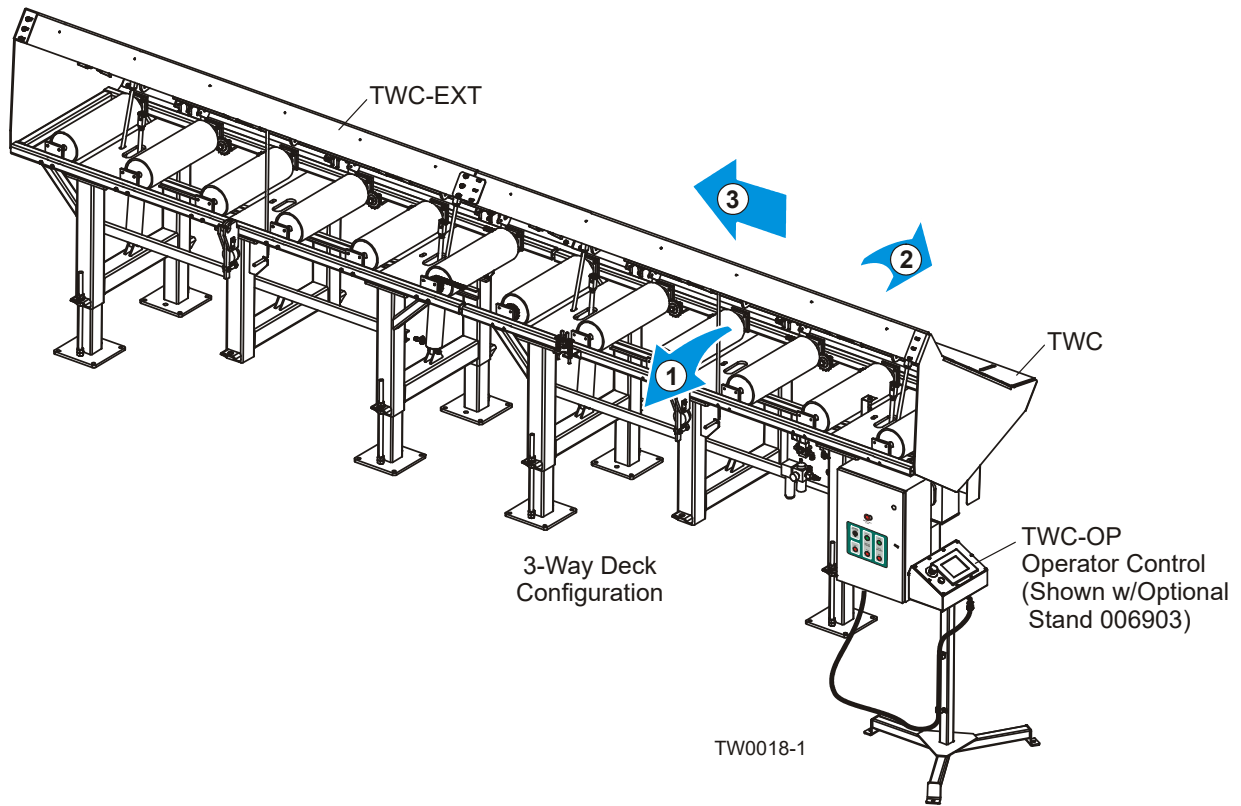
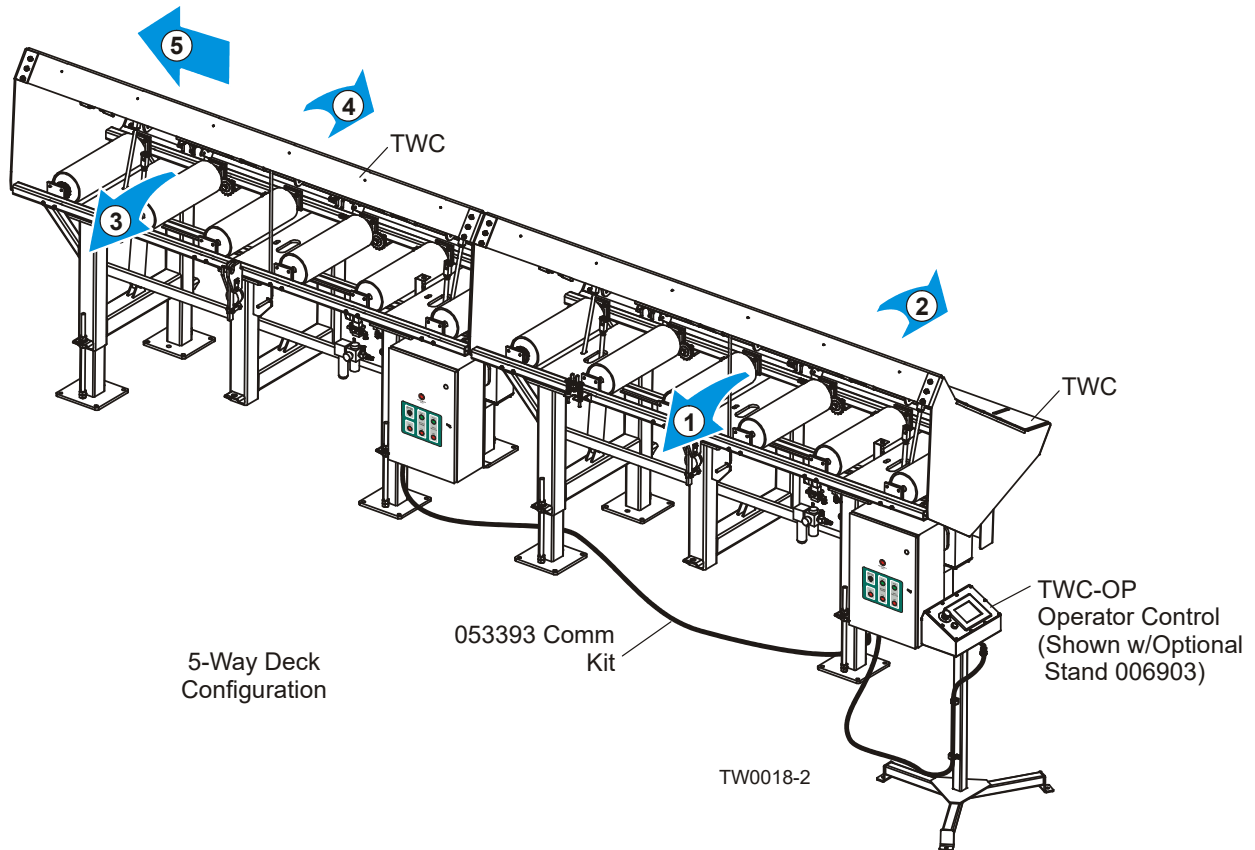


FIG. 2-3

## 2 Setup & Operation

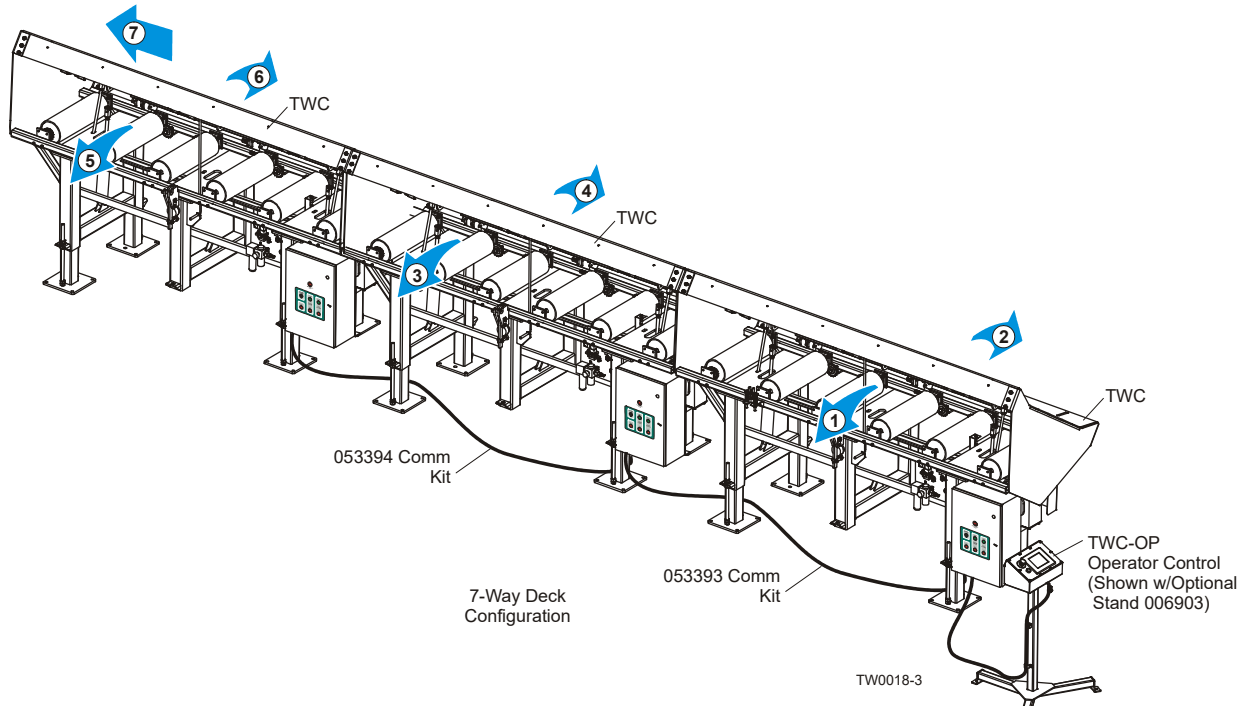
### Overview

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**

**2.1.4 Rev. A1.00 - A3.00**

See **Figure 2-6**. A single deck (TWC-1) can be used to route material up to 9 feet long in

## 2 Setup & Operation

### Overview

three directions.

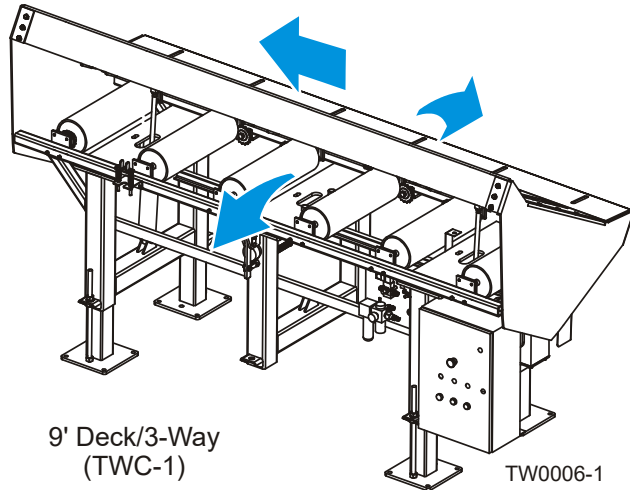


FIG. 2-6

See Figure 2-7. A second deck (TWC-2) can be added to route material up to 9 feet long in five directions.

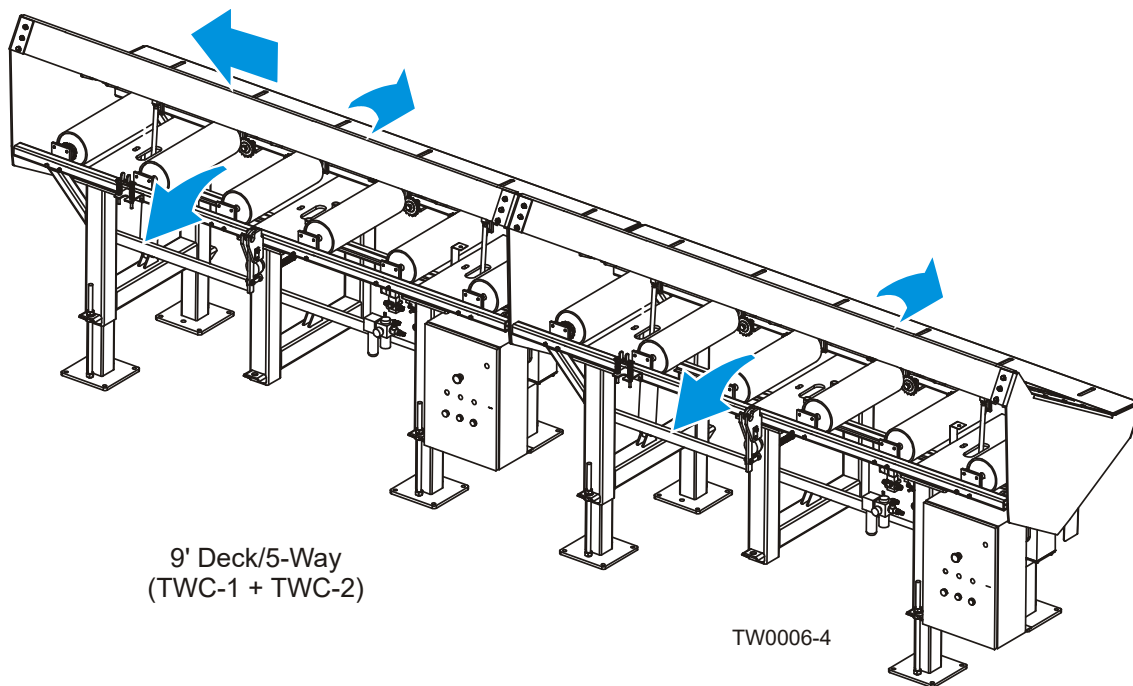


FIG. 2-7

See **Figure 2-8**. A deck extension (TWC-EXT) can be added to a single deck to route material up to 18 feet long in three directions

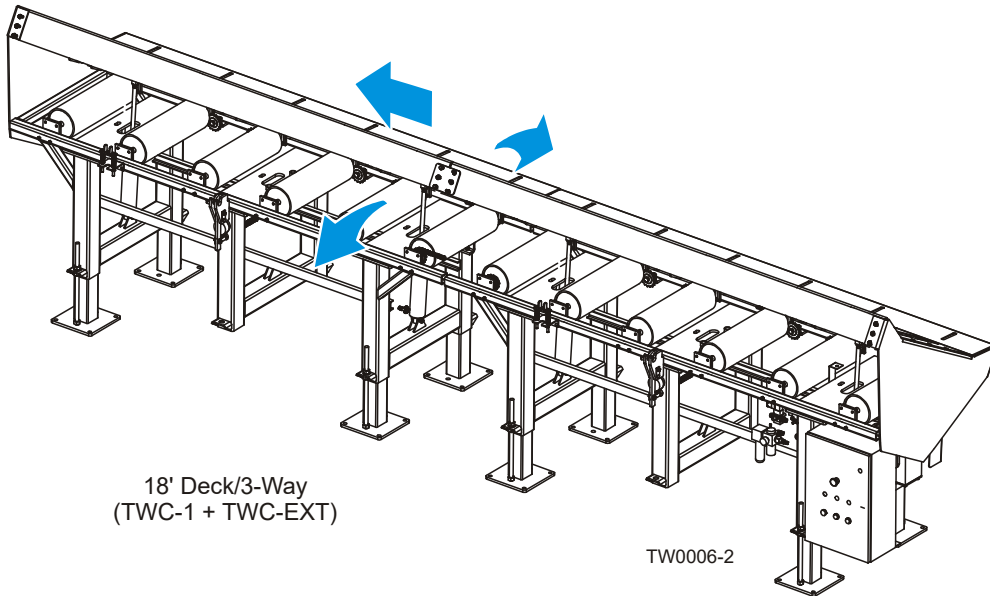


FIG. 2-8

See **Figure 2-9**. A deck extension (TWC-EXT) can be added to two decks to route material up to 18 feet long in five directions.

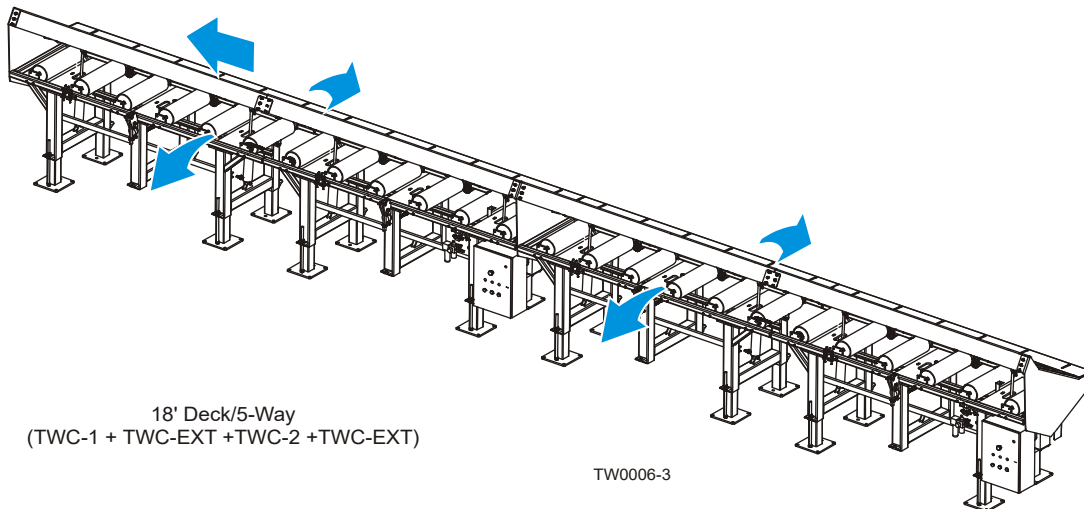



FIG. 2-9

## 2.2 Installation

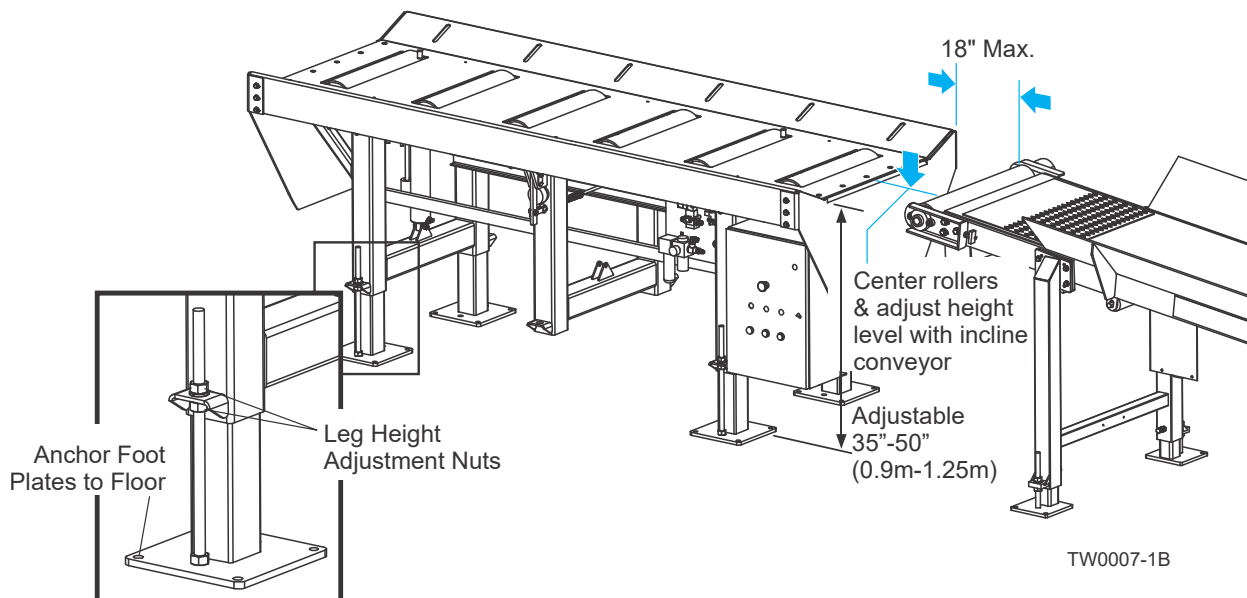
### 2.2.1 First Deck Position

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 2-10.



**FIG. 2-10**

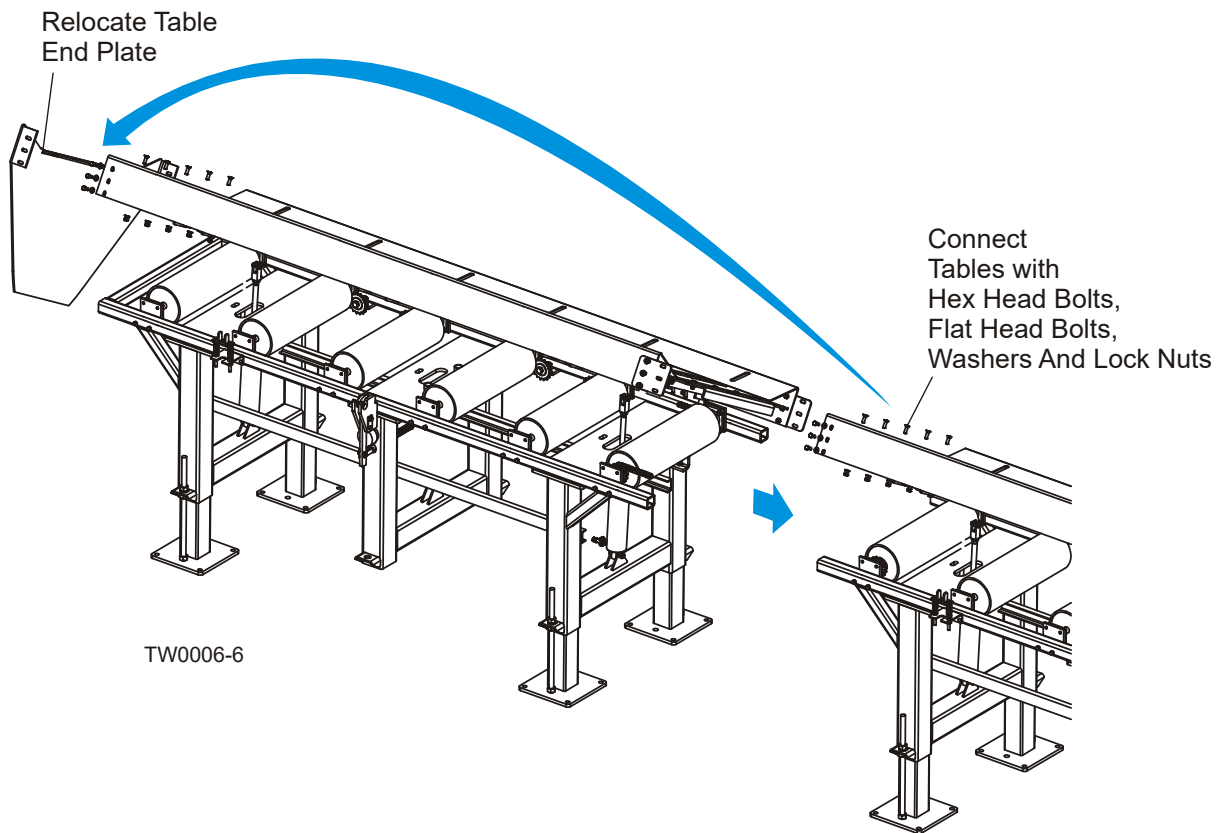
Adjust the table legs so the height of the three-way table is level with the height of the incline conveyor. To adjust the legs, turn the adjustment nuts to raise or lower the leg as desired. Tighten the adjustment nuts when the adjustment is complete.

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 2-11**. 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. 2-11**

See **Figure 2-12**. 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.

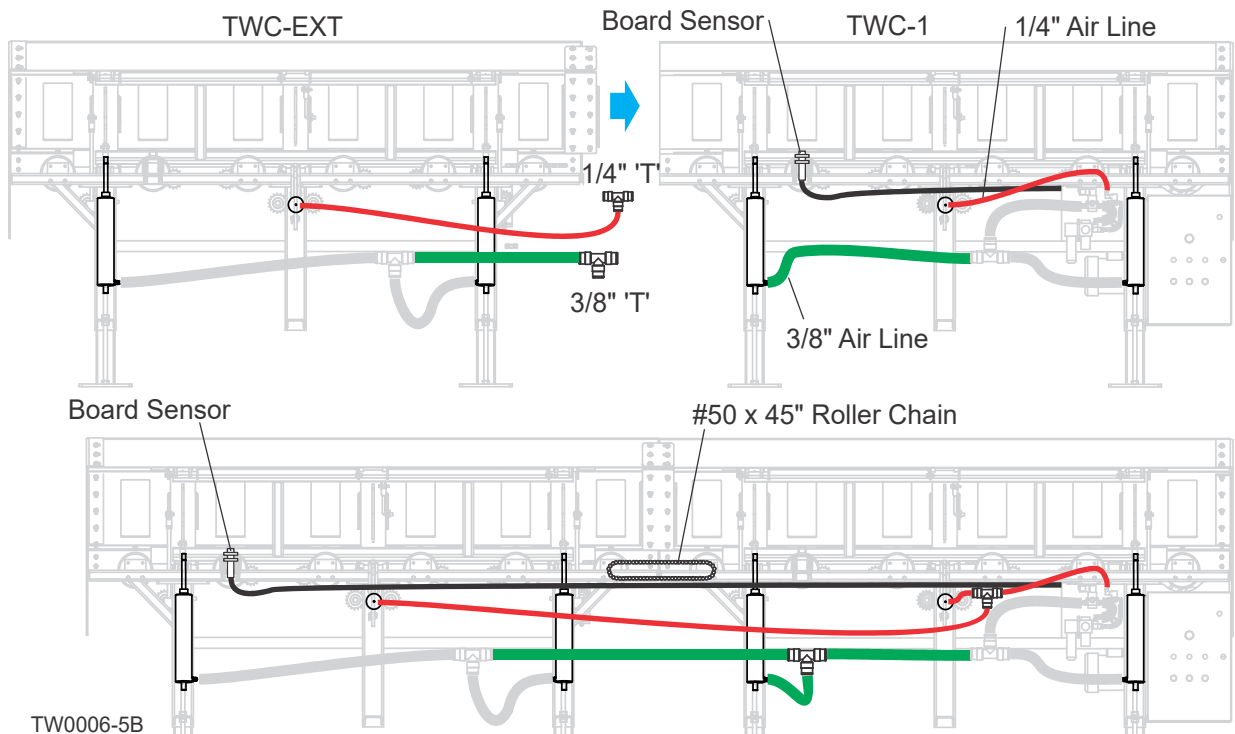


FIG. 2-12

#### 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.**

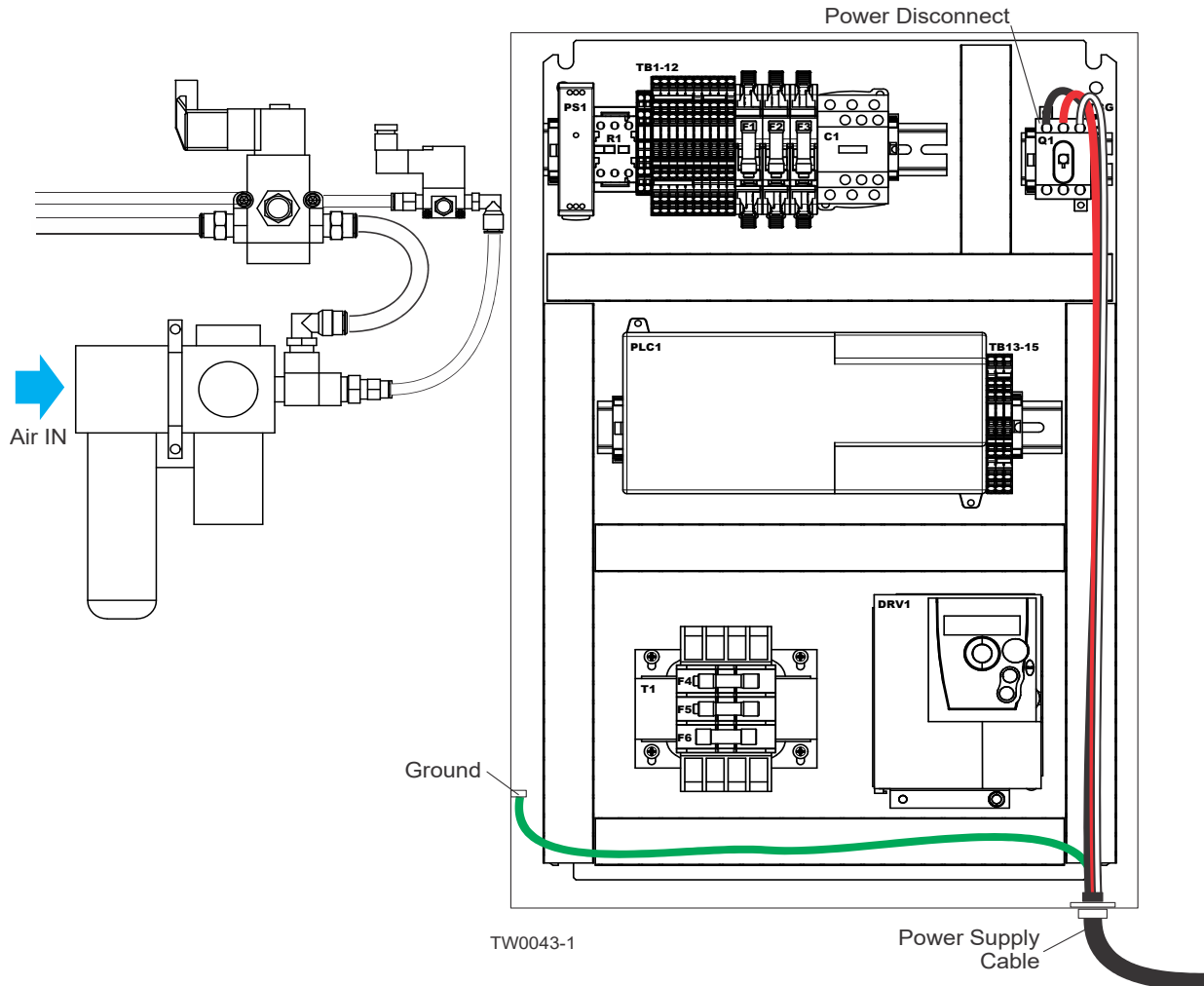
| Conversion From/To  | 240 to 480 volts | 400 to 480 volts | 600 to 480 volts |
|---------------------|------------------|------------------|------------------|
| Wood-Mizer Part No. | 078203           | 078204           | 078205           |

**TABLE 2-3**

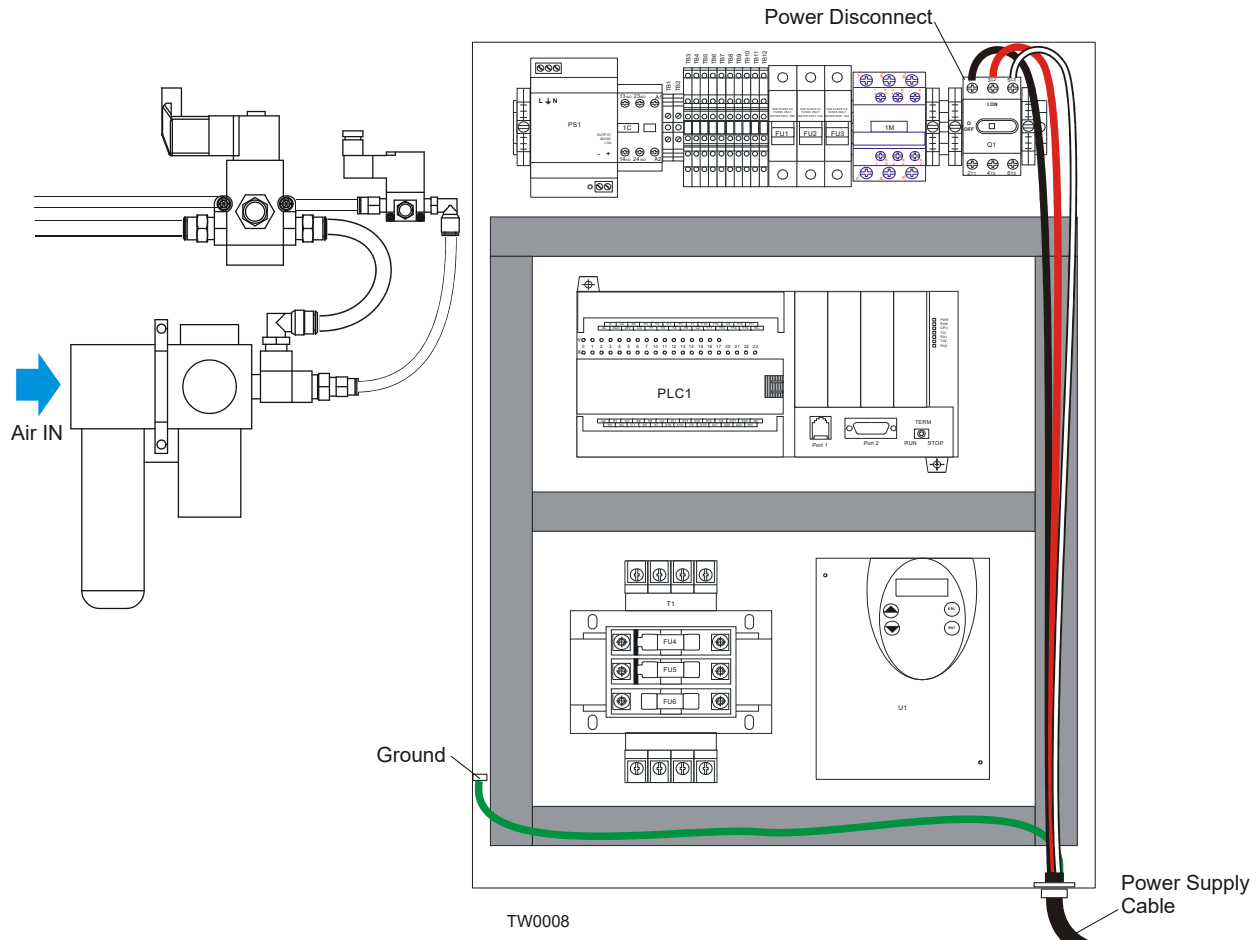
# 2

## Setup & Operation Electrical/Air Installation

See **Figure 2-13**. 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. 2-13 TWC REV. A5.00+**



**FIG. 2-13 TWC REV. A1.00 - A4.01**

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.

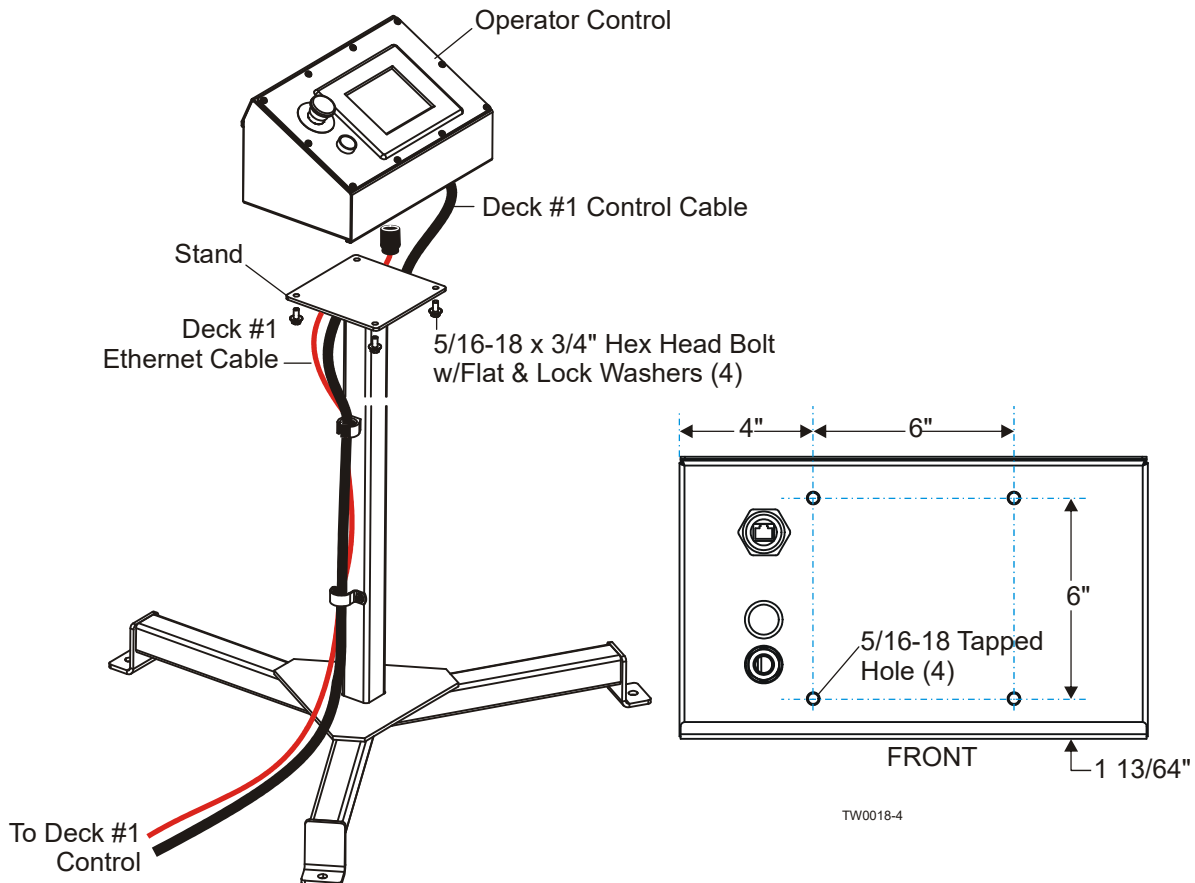
## 2.3 Control Installation (Rev. A5.00+)

### 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 2-14**. 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. 2-14**

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.

See Figure 2-15. 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.

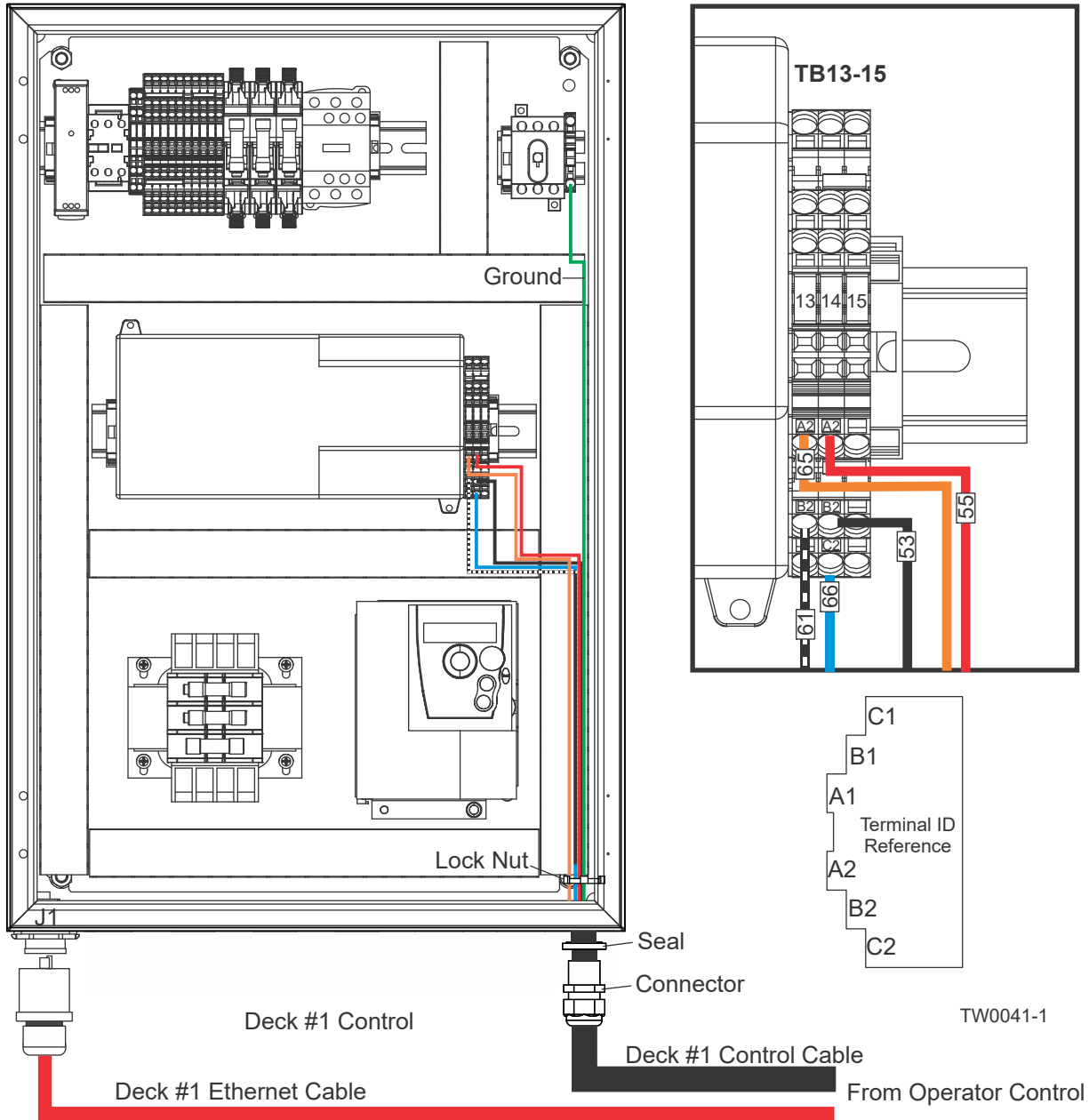


FIG. 2-15

# 2

## Setup & Operation

Deck #1

---

- 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 2-16.** 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.

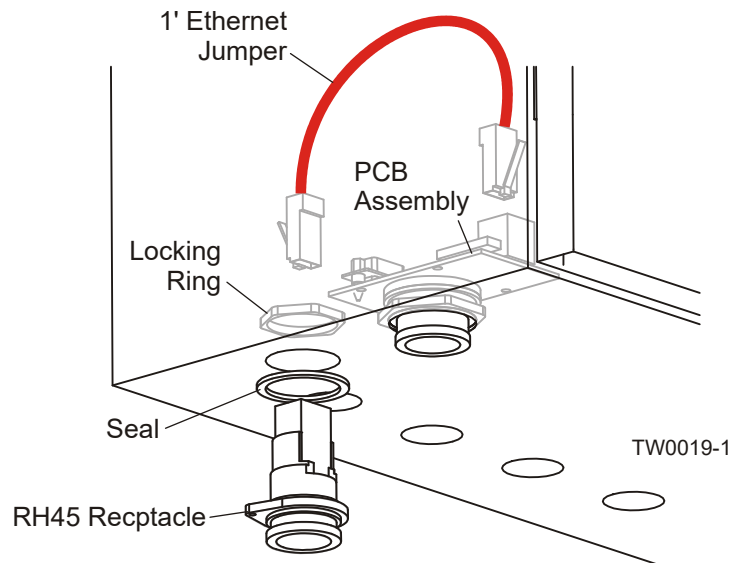


FIG. 2-16

# 2

## Setup & Operation

### Deck #2

See Figure 2-17. 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.

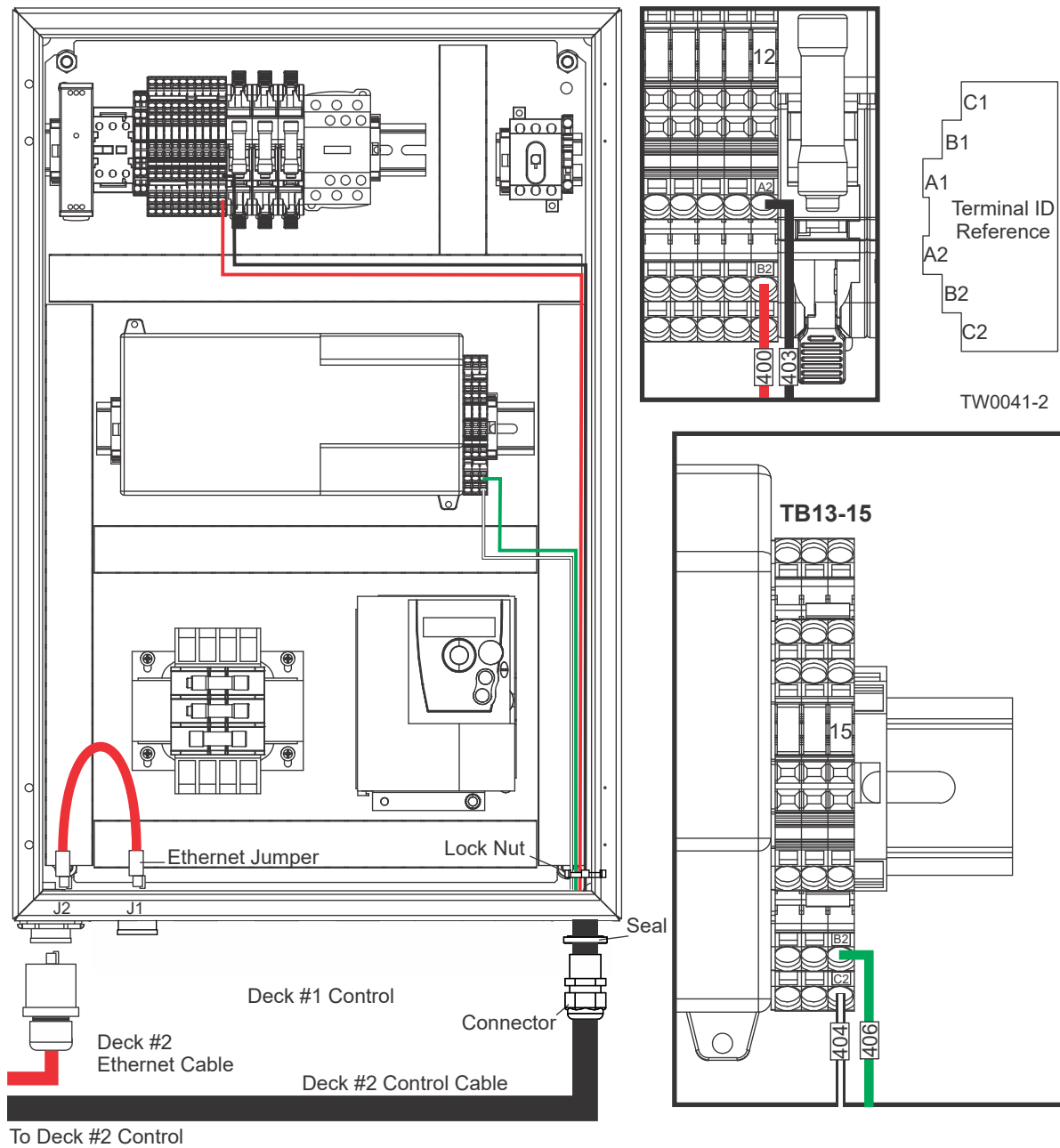


FIG. 2-17

- 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.

# 2

## Setup & Operation

### Deck #2

See Figure 2-18. 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.

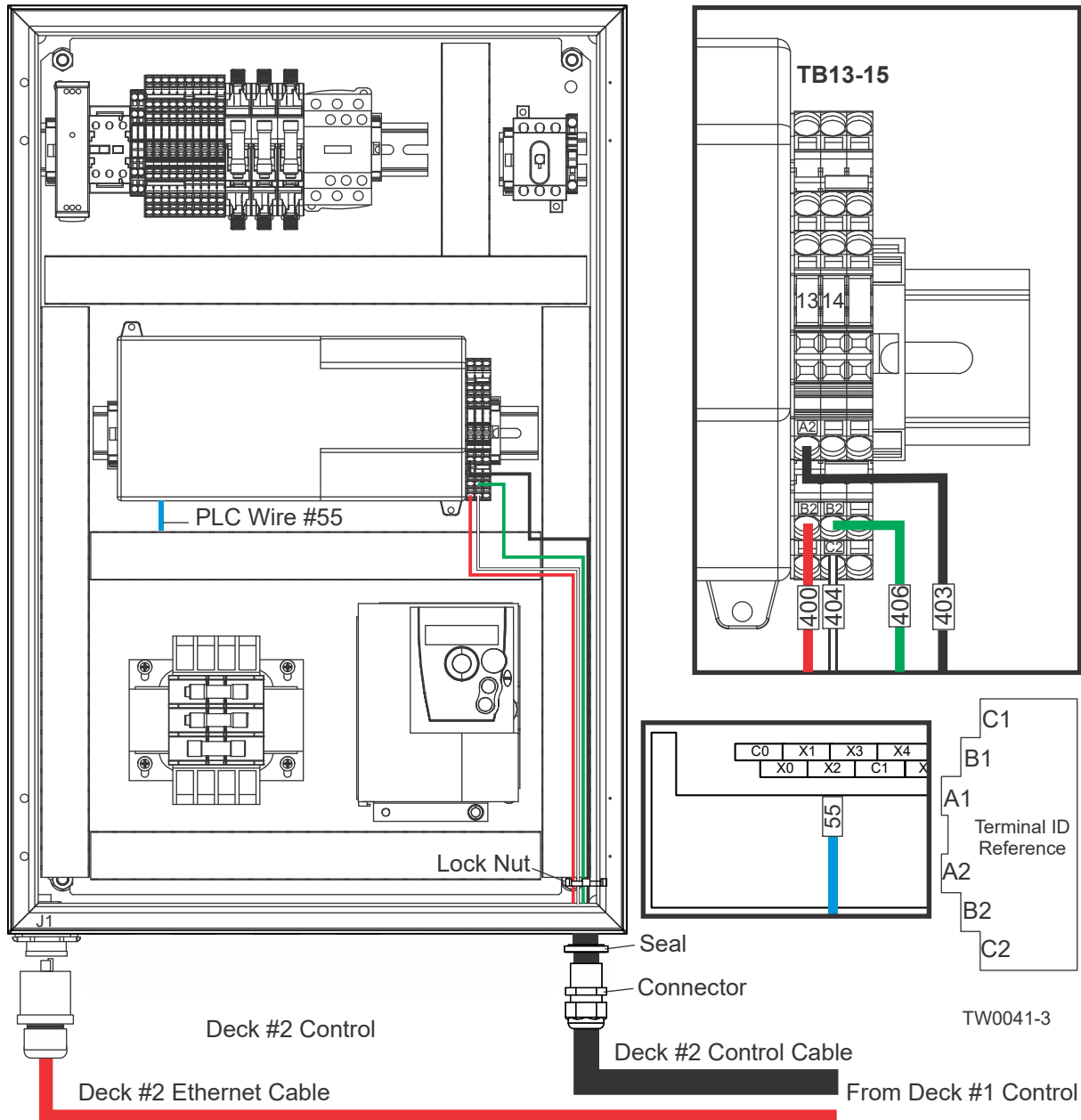


FIG. 2-18

- 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 4.15](#) 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.

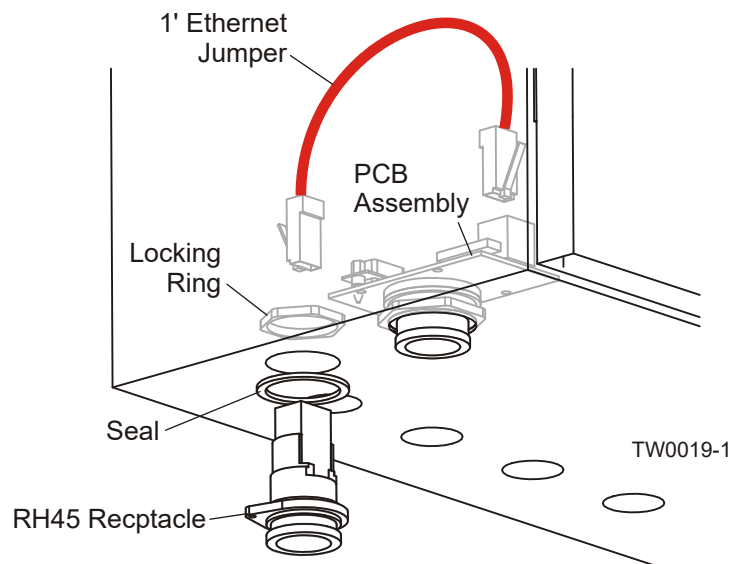
## 2.3.3 Deck #3



**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 2-19.** 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. 2-19**

See Figure 2-20. 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.

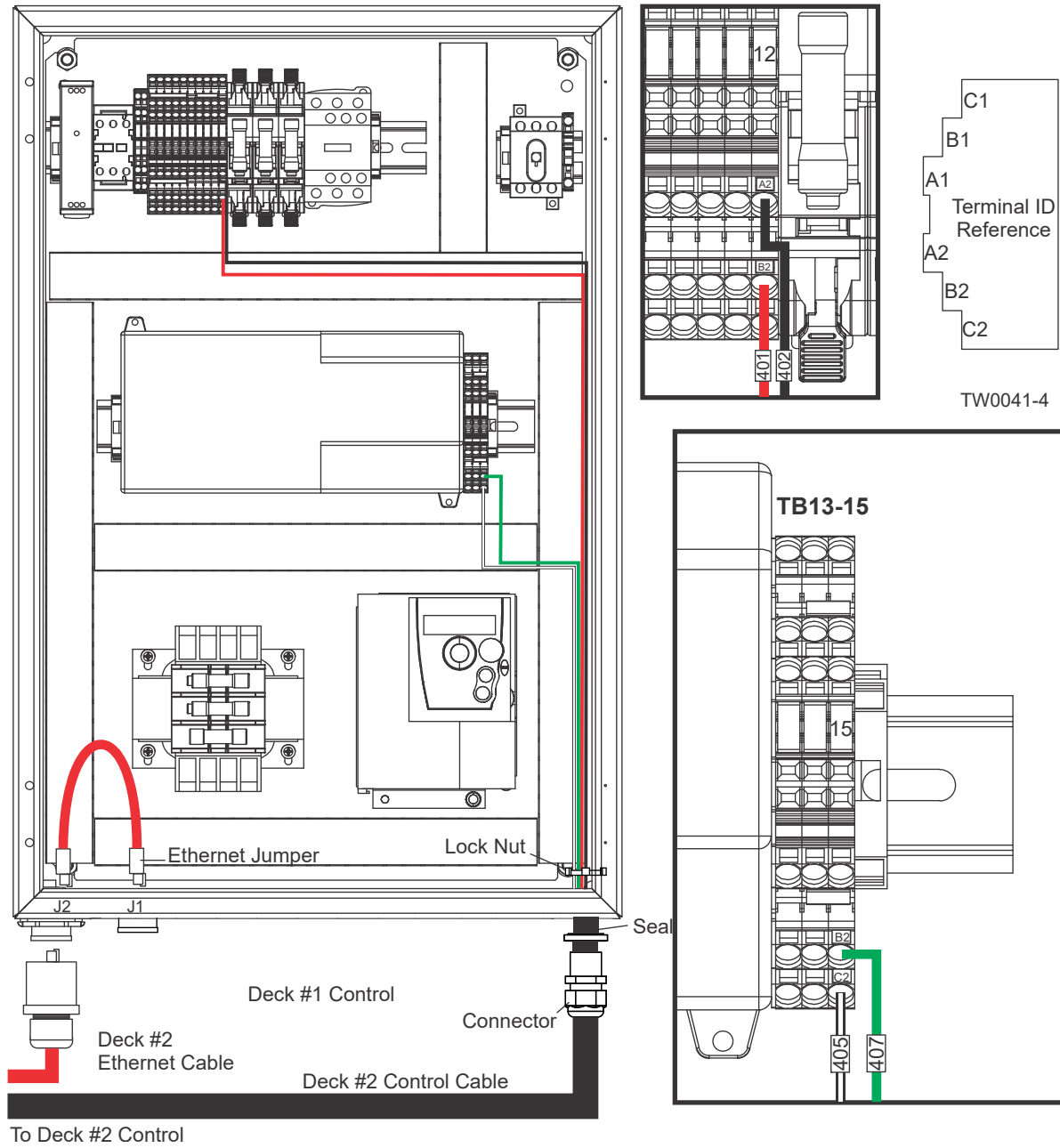


FIG. 2-20

# 2

## Setup & Operation

### Deck #3

---

- 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.



See Figure 2-21. 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.

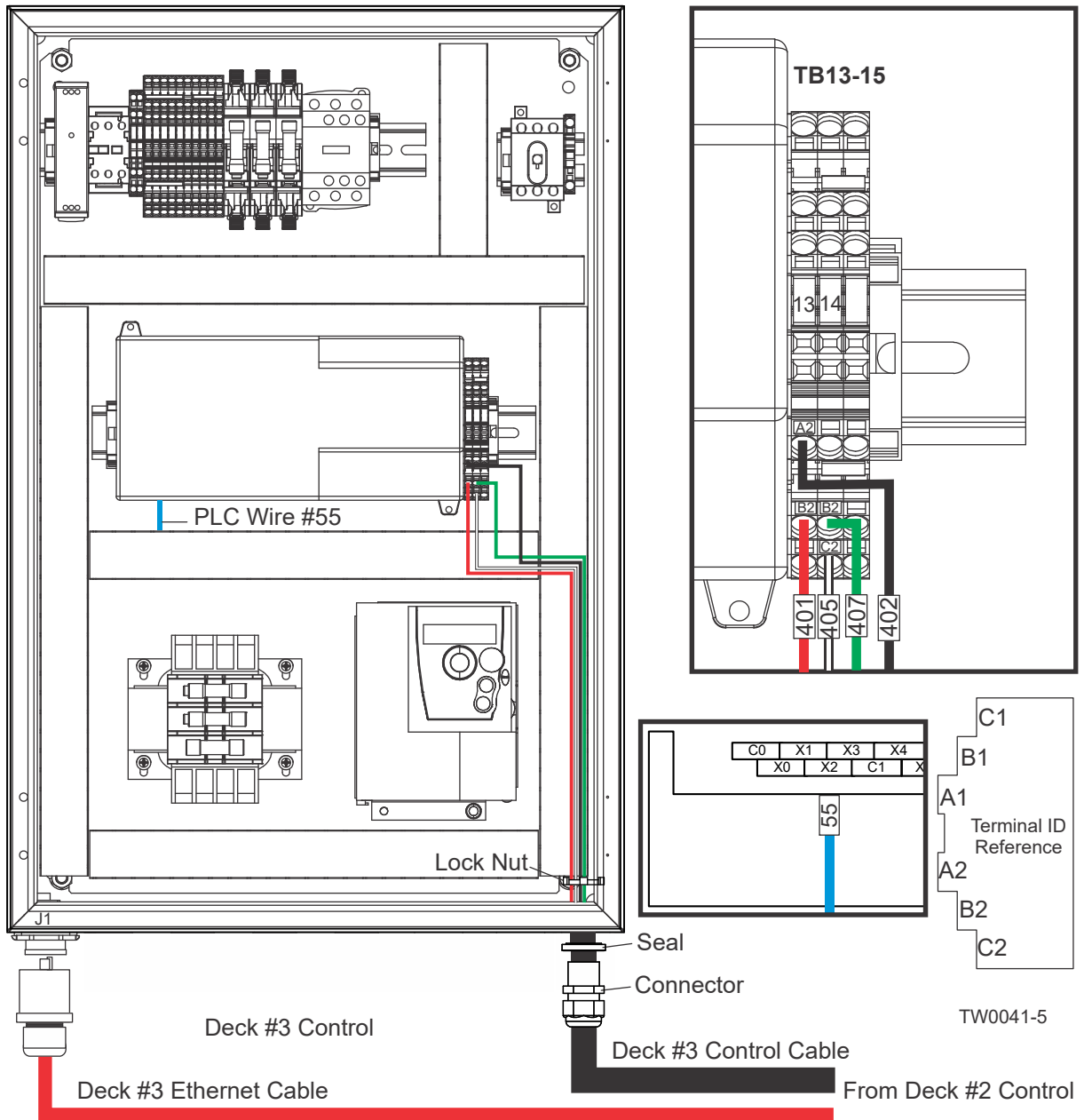


FIG. 2-21

- 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 4.15](#) 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.

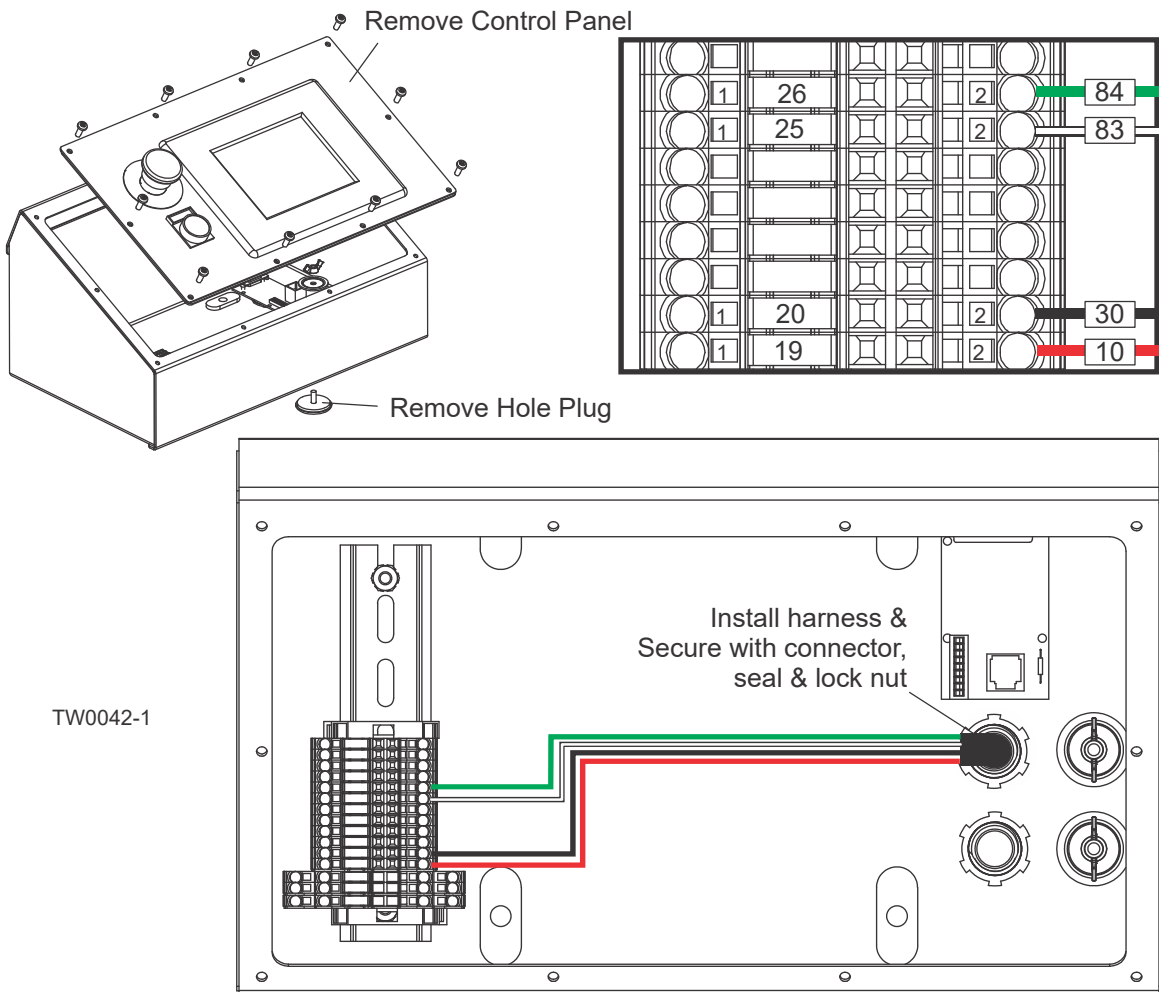
**2.3.4 Auxiliary E-Stop**

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

See **Figure 2-22**. 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.



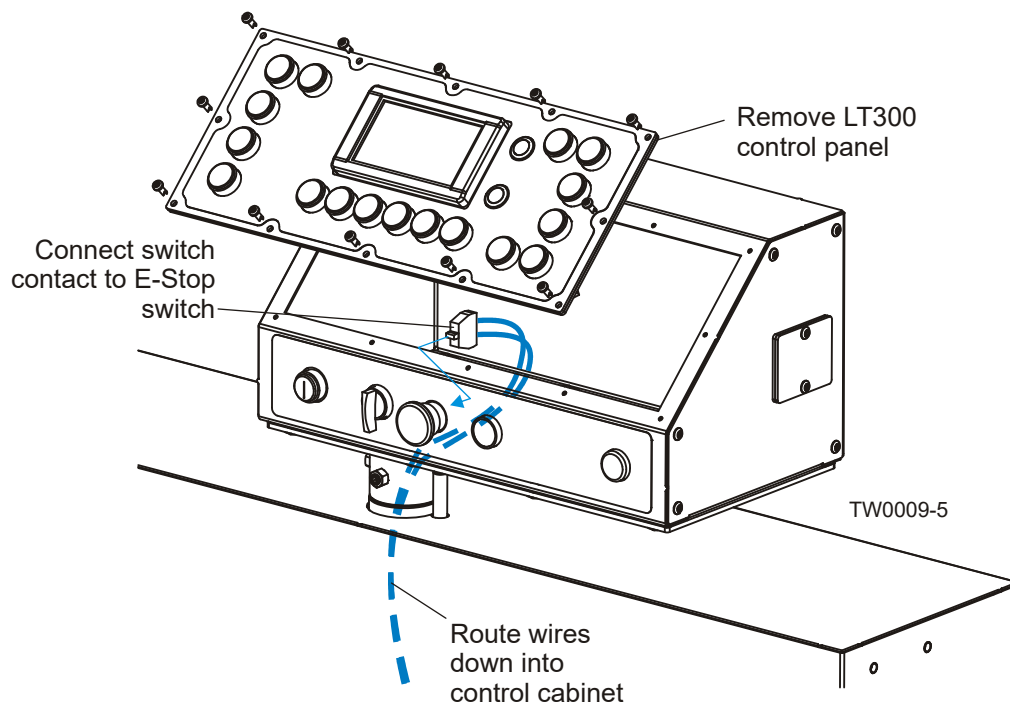
**FIG. 2-22**

- 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 2-23.** 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.

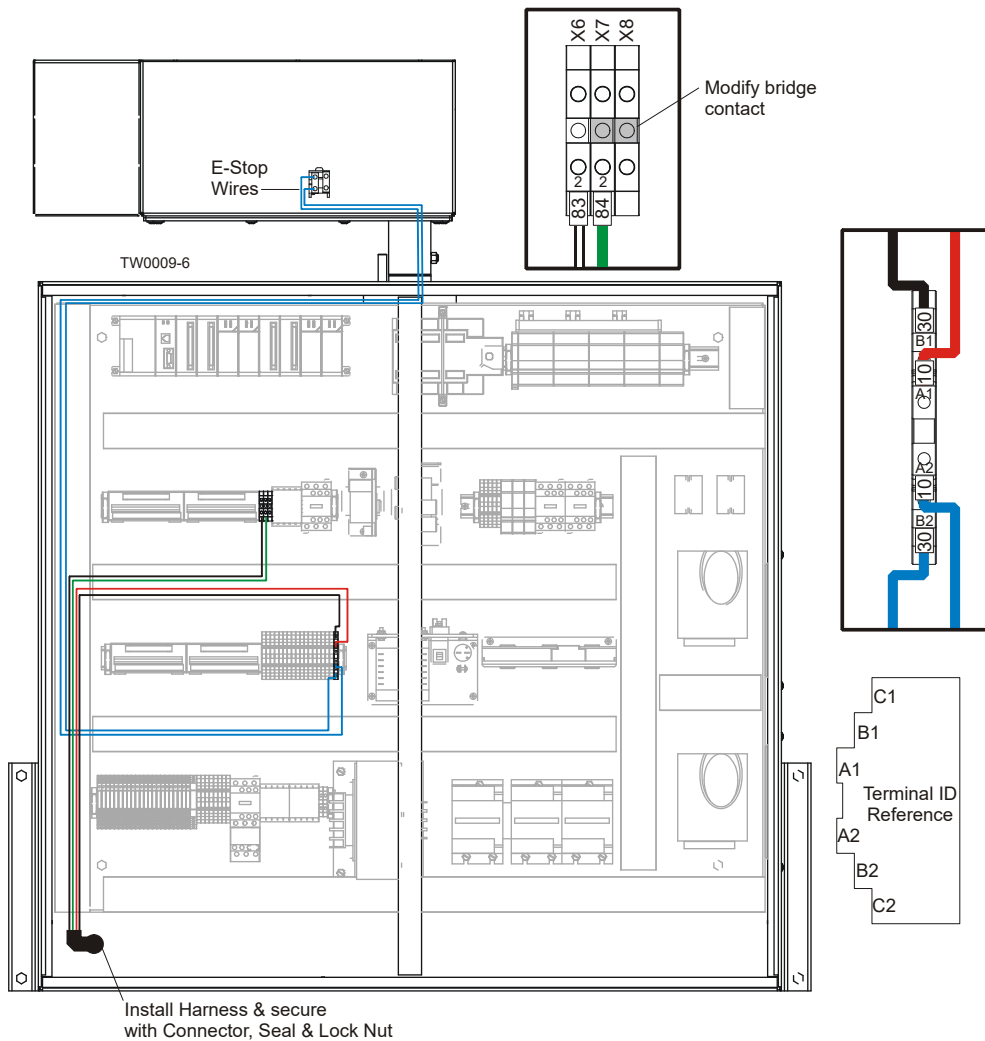


**FIG. 2-23**

**See Figure 2-24.** 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. 2-24**

- 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 Control Installation (Rev. A4.00 - A4.01)

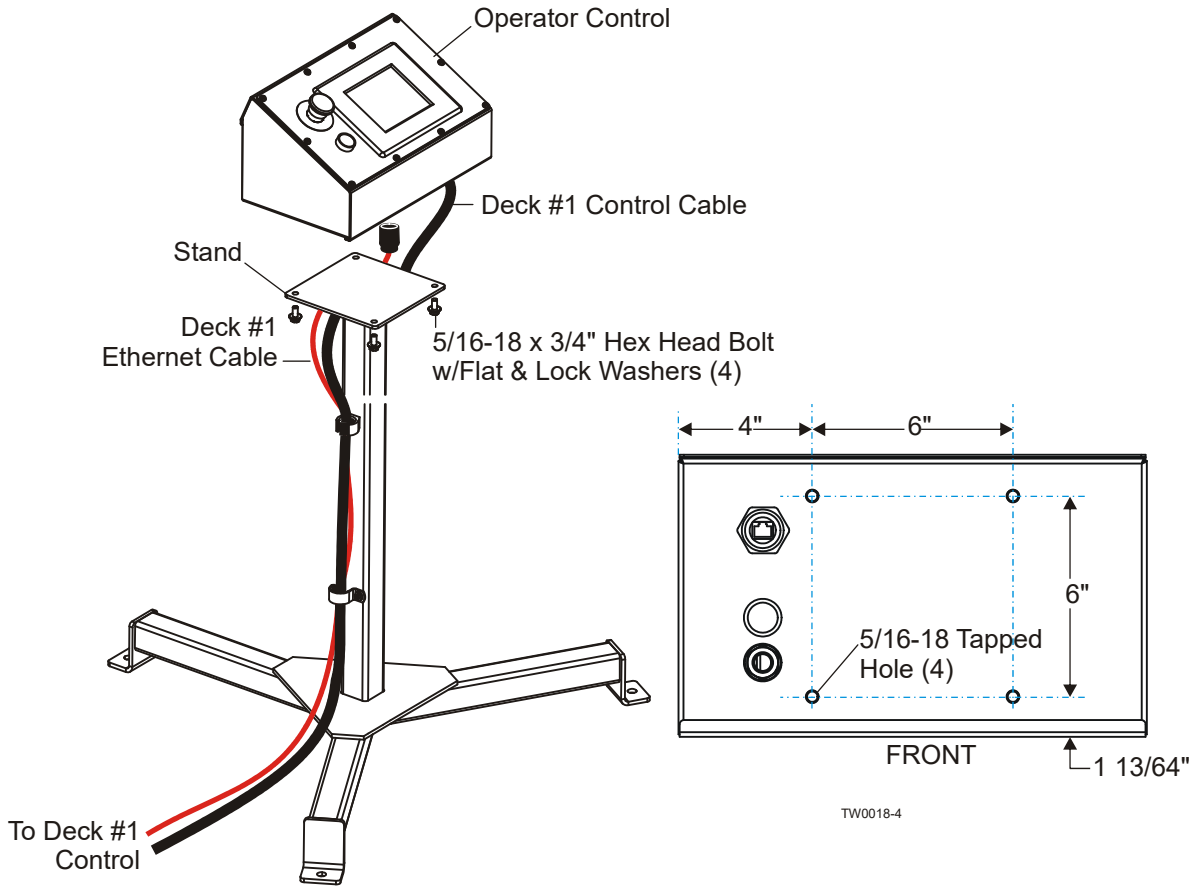
### 2.4.1 Deck #1



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

**See Figure 2-25.** 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. 2-25**

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.

**See Figure 2-26.** 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

## 2 Setup & Operation

### Deck #1

TB13-TB17. Connect the control wires to the control components as described below.

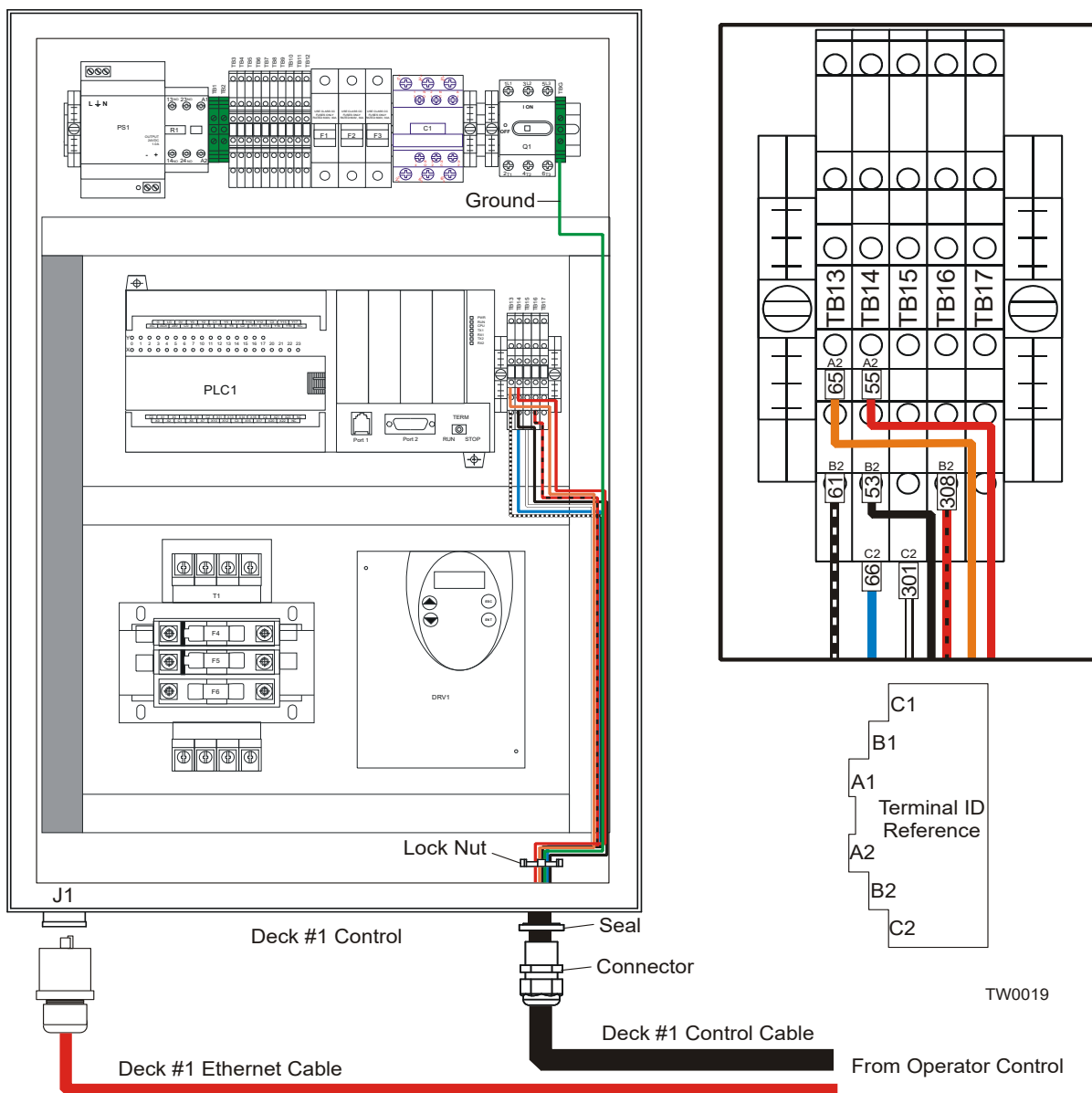


FIG. 2-26

- Connect blue wire #66 to terminal block #TB14 C2.
- Temporarily disconnect wire #302 from terminal block #TB15 B2. Connect white wire #301 to terminal block #TB15 C2. Reconnect wire #302 to terminal block #TB15 B2.
- Connect white/black wire #61 to terminal block #TB13 B2.



- Connect black wire #53 to terminal block #TB14 B2.
- Connect red/black wire #308 to terminal block #TB16 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.

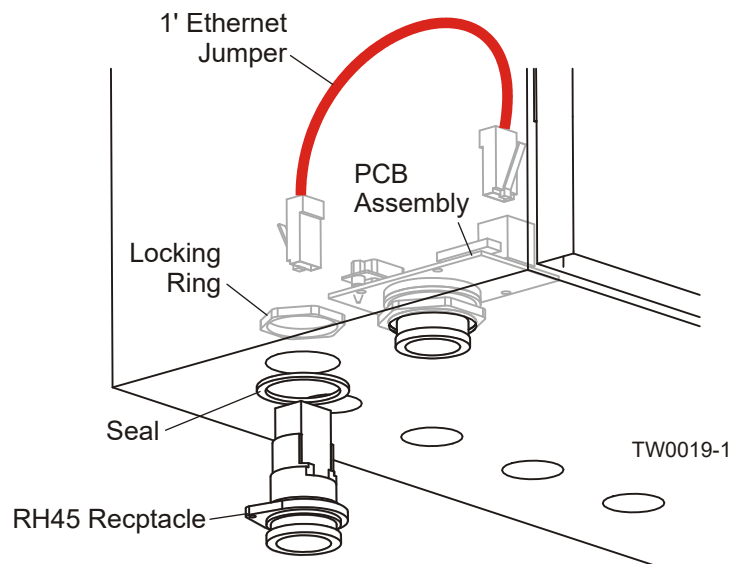
## 2.4.2 Deck #2



**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 2-27.** 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. 2-27**

See Figure 2-28. 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-TB17. Connect the control wires to the control components as described below.

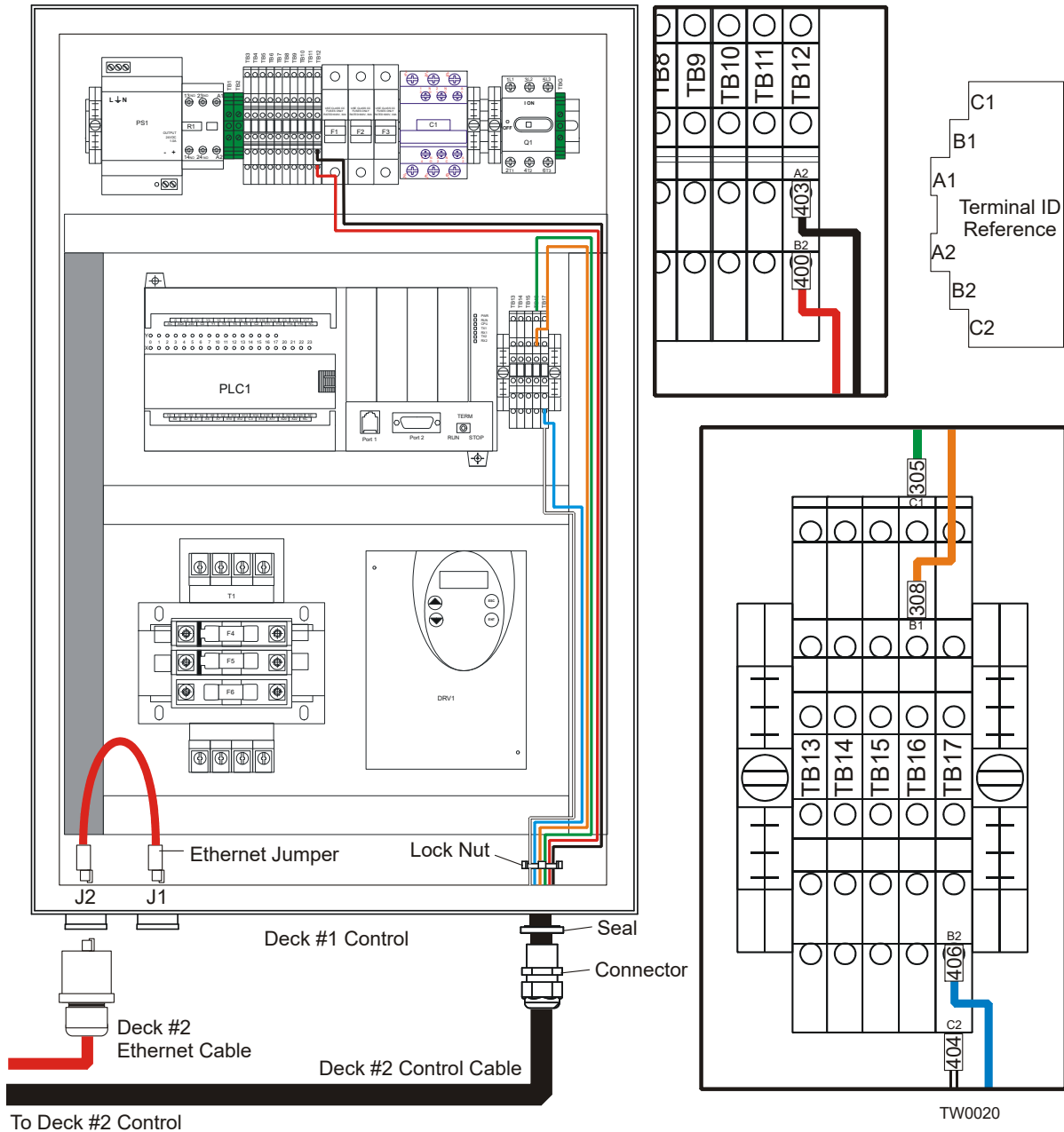


FIG. 2-28

- Connect white wire #404 to terminal block #TB17 C2.

- Remove jumper wire J3 from terminal block #TB16 C1 and B1.
- Connect green wire #305 to terminal block #TB16 C1.
- Connect orange wire #308 to terminal block #TB16 B1.
- Remove jumper wire J2 from terminal block #TB12 B2 and A2.
- Connect red wire #400 to terminal block #TB12 B2.
- Connect black wire #403 to terminal block #TB12 A2.
- Connect blue wire #406 to terminal block #TB17 B2.

See Figure 2-29. 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-TB17. Connect the control wires to the control components as described below.

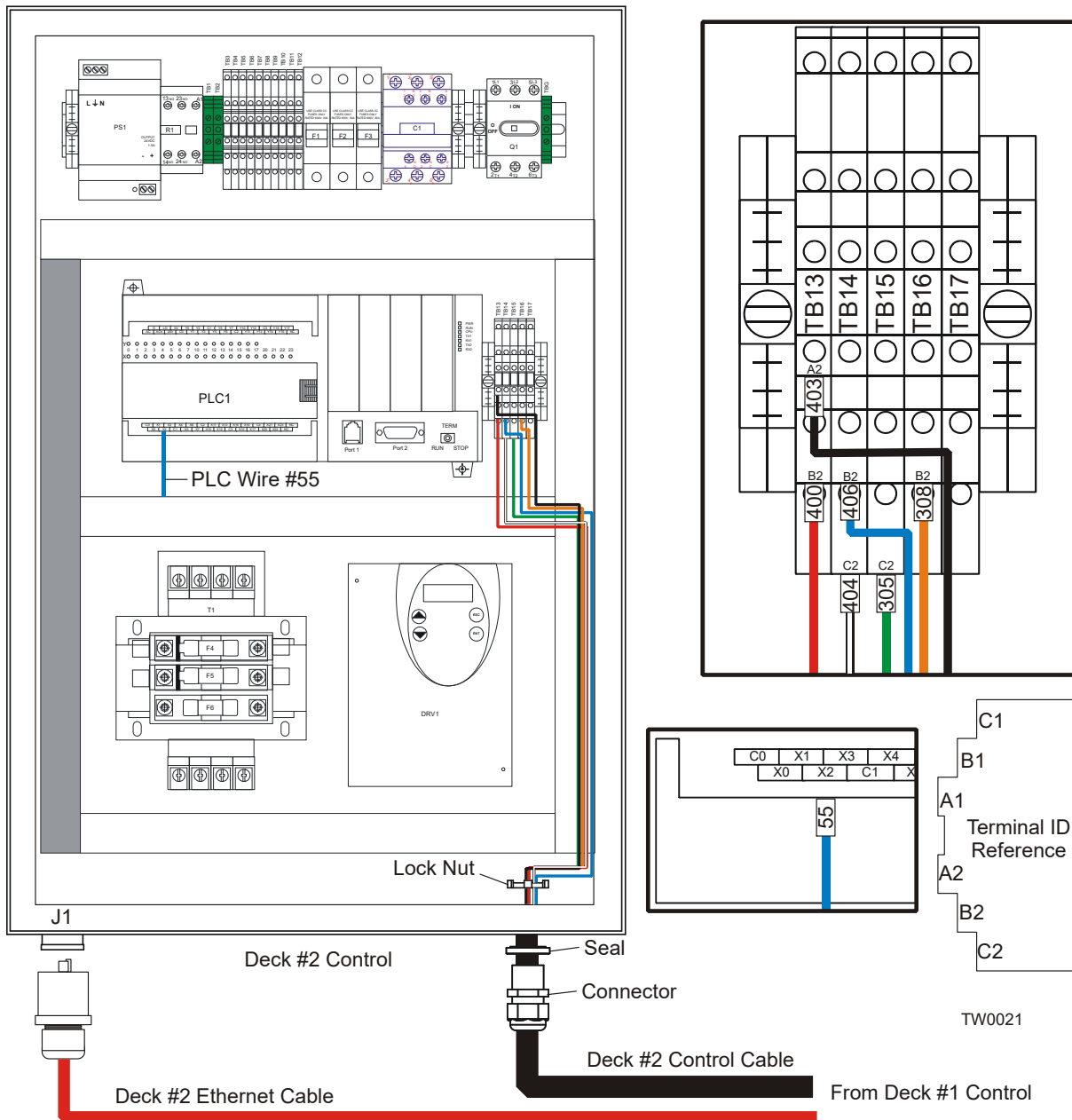


FIG. 2-29

- Connect white wire #404 to terminal block #TB14 C2.

- Connect green wire #305 to terminal block #TB15 C2.
- Connect red wire #400 to terminal block #TB13 B2.
- Connect blue wire #406 to terminal block #TB14 B2.
- Connect orange wire #308 to terminal block #TB16 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 4.15](#) 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.

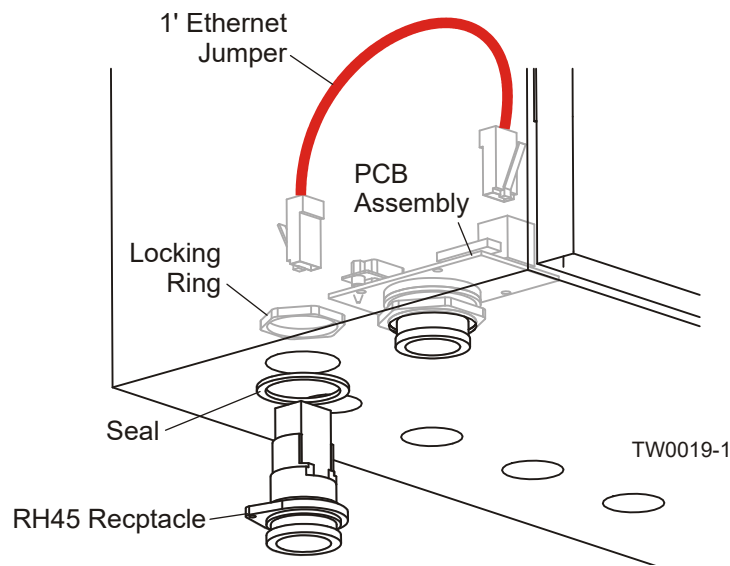
2.4.3 Deck #3



**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 2-30.** 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. 2-30**

## 2 Setup & Operation

### Deck #3

See Figure 2-31. 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-TB17. Connect the control wires to the control components as described below.

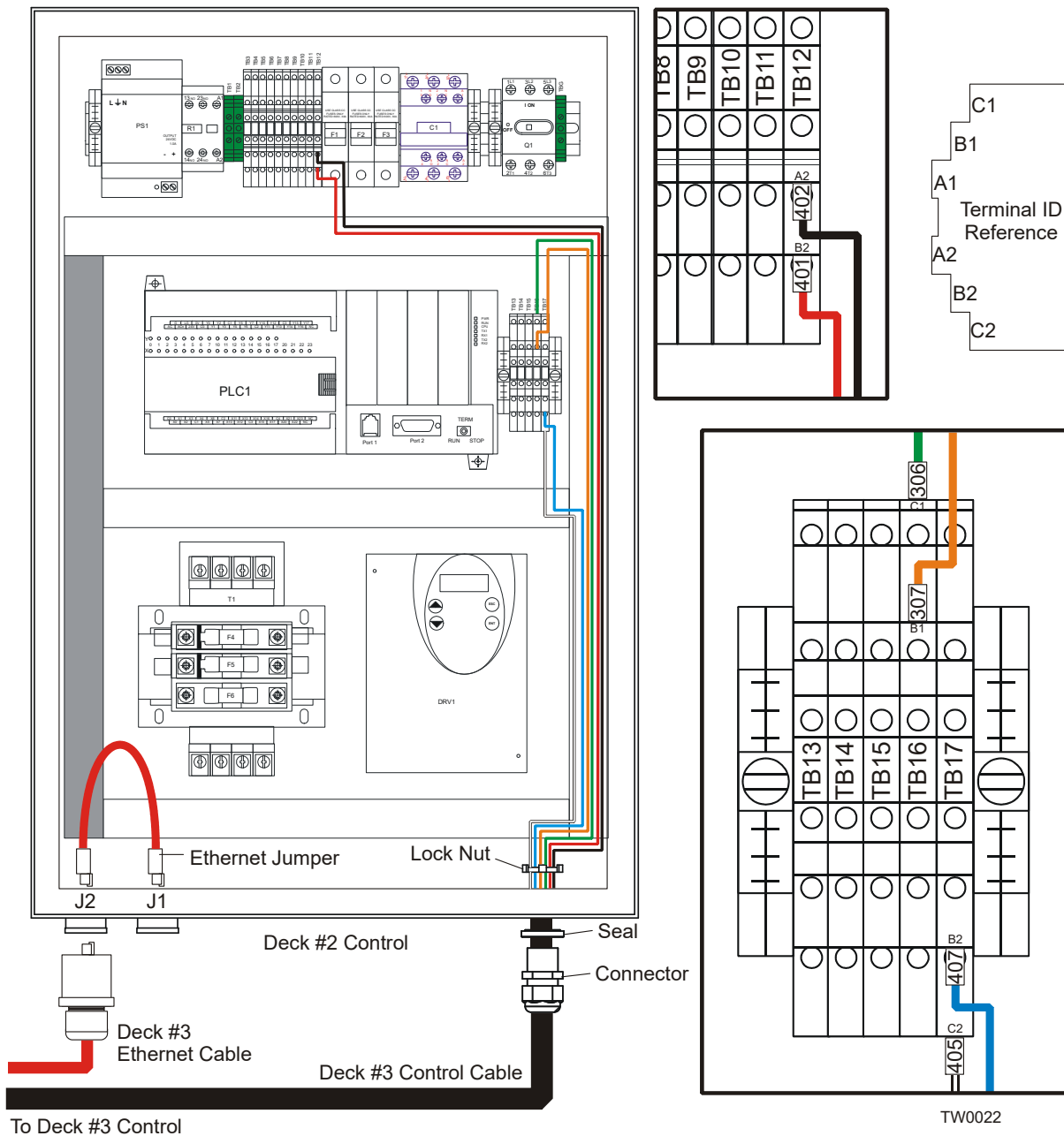


FIG. 2-31

- Connect white wire #405 to terminal block #TB17 C2.



- Remove jumper wire J3 from terminal block #TB16 C1 and B1.
- Connect green wire #306 to terminal block #TB16 C1.
- Connect orange wire #307 to terminal block #TB16 B1.
- Remove jumper wire J2 from terminal block #TB12 B2 and A2.
- Connect red wire #401 to terminal block #TB12 B2.
- Connect black wire #402 to terminal block #TB12 A2.
- Connect blue wire #407 to terminal block #TB17 B2.

See Figure 2-32. 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-TB17. Connect the control wires to the control components as described below.

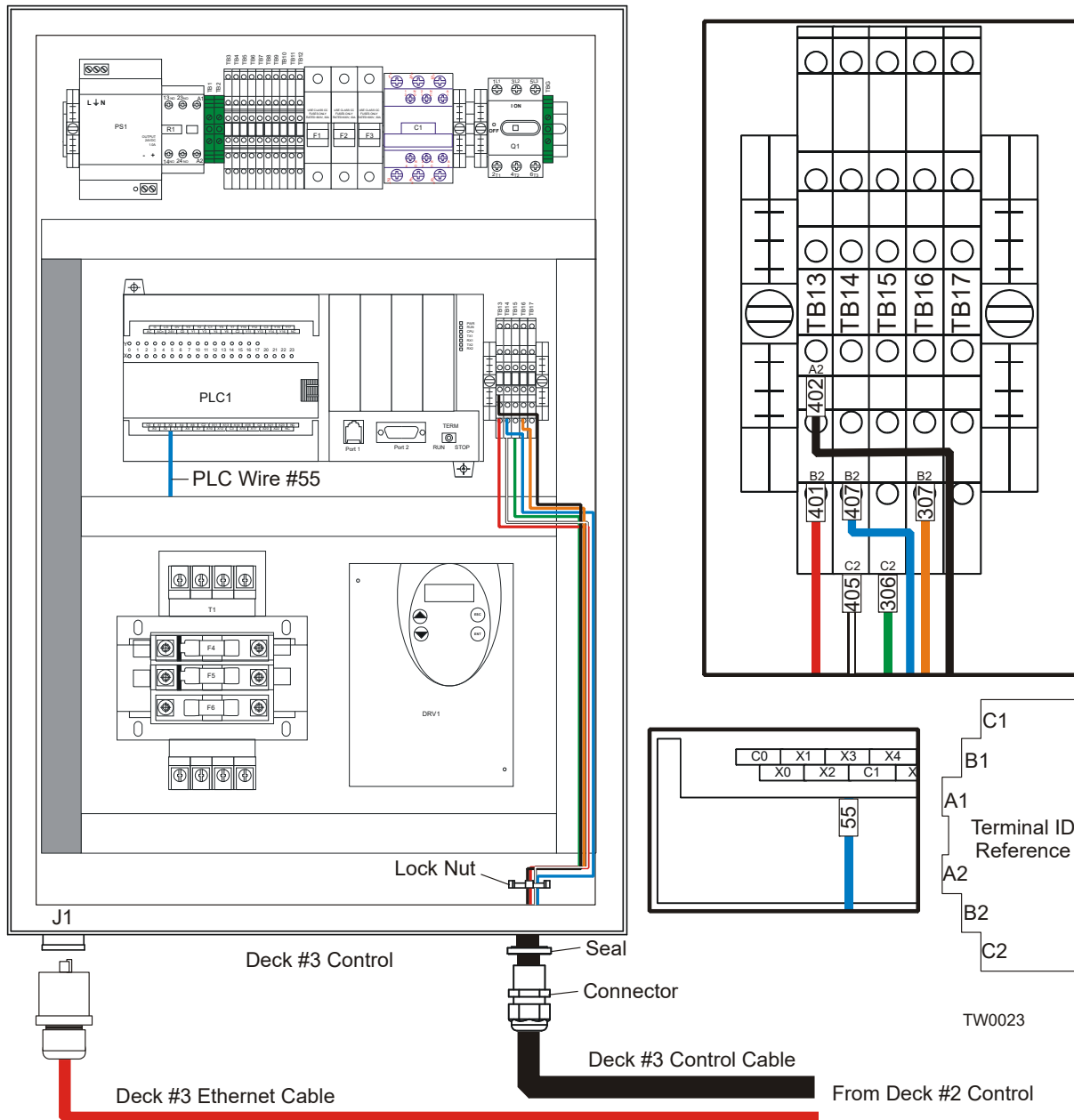


FIG. 2-32

- Connect white wire #405 to terminal block #TB14 C2.

- Connect green wire #306 to terminal block #TB15 C2.
- Connect red wire #401 to terminal block #TB13 B2.
- Connect blue wire #407 to terminal block #TB14 B2.
- Connect orange wire #307 to terminal block #TB16 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 4.15](#) 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.

## 2.4.4 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 2-33**. 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.

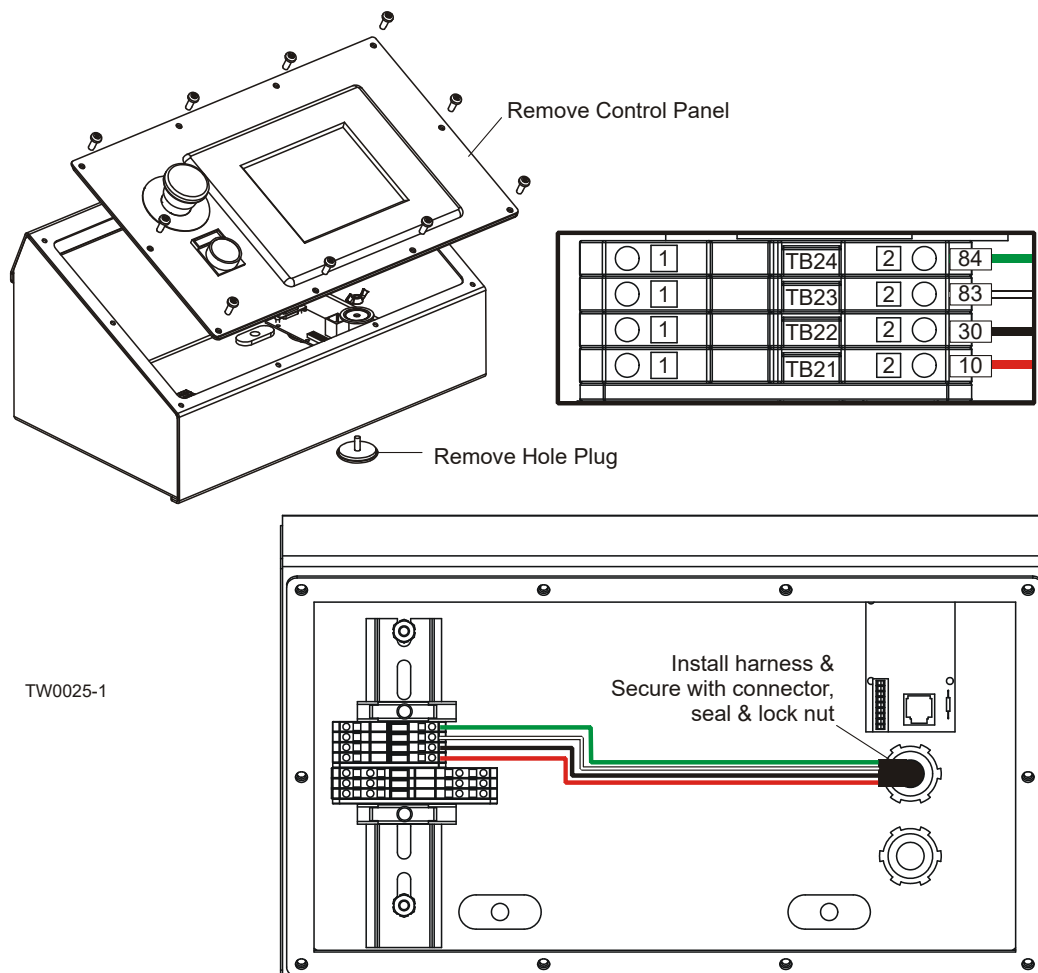


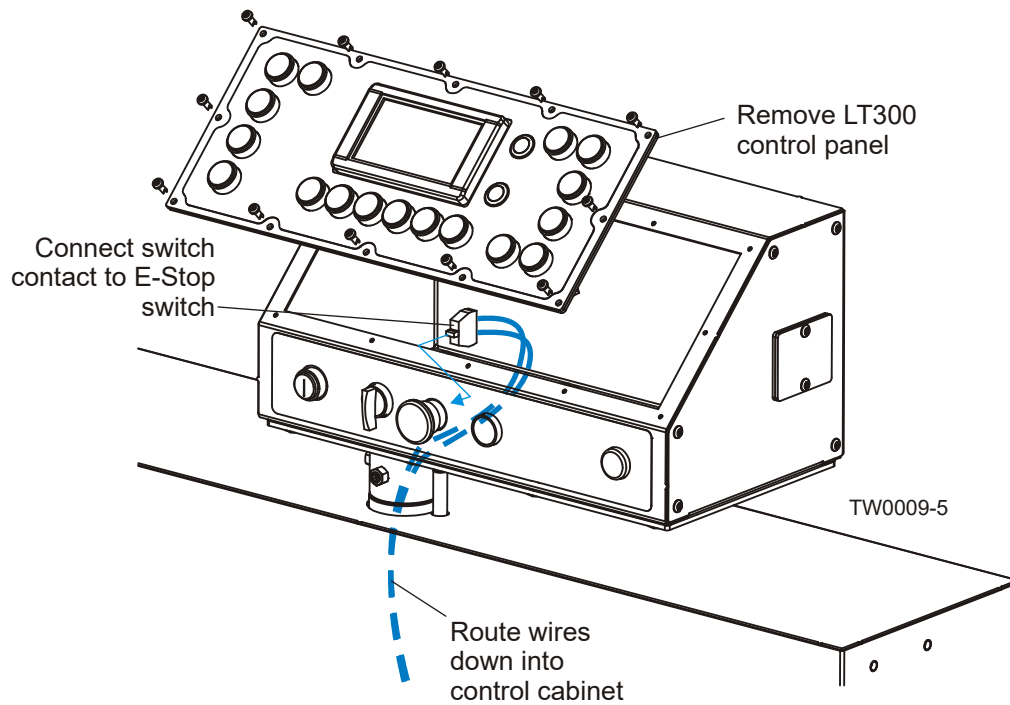
FIG. 2-33

- Remove the jumper wire from terminal block #TB21.2 & #TB22.2.
- Connect red wire #10 to terminal block #TB21.2.
- Connect black wire #30 to terminal block #TB22.2.
- Connect white wire #83 to terminal block #TB23.2
- Connect green wire #84 to terminal block #TB24.2

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 2-34.** 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. 2-34**

# 2

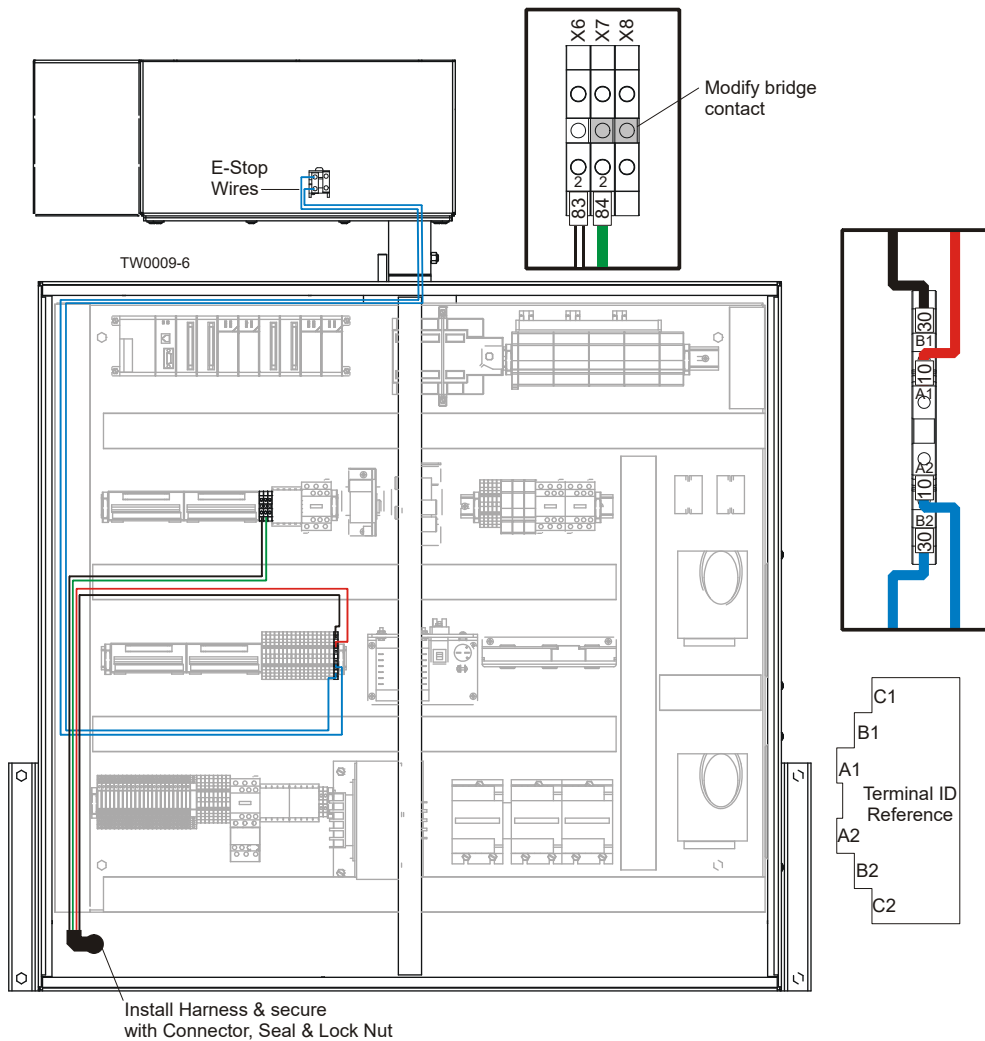
## Setup & Operation

### Auxiliary E-Stop

See **Figure 2-35**. 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. 2-35**

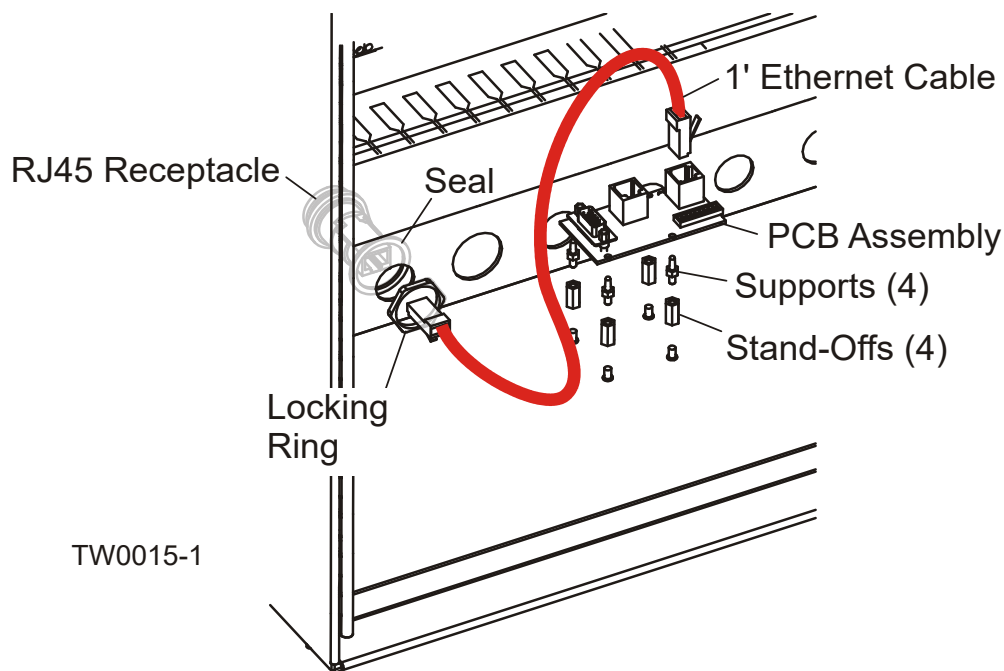
- Connect red wire #10 to new terminal block port #A1.
- Connect black wire #30 to new terminal block port #B1.
- Connect white wire #83 to terminal block #X6.2
- Connect green wire #84 to terminal block #X7.2

Replace the wireway covers and close the control cabinet doors.

## 2.5 Control Installation (Rev. A3.00)

See **Figure 2-36**. Install the provided circuit board assembly to the four threaded studs in the bottom of the LT300 control cabinet using the four stand-offs and supports supplied. Screw the stand-offs onto the studs, thread the supports into the stand-offs and carefully press the circuit board assembly onto the supports until it snaps in place.

Install the provided RJ45 cable receptacle to an unused port hole in the back of the LT300 control cabinet. Orient the receptacle with the housing and seal outside of the box and secure with the threaded locking ring. Connect the receptacle to the circuit board with the provided 1' ethernet cable.

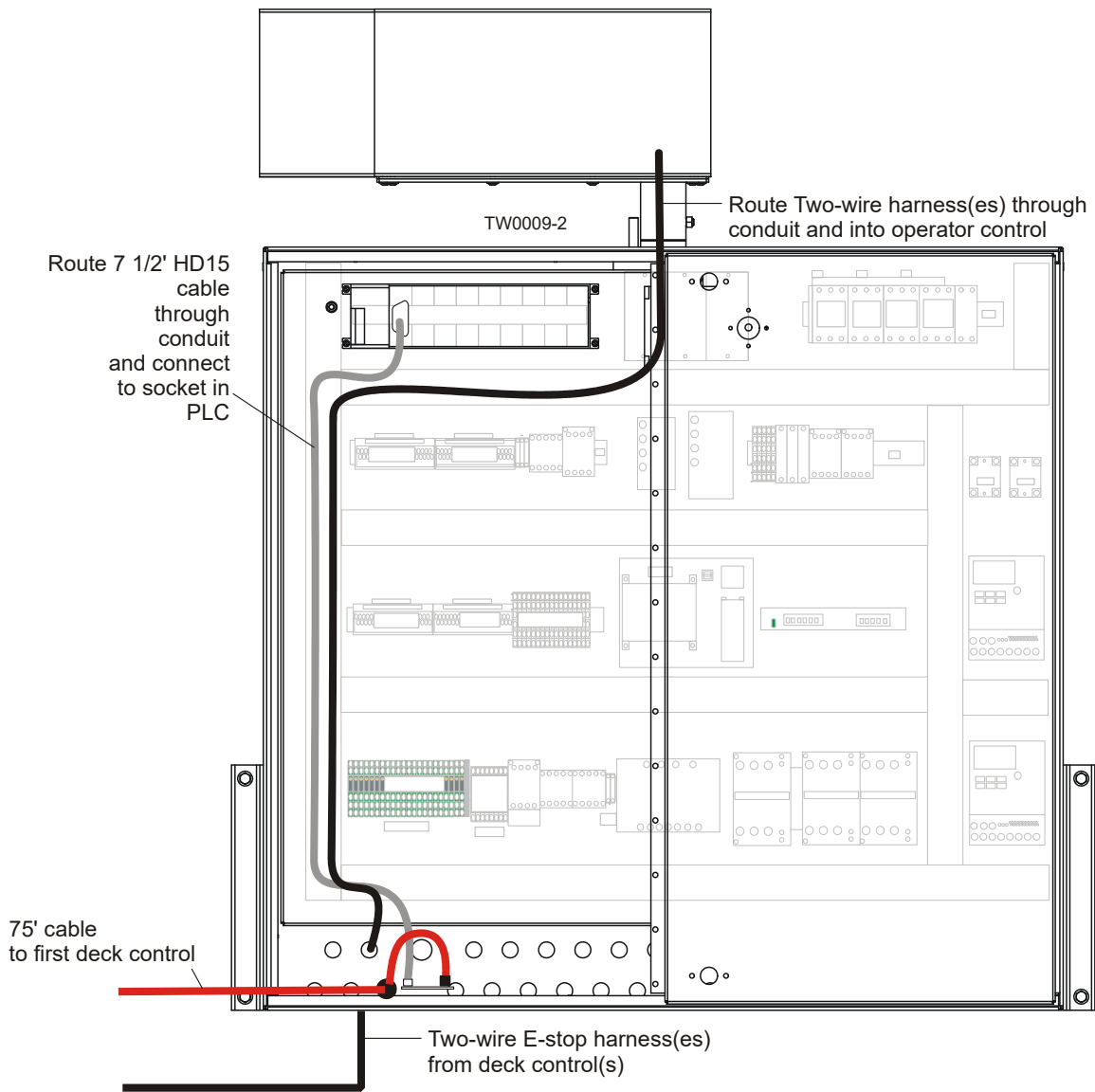


**FIG. 2-36**



**See Figure 2-37.** Connect the female end of the provided 7 1/2' HD15 cable to the connector on the circuit board. Route the cable through the electrical cabinet conduit and connect the male end to the PLC at the top of the cabinet. **NOTE:** The jack screws originally supplied with the PLC will not accept the new cable. Replace the PLC jack screws with the two provided.

Route the two-wire harness from each of the three-way deck controls to the LT300 control cabinet. Install the harness(es) through one of the cable clamps at the back of the cabinet, near the bottom. Route the harness(es) through the conduit in the control cabinet and up into the operator control box.



**FIG. 2-37**

## 2

## Setup & Operation

Control Installation (Rev. A3.00)

Connect one end of the provided 75' ethernet cable to the receptacle at the bottom of the LT300 control cabinet. Push the connectors together and twist the outer housing to lock together. Route the cable toward the first three-way deck control box. Plug the cable into the connector in the bottom of the control box. Secure the cable out of the way of moving parts to avoid damage.

**See Figure 2-38.** Mount the provided auxiliary control box to the side of the LT300 control box. Remove the five screws from the side of the LT300 control. Remove the access hole cover plate and gasket from the side of the box.

Remove the face panel from the auxiliary control box. Use the five screws removed from the side of the LT300 control to secure the auxiliary control to the LT300 control. Feed the two harnesses from the auxiliary control through the access hole in the side of the LT300 control. Replace the auxiliary control face panel.

Remove the LT300 control face panel and locate the two unused harnesses with connectors that match those on the auxiliary control harnesses. Connect the harnesses, matching the male and female connectors of each.

Install the provided switch contact(s) to the LT300 control E-stop switch and connect the harness wires to the contact(s). Replace the LT300 control face panel.

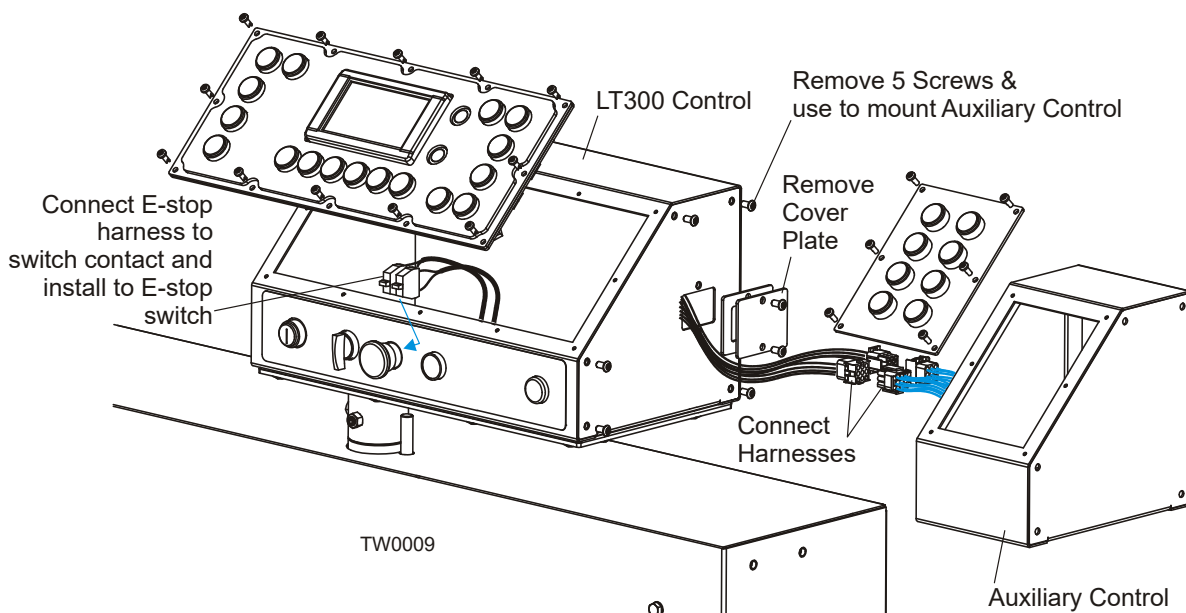


FIG. 2-38

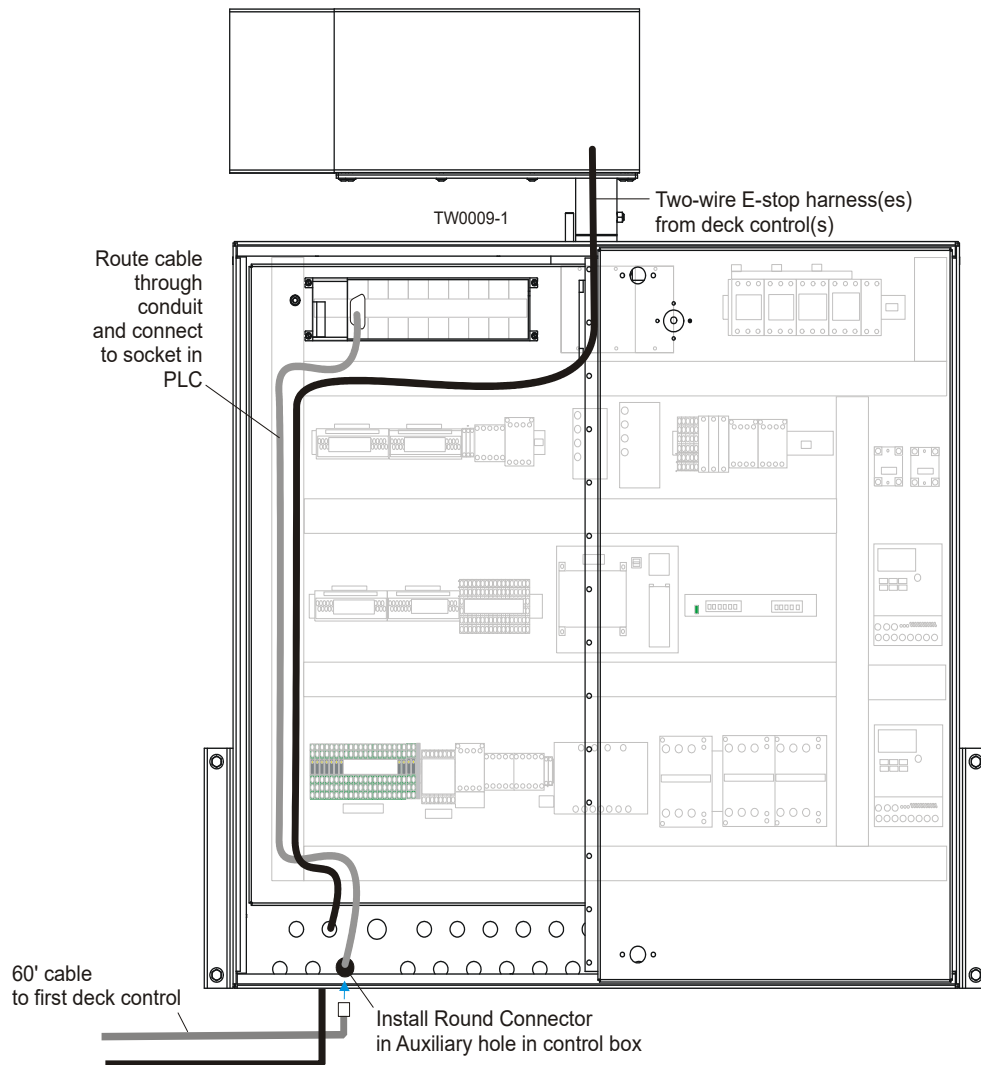


**IMPORTANT!** To reset the LT300 control to operate the three-way deck, hold the REF1 button down when powering up the LT300 until the display appears as normal.

## 2.6 Control Installation (Rev. A1.00 - A2.00)

See **Figure 2-39**. In the LT300 control cabinet, mount the round connector of the provided 6' ethernet cable to an unused port hole in the back of the control box, near the bottom. Route the cable through the conduit and connect to the socket located on the PLC at the top of the box.

Route the two-wire harness from each of the three-way deck controls to the LT300 control cabinet. Install the harness(es) through one of the cable clamps at the back of the cabinet, near the bottom. Route the harness(es) through the conduit in the control cabinet and up into the operator control box.



**FIG. 2-39**

## 2

### Setup & Operation

Control Installation (Rev. A1.00 - A2.00)

Connect one end of the provided 60' ethernet cable to the connector at the bottom of the LT300 control cabinet. Route the cable toward the first three-way deck control box. Plug the cable into the connector in the bottom of the control box. Secure the cable out of the way of moving parts to avoid damage.

**See Figure 2-40.** Mount the provided auxiliary control box to the side of the LT300 control box. Remove the five screws from the side of the LT300 control. Remove the access hole cover plate and gasket from the side of the box.

Remove the face panel from the auxiliary control box. Use the five screws removed from the side of the LT300 control to secure the auxiliary control to the LT300 control. Feed the two harnesses from the auxiliary control through the access hole in the side of the LT300 control. Replace the auxiliary control face panel.

Remove the LT300 control face panel and locate the two unused harnesses with connectors that match those on the auxiliary control harnesses. Connect the harnesses, matching the male and female connectors of each.

Install the provided switch contact(s) to the LT300 control E-stop switch and connect the harness wires to the contact(s). Replace the LT300 control face panel.

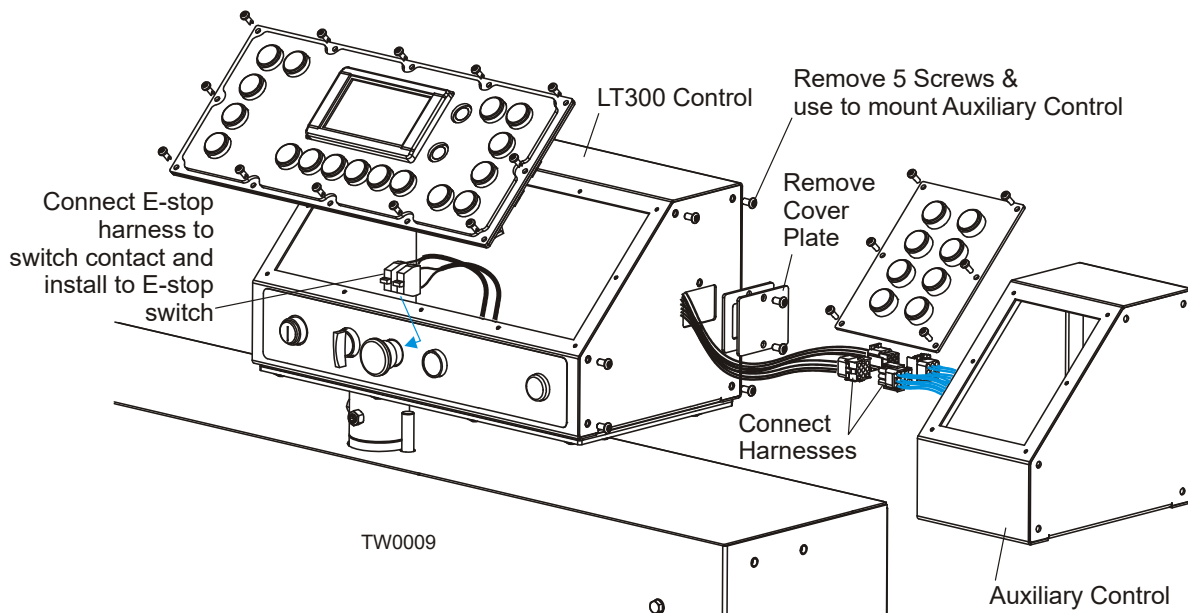




FIG. 2-40



**IMPORTANT!** To reset the LT300 control to operate the three-way deck, hold the REF1 button down when powering up the LT300 until the display appears as normal.

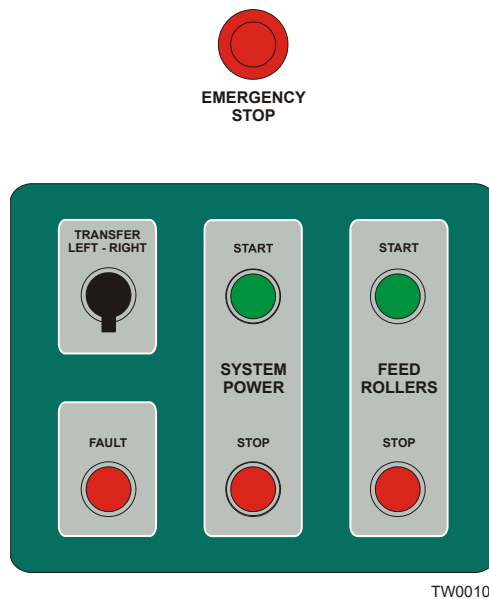
## 2.7 Operation (Rev. A4.00+)

 **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 2-41**. The deck control box switches are shown below.



**FIG. 2-41**

**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.

# 2

## Setup & Operation

Operation (Rev. A4.00+)

**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 2-42. The operator control switches are shown below.

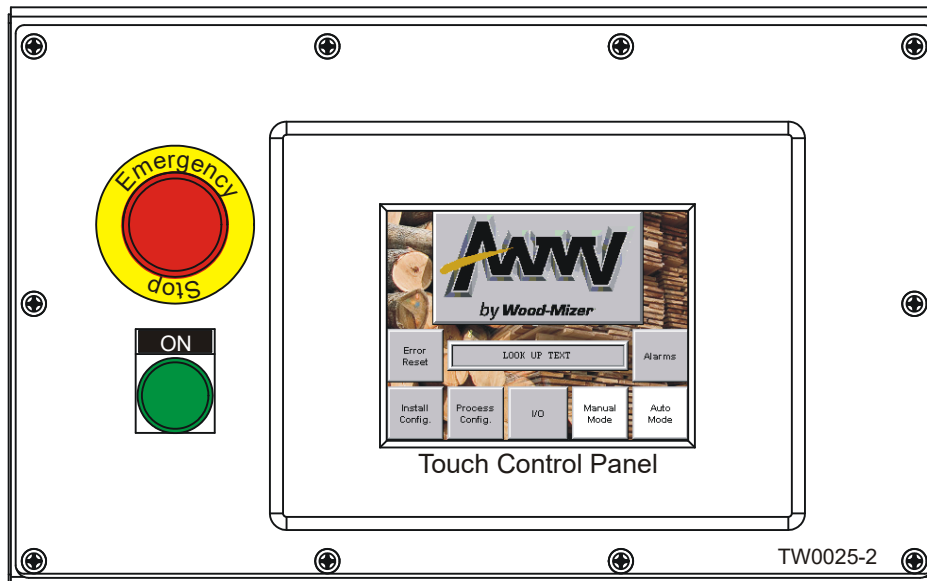
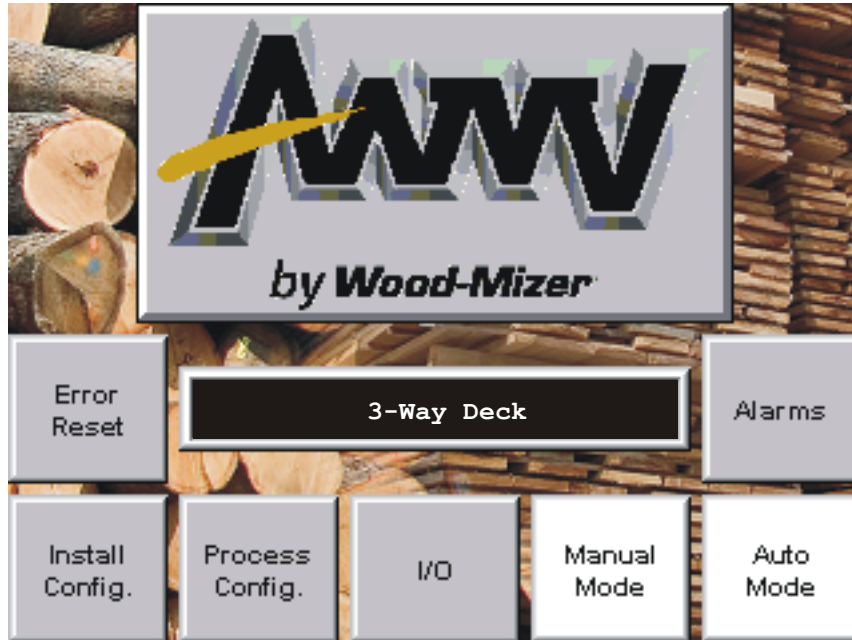


FIG. 2-42

**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 2-43. The touch control panel main screen is shown below.



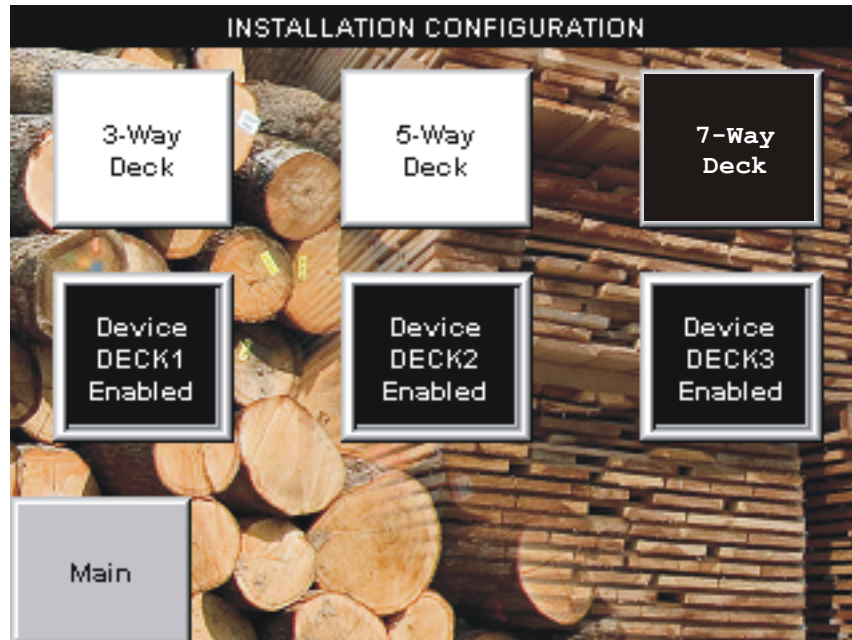
TW0030

FIG. 2-43

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 2-44.



TW0031

**FIG. 2-44**

**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.

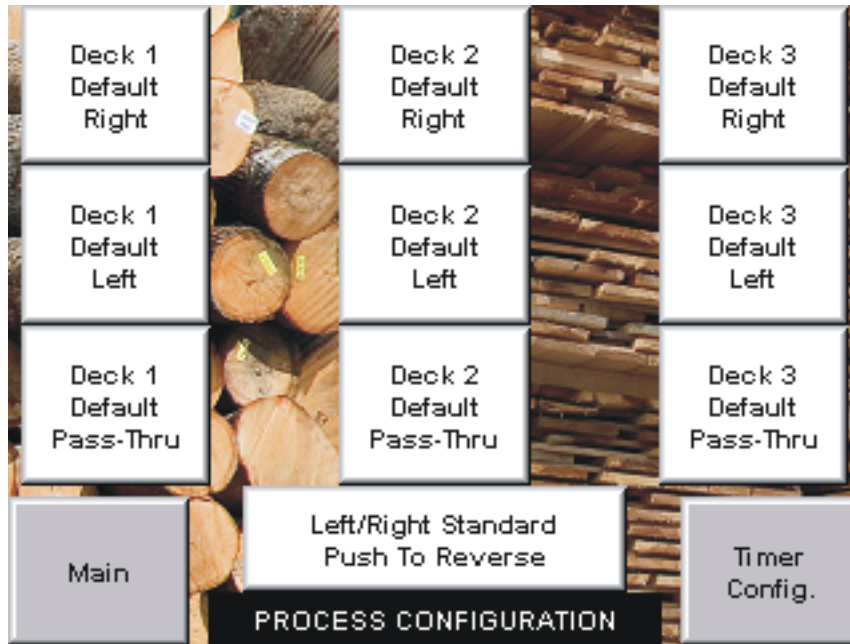
Choosing a configuration that requires less decks than are installed will disable the second or third decks as indicated by the bottom row buttons.

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 2-45.** 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. 2-45**

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

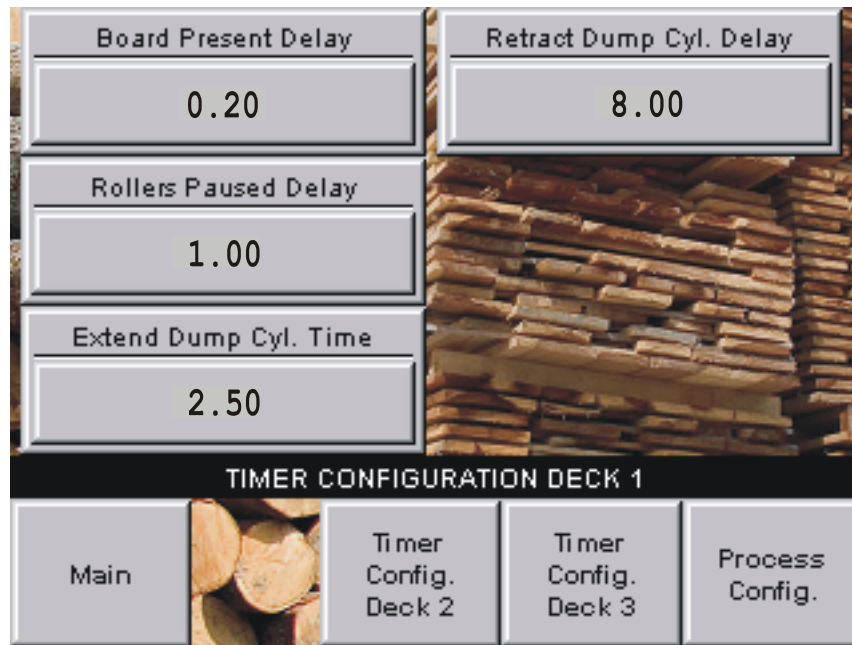
Push the PUSH FOR STANDARD button to return to the default orientation.

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 2-46.** 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. 2-46

**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.

**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 2-47.** 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. 2-47**

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.

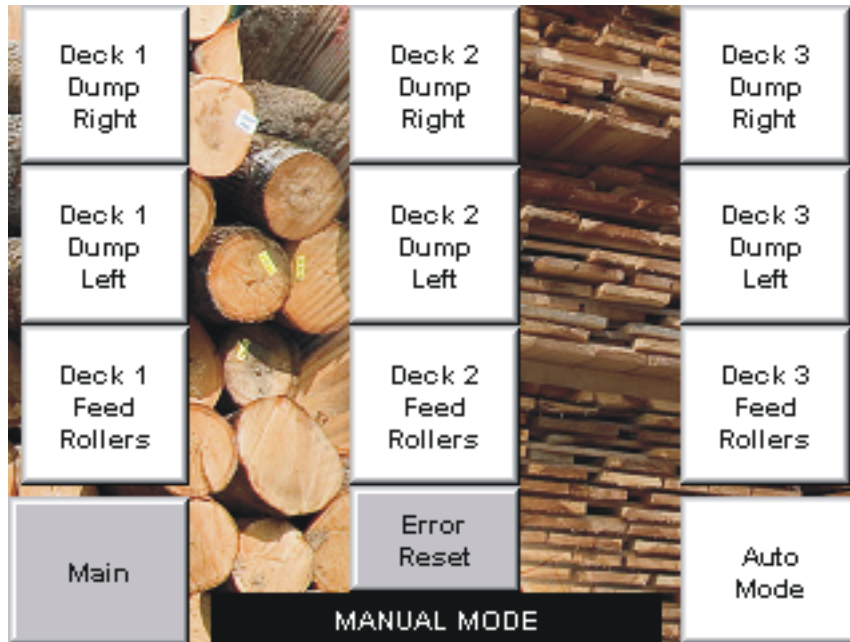
**MANUAL MODE** - In Manual Mode, the rollers and dump functions of each deck can be controlled with the buttons on the touch screen.

# 2

## Setup & Operation

Operation (Rev. A4.00+)

**See Figure 2-48.** 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. 2-48**

**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.

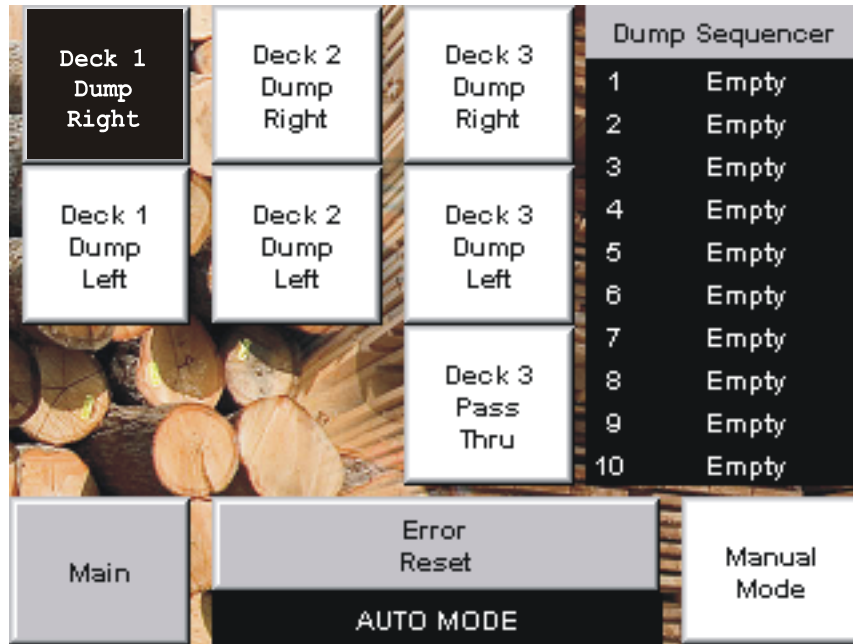
If an error occurs during operation, press ERROR RESET to clear the error.

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.

**See Figure 2-49.** 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. 2-49**

**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.


## 2 Setup & Operation

Operation (Rev. A4.00+)

**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 2-50.

| 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         |         |



TW0037

**FIG. 2-50**

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.

## 2.8 Operation (Rev. A1.00 - A3.00)

 **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.

**NOTE:** The Three-Way Deck is setup to dump to the right by default in AUTO mode. When the board reaches the end of the deck, the deck will dump to the right unless the LEFT button is depressed. To change the default, locate wire #55 connected to terminal #X12 in the control box. To make the deck dump to the left by default, disconnect wire #55 from terminal #X12 and connect it to terminal #X13. To bypass the default to allow material to pass straight off the end of the deck, disconnect wire #55 and wrap the end of the wire with electrical tape.

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 auxiliary control box mounted to the LT300 operator control.

See Figure 2-51. The deck control box switches are shown below.

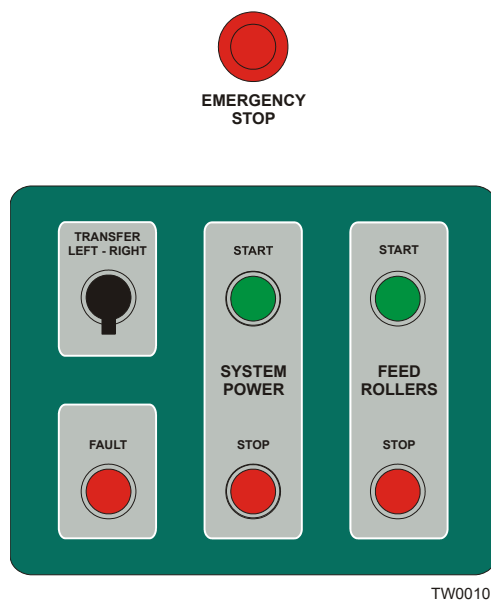


FIG. 2-51

## 2

## Setup & Operation

Operation (Rev. A1.00 - A3.00)

**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.

**FEED ROLLERS** - Push START to start feed rollers spinning. Push STOP to stop the feed rollers.

**TRANSFER** - 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 2-52. The buttons on the auxiliary control are shown below.

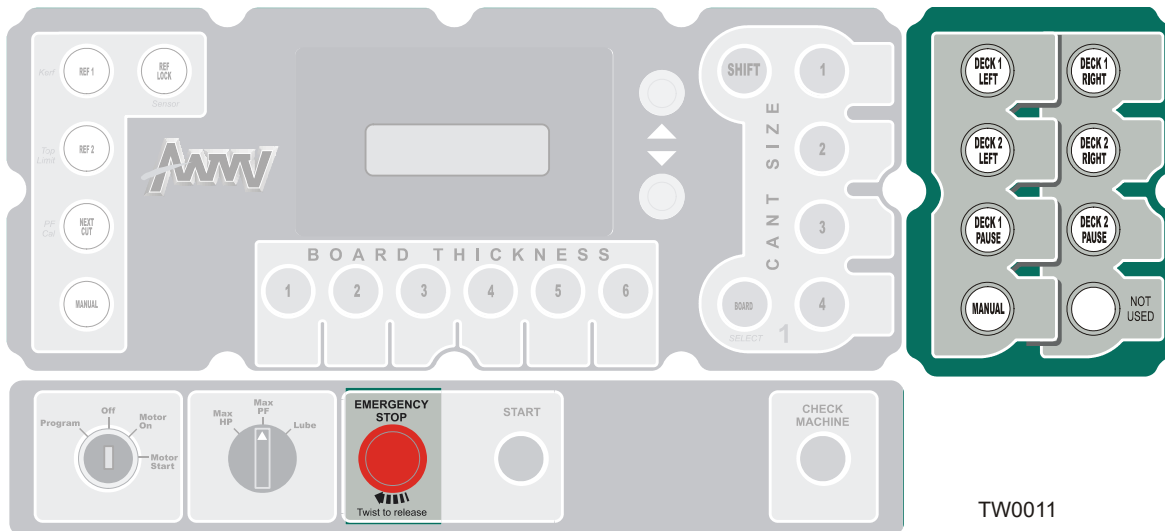


FIG. 2-52

**EMERGENCY STOP (LT300)** - Stops all LT300 functions including three-way deck(s). Turn clockwise to release the stop.

**NOTE:** You can use a grease pencil to label the buttons for your custom application. For example, the DECK 1 LEFT button might be labeled “To Edger”.

**MANUAL** - Toggles deck operation between AUTO (button unlit) and MANUAL (button lit) modes.



**DECK 1 LEFT** - When depressed in AUTO mode, this button will stay illuminated and the first deck will dump to the left when the board sensor at the end of the deck is activated. In MANUAL mode, pushing this button will immediately dump the first deck to the left.

**DECK 1 RIGHT** - When depressed in AUTO mode, this button will stay illuminated and the first deck will dump to the right when the board sensor at the end of the deck is activated. In MANUAL mode, pushing this button will immediately dump the first deck to the right.

**NOTE:** If neither RIGHT or LEFT buttons are on in AUTO mode, the deck will dump to the right by default, unless the PAUSE button for that deck is activated. [See Page 2-63](#) for instructions to change the default action of the deck.

**DECK 2 RIGHT** - When depressed in AUTO mode, this button will stay illuminated and the second deck (if equipped) will dump to the left when the board sensor at the end of the deck is activated. In MANUAL mode, pushing this button will immediately dump the second deck to the left.

**DECK 2 LEFT** - When depressed in AUTO mode, this button will stay illuminated and the second deck (if equipped) will dump to the right when the board sensor at the end of the deck is activated. In MANUAL mode, pushing this button will immediately dump the second deck to the right.

**NOTE:** If neither RIGHT or LEFT buttons are on in AUTO mode, the deck will dump to the right by default, unless the PAUSE button for that deck is activated. [See Page 2-63](#) for instructions to change the default action of the deck.

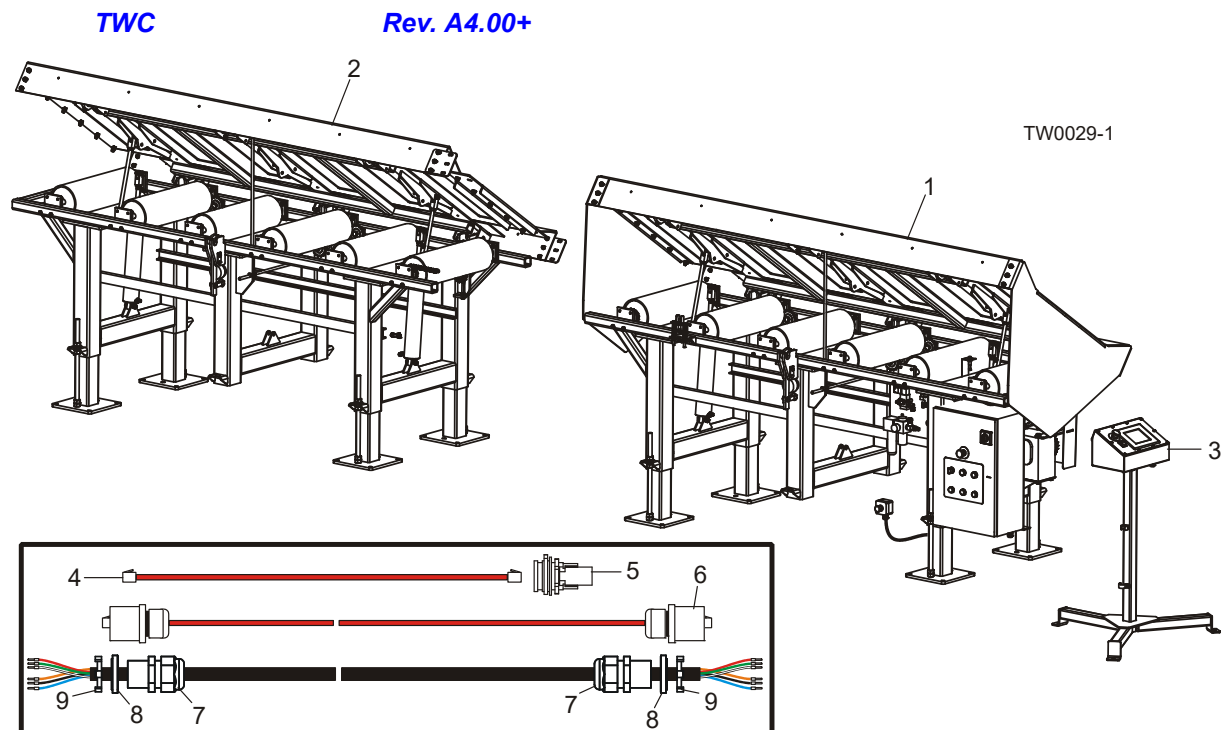
**DECK 1 & DECK 2 PAUSE** - Push to stop the feed rollers on the corresponding deck. Push again to restart the feed rollers.

# 3 Replacement Parts

## Three-Way Deck

### SECTION 3 REPLACEMENT PARTS

#### 3.1 Three-Way Deck



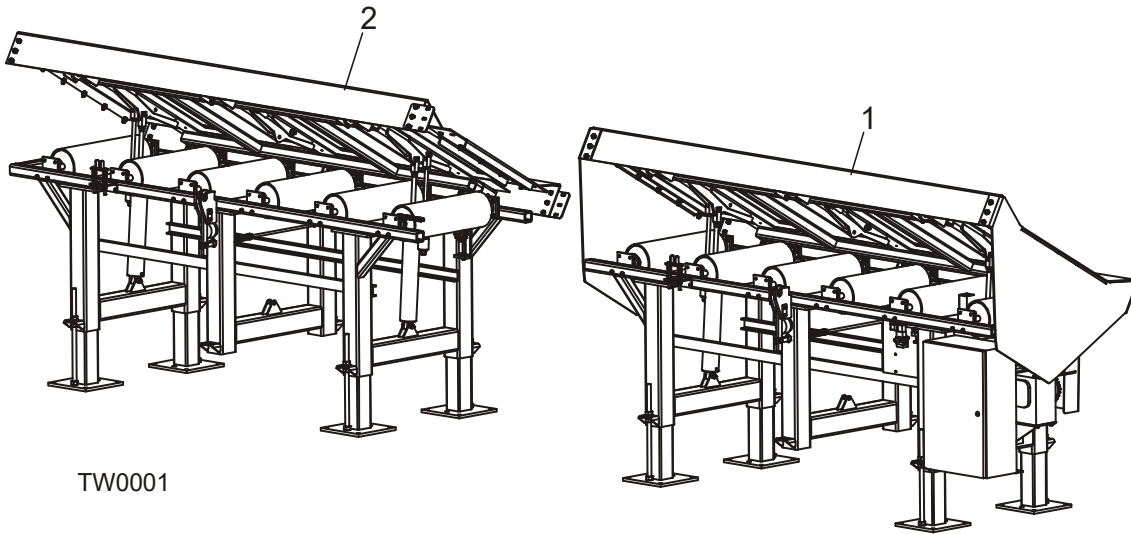
| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART #              | QTY. |
|-----|--|---------------------|------|
| 1   | DRIVE TABLE PARTS ( <a href="#">See Section 3.3</a> )        |                     |      |
| 2   | EXTENSION TABLE PARTS ( <a href="#">See Section 3.5</a> )    |                     |      |
| 3   | OPERATOR CONTROL PARTS ( <a href="#">See Section 3.20</a> )  |                     |      |
|     | CABLE KIT, FIVE-WAY DECK COMMUNICATION                       | 053393 <sup>1</sup> | 1    |
|     | CABLE KIT, SEVEN-WAY DECK COMMUNICATION                      | 053394 <sup>1</sup> | 1    |
| 4   | Cable, 1' RJ45 Ethernet                                      | 052994              | 1    |
| 5   | Receptacle, RJ45 Straight Panel Mount                        | 052993              | 1    |
| 6   | Cable Assembly, 30' RJ45 Ethernet                            | 052989              | 1    |
| 7   | Connector, 1/2" NPT .17-.47 Cable                            | 051229              | 2    |
| 8   | Ring, 1/2" Sealing   | E20460              | 2    |
| 9   | Nut, 1/2" NPT Connector Lock                                 | E20461              | 2    |

<sup>1</sup> 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.

### 3.2 Three-Way Deck

TWC

Rev. A1.00 - A3.00



TW0001

| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART # | QTY. |
|-----|--|--------|------|
| 1   | DRIVE TABLE PARTS ( <a href="#">See Section 3.4</a> )        |        |      |
| 2   | EXTENSION TABLE PARTS ( <a href="#">See Section 3.5</a> )    |        |      |

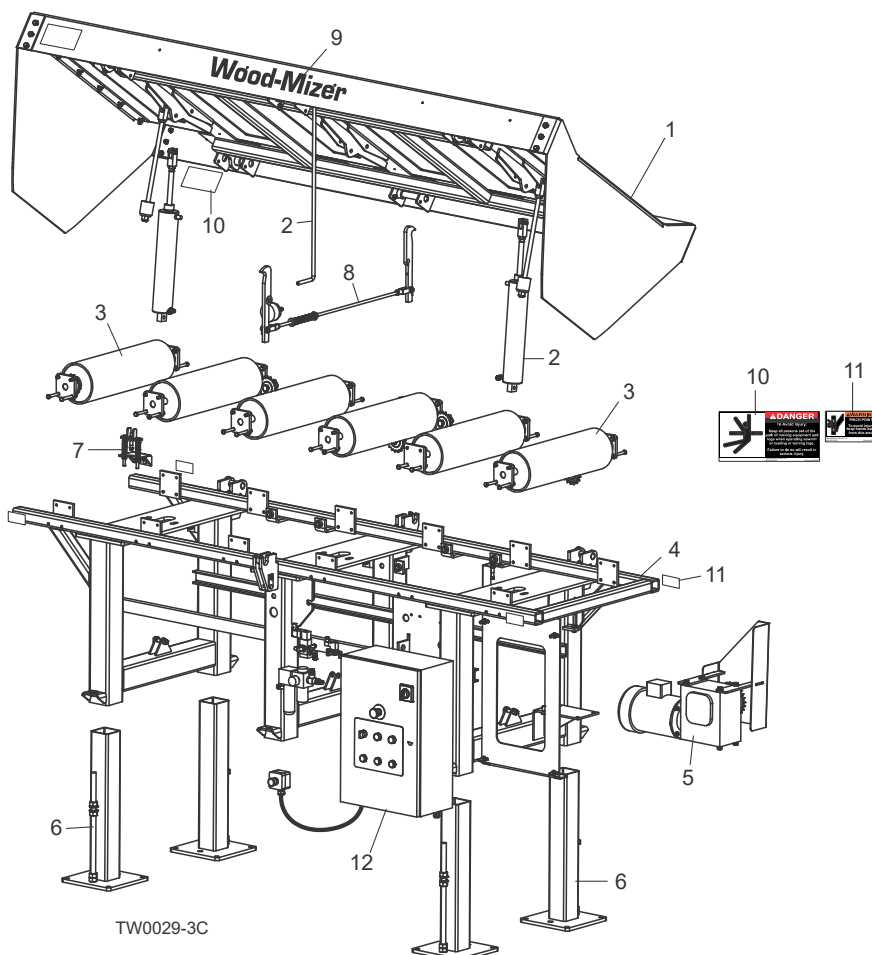
# 3 Replacement Parts

## Drive Table

### 3.3 Drive Table

TWC

Rev. A4.00+



| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)     | PART # | QTY. |
|-----|--|--------|------|
|     | <b>TABLE ASSEMBLY, PRIMARY THREE-WAY DRIVE</b>                   | TWC    | 1    |
|     | Table Assembly, Three-Way Drive                                  | 047374 | 1    |
| 1   | Pivoting Table Top Parts ( <a href="#">See Section 3.6</a> )     |        |      |
| 2   | Air Cylinder/Prop Parts ( <a href="#">See Section 3.7</a> )      |        |      |
| 3   | Table Roller/Sprocket Parts ( <a href="#">See Section 3.10</a> ) |        |      |
| 4   | Frame Weldment, Three-Way Drive Table                            | 047375 | 1    |
| 5   | Drive Parts ( <a href="#">See Section 3.14</a> )                 |        |      |
| 6   | Table Leg Parts ( <a href="#">See Section 3.11</a> )             |        |      |
| 7   | Table Sensor Bracket Parts ( <a href="#">See Section 3.12</a> )  |        |      |
| 8   | Pivot Latch Parts ( <a href="#">See Section 3.9</a> )            |        |      |
| 9   | Decal, 20" Black Wood-Mizer Logo                                 | 076281 | 2    |
| 10  | Decal, Keep Away Danger  | S09851 | 2    |
| 11  | Decal, Hand Pinch Point Warning                                  | S12641 | 4    |

## Replacement Parts

*Drive Table*

**3**

|           |   |        |      |  |
|-----------|---|--------|------|--|
|           | Line, 1/4" Air  | R01869 | 5.33 |  |
|           | Line, 3/8" Air  | 005453 | 8.69 |  |
| <b>12</b> | Air/Electrical Control Parts ( <a href="#">See Section 3.15</a> ) |        |      |  |

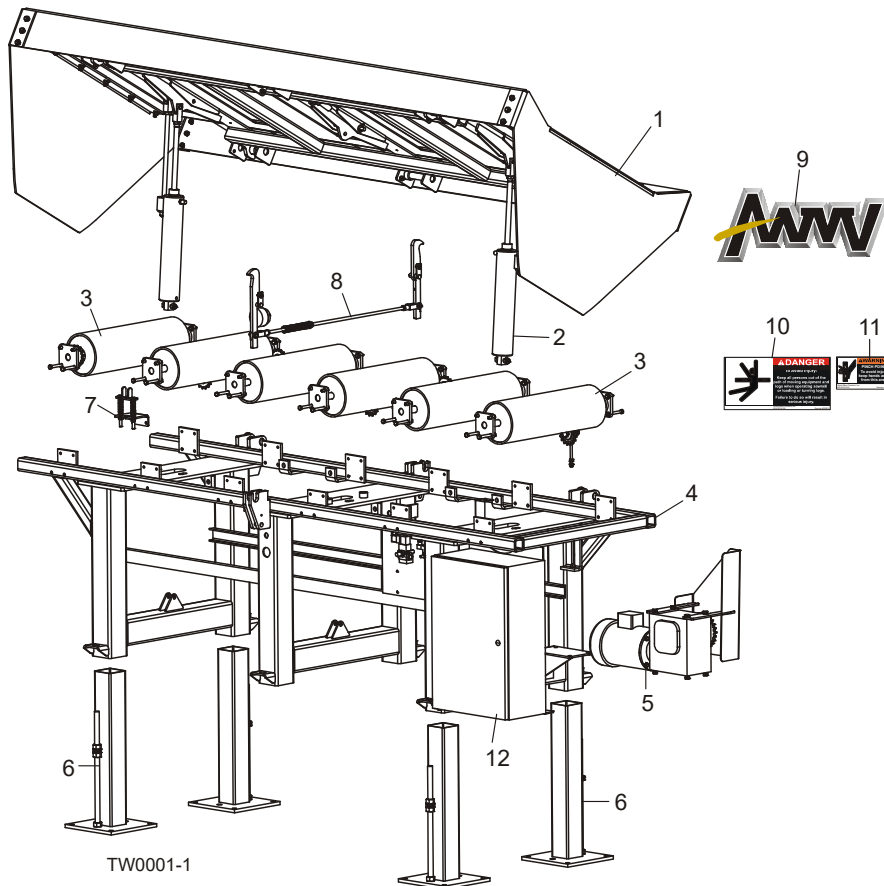
# 3 Replacement Parts

## Drive Table

### 3.4 Drive Table

TWC

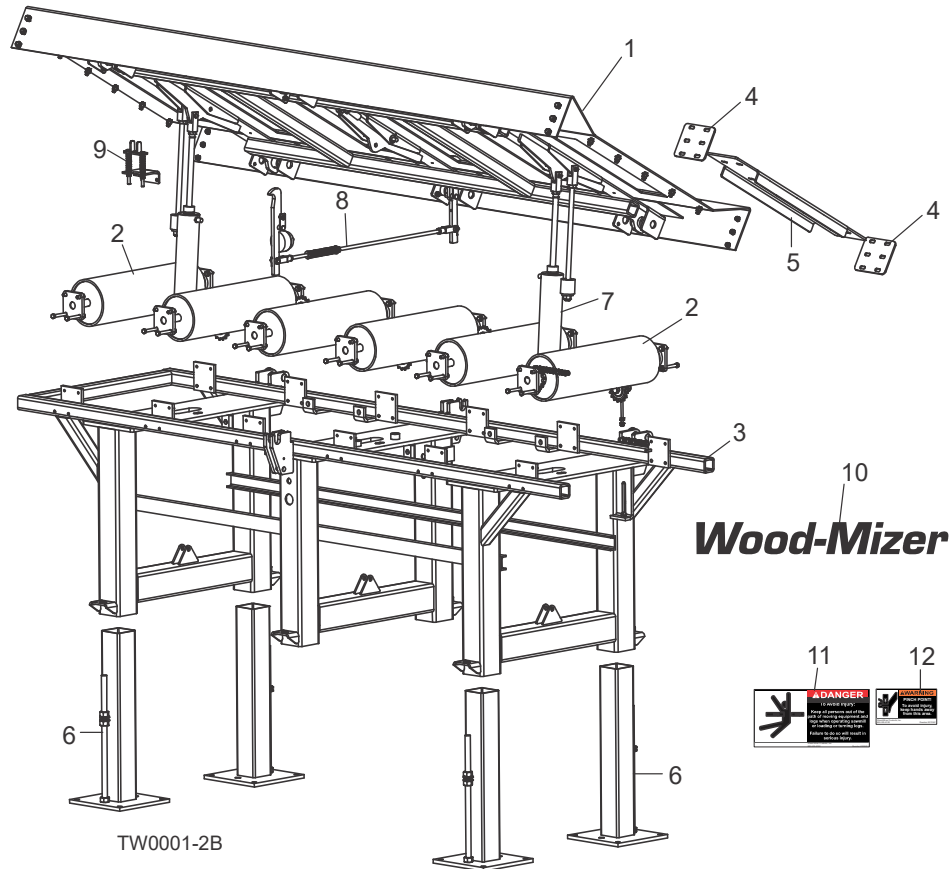
Rev. A1.00 - A3.00



| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)     | PART # | QTY. |
|-----|--|--------|------|
|     | <b>TABLE ASSEMBLY, PRIMARY THREE-WAY DRIVE</b>                   | TWC-1  | 1    |
|     | <b>TABLE ASSEMBLY, SECONDARY THREE-WAY DRIVE</b>                 | TWC-2  | 1    |
|     | Installation Kit Parts ( <a href="#">See Section 3.24</a> )      |        |      |
|     | Table Assembly, Three-Way Drive                                  | 047374 | 1    |
| 1   | Pivoting Table Top Parts ( <a href="#">See Section 3.6</a> )     |        |      |
| 2   | Air Cylinder/Prop Parts ( <a href="#">See Section 3.7</a> )      |        |      |
| 3   | Table Roller/Sprocket Parts ( <a href="#">See Section 3.10</a> ) |        |      |
| 4   | Frame Weldment, Three-Way Drive Table                            | 047375 | 1    |
| 5   | Drive Parts ( <a href="#">See Section 3.14</a> )                 |        |      |
| 6   | Table Leg Parts ( <a href="#">See Section 3.11</a> )             |        |      |
| 7   | Table Sensor Bracket Parts ( <a href="#">See Section 3.12</a> )  |        |      |
|     | Sensor & Cable Parts ( <a href="#">See Section 3.22</a> )        |        |      |
| 8   | Pivot Latch Parts ( <a href="#">See Section 3.9</a> )            |        |      |
| 9   | Decal, 10" AWMV Logo   | 052287 | 2    |
| 10  | Decal, Keep Away Danger  | S09851 | 2    |

|           |   |        |      |  |
|-----------|---|--------|------|--|
| <b>11</b> | Decal, Hand Pinch Point Warning                                   | S12641 | 4    |  |
|           | Line, 1/4" Air  | R01869 | 5.33 |  |
|           | Line, 3/8" Air  | 005453 | 8.69 |  |
| <b>12</b> | Air/Electrical Control Parts ( <a href="#">See Section 3.17</a> ) |        |      |  |

### 3.5 Extension Table



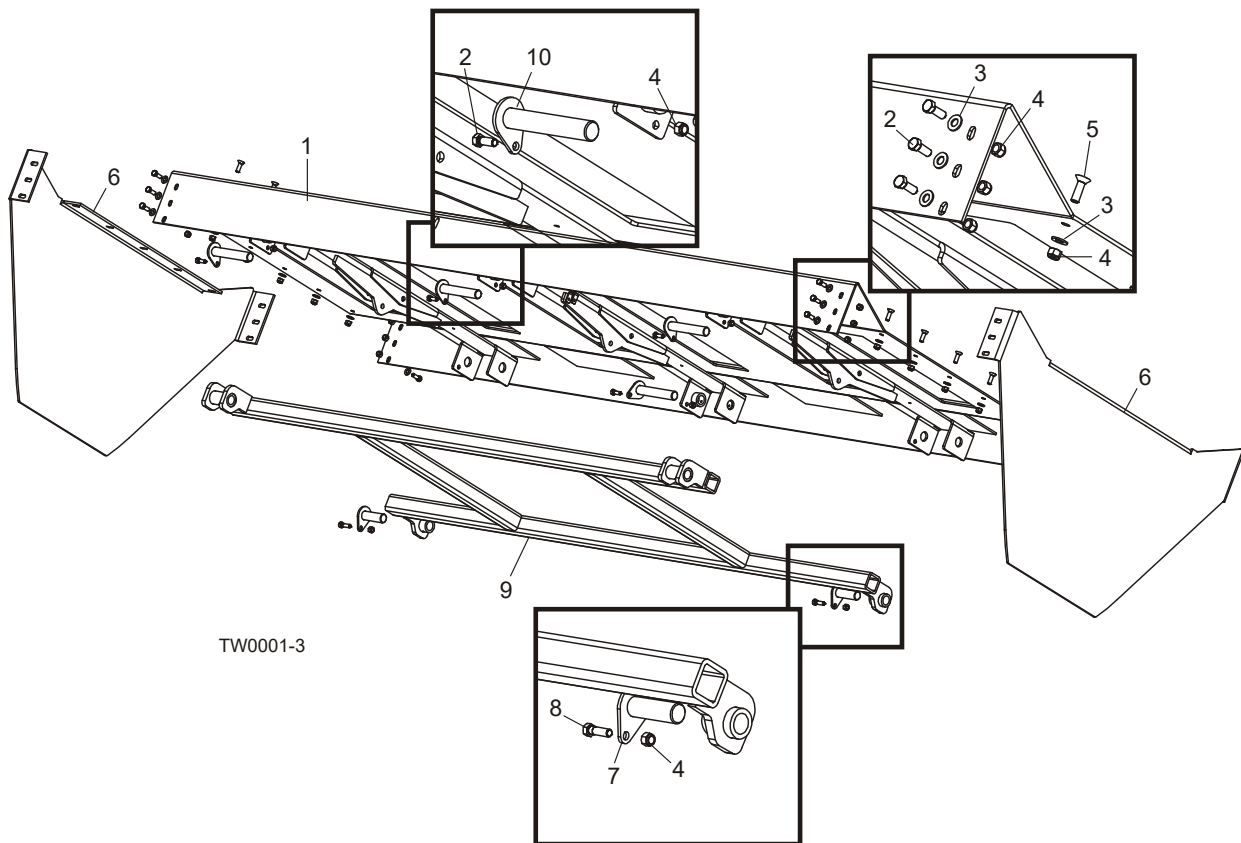
| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)     | PART #  | QTY.   |
|-----|--|---------|--------|
|     | <b>TABLE ASSEMBLY, THREE-WAY EXTENSION</b>                       | TWC-EXT | 1      |
|     | Table Assembly, Three-Way Extension                              | 047341  | 1      |
| 1   | Pivoting Table Top Parts ( <a href="#">See Section 3.6</a> )     |         |        |
| 2   | Table Roller/Sprocket Parts ( <a href="#">See Section 3.10</a> ) |         |        |
| 3   | Frame Weldment, Three-Way Extension Table                        | 047342  | 1      |
| 4   | Plate, Table End Splice  | 054139  | 2      |
| 5   | Plate, Table Bottom Splice                                       | 054149  | 1      |
| 6   | Table Leg Parts ( <a href="#">See Section 3.11</a> )             |         |        |
| 7   | Air Cylinder/Prop Parts ( <a href="#">See Section 3.7</a> )      |         |        |
| 8   | Pivot Latch Parts ( <a href="#">See Section 3.9</a> )            |         |        |
| 9   | Table Sensor Bracket Parts ( <a href="#">See Section 3.12</a> )  |         |        |
|     | Sensor & Cable Parts ( <a href="#">See Section 3.22</a> )        |         |        |
|     | Line, 1/4" Air   | R01869  | 10 ft. |
|     | Line, 3/8" Air   | 005453  | 11 ft. |
| 10  | Decal, 10" AWMV Logo   | 052287  | 2      |
| 11  | Decal, Keep Away Danger  | S09851  | 2      |
| 12  | Decal, Hand Pinch Point Warning                                  | S12641  | 4      |



# 3 Replacement Parts

## Pivot Table Top

### 3.6 Pivot Table Top

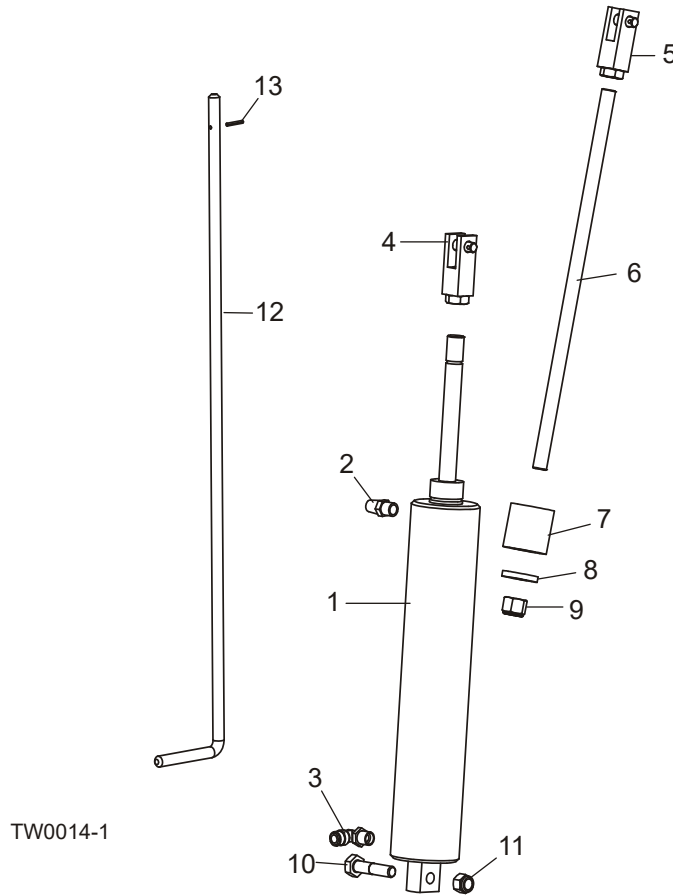


| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART #     | QTY. |
|-----|--|------------|------|
| 1   | TOP WELDMENT, THREE-WAY PIVOT                                | 051480     | 1    |
| 2   | BOLT, 3/8-16 X 1" HEX HEAD GRADE 5                           | F05007-87  | 16 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

### 3.7 Air Cylinder/Prop

TWC

Rev. A2.00+



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

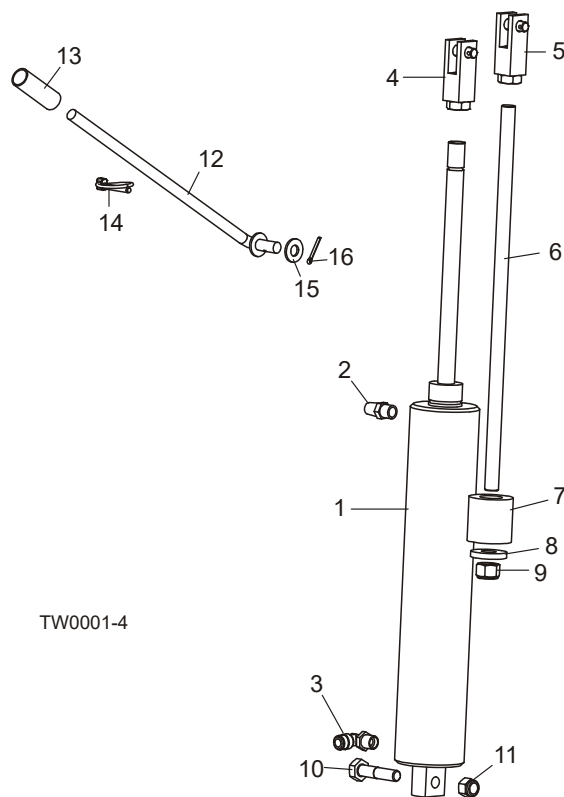
# 3 Replacement Parts

## Air Cylinder/Prop

### 3.8 Air Cylinder/Prop

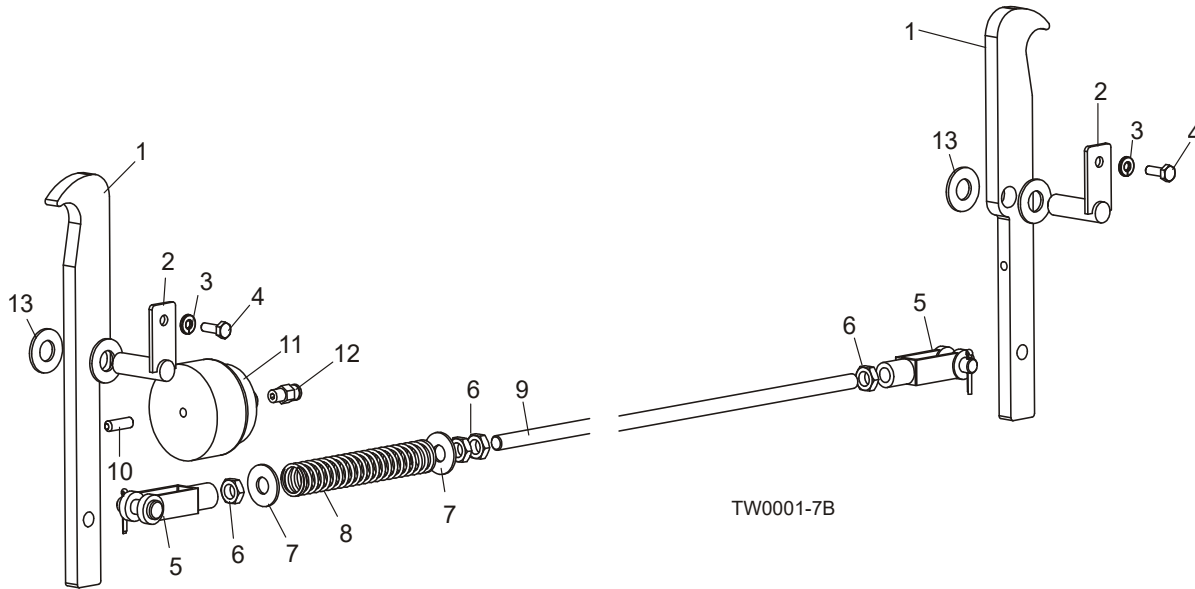
TWC

Rev. A1.00



| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART #     | QTY. |  |
|-----|--|------------|------|--|
| 1   | CYLINDER, 3" X 12" PNEUMATIC                                 | 051455     | 2    |  |
| 2   | MUFFLER, 3/8" NPT AIR CEC-3                                  | P21528     | 2    |  |
| 3   | FITTING, 3/8" NPT X 3/8" TUBE 90° ELBOW                      | P21526     | 2    |  |
| 4   | CLEVIS, 5/8-18 X 2 1/4"                                      | 051456     | 2    |  |
|     | ROD ASSEMBLY, TABLE TOP STOP                                 | 054177     | 2    |  |
| 5   | Clevis, 5/8-18 x 2 1/4"                                      | 051456     | 1    |  |
| 6   | Rod, Table Top Stop  | 054161     | 1    |  |
| 7   | SPRING, RUBBER STOP  | 014828     | 2    |  |
| 8   | WASHER, 21/32" X 1 5/8" X 1/4"                               | 034685     | 2    |  |
| 9   | NUT, 5/8-18 NYLON LOCK                                       | F05010-71  | 2    |  |
| 10  | BOLT, 1/2-13 X 2 1/4" HEX HEAD                               | F05008-124 | 2    |  |
| 11  | NUT, 1/2-13 HEX NYLON LOCK                                   | F05010-8   | 2    |  |
| 12  | ROD WELDMENT, TABLE TOP PROP                                 | 054164     | 1    |  |
| 13  | TUBE, PROP GUIDE   | 054162     | 1    |  |
| 14  | PIN, 1/4" RETAINING  | F05012-93  | 1    |  |
| 15  | WASHER, 1/2" SAE FLAT  | F05011-2   | 1    |  |
| 16  | PIN, 1/8" X 1" COTTER  | F05012-1   | 1    |  |

### 3.9 Pivot Latch

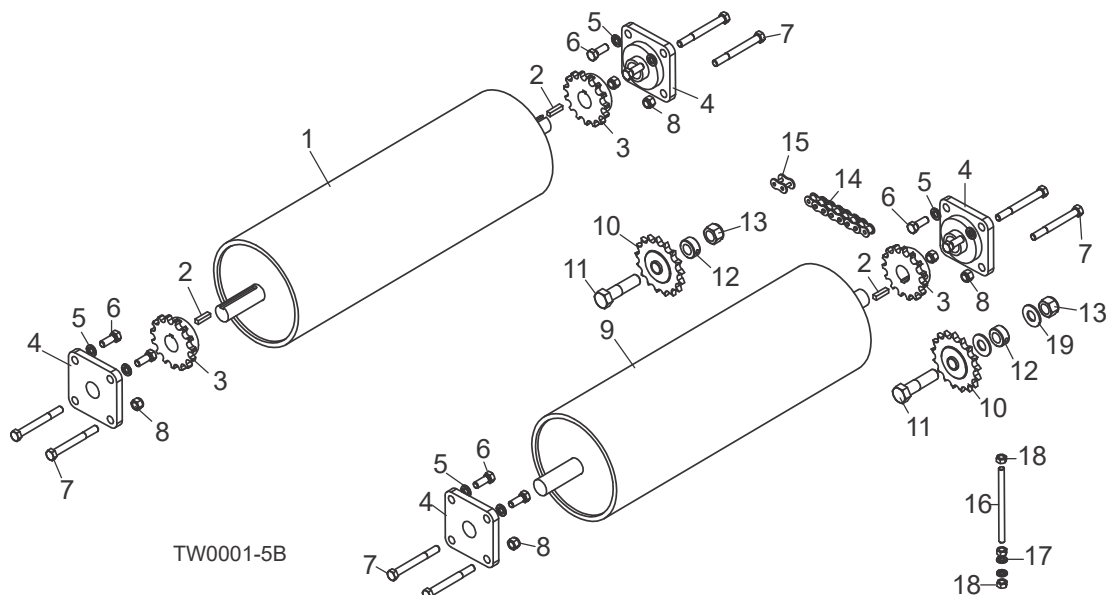


| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART #     | QTY. |
|-----|--|------------|------|
| 1   | PLATE, PIVOT LATCH   | 051454     | 2    |
| 2   | PIN WELDMENT, LOCK   | 051458     | 2    |
| 3   | WASHER, 1/4" SPLIT LOCK                                      | F05011-14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

# 3 Replacement Parts

## Rollers, Sprockets & Chain

### 3.10 Rollers, Sprockets & Chain

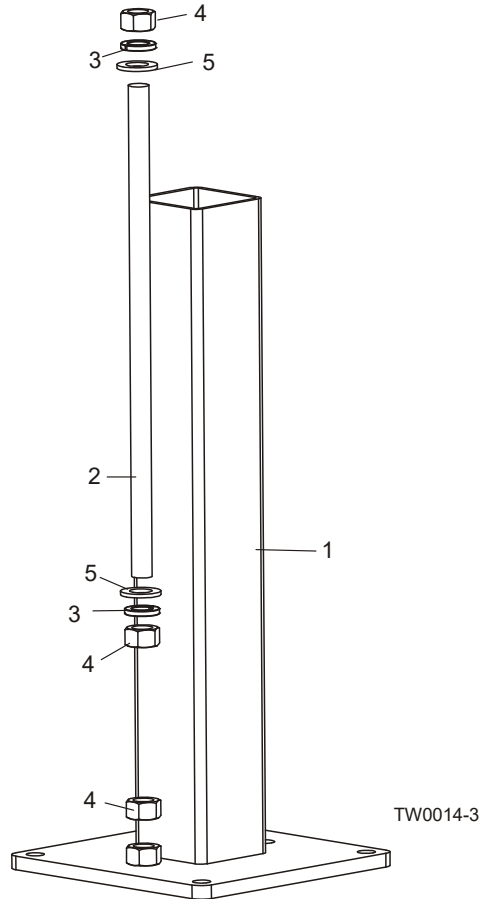


| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART #                | QTY. |
|-----|--|-----------------------|------|
| 1   | ROLLER WELDMENT, DUAL KEY TABLE                              | 051464                | 1    |
| 2   | KEY, 1/4" X 1"   | S21486                | 7    |
| 3   | SPROCKET, #50 15 TOOTH X 1" BORE                             | 054172                | 7    |
| 4   | BEARING, VF4S-216  | 014090                | 12   |
| 5   | WASHER, 3/8" SPLIT LOCK                                      | F05011-4              | 24   |
| 6   | BOLT, 3/8-16 X 1" HEX HEAD GRADE 5                           | F05007-87             | 24   |
| 7   | BOLT, 3/8-16 X 3 1/2" HEX HEAD GRADE 8                       | F05007-6              | 24   |
| 8   | NUT, 3/8-16 NYLON LOCK                                       | F05010-10             | 24   |
| 9   | ROLLER WELDMENT, DUAL KEY TABLE                              | 051464 <sup>1</sup>   | 5    |
| 10  | SPROCKET, #50BB X 17H TOOTH X 5/8" BORE IDLER                | P21504                | 8    |
| 11  | BOLT, 5/8-11 X 2 1/2" HEX HEAD GRADE 5                       | F05009-20             | 8    |
| 12  | COLLAR, 5/8" LOCK  | P05035                | 8    |
| 13  | NUT, 5/8-11 NYLON LOCK                                       | F05010-34             | 8    |
| 14  | CHAIN, #50 X 45" (CONNECTS EXTENSION/DRIVE TABLES)           | 054182                | 1    |
|     | CHAIN, #50 X 220" (EXTENSION TABLE)                          | 036643                | 1    |
|     | CHAIN, #50 X 230" (PRIMARY/SECONDARY DRIVE TABLE)            | 054194                | 1    |
| 15  | LINK, #50 MASTER   | P20208                | 2    |
|     | LINK, #50 HALF   | 036648                | 3    |
| 16  | ROD, 5/16-18 X 5" THREADED                                   | 036743                | 1    |
| 17  | WASHER, 5/16" SPLIT LOCK                                     | F05011-13             | 2    |
| 18  | NUT, 5/16-18 HEX   | F05010-17             | 3    |
| 19  | WASHER, 5/8" SAE FLAT (FRONT SPROCKET ONLY)                  | F05011-5 <sup>2</sup> | 2    |

<sup>1</sup> Replaced 047370 Roller Weldment, 3-Way, Single Key (Rev. A5.01).

<sup>2</sup> Second washer F05011-5 added behind sprocket 5/06.

### 3.11 Table Legs



| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART #    | QTY. |  |
|-----|--|-----------|------|--|
| 1   | LEG WELDMENT, THREE-WAY DECK TABLE                           | 051478    | 4    |  |
| 2   | ROD, THREADED LEG ADJUSTMENT                                 | 054147    | 4    |  |
| 3   | WASHER, 3/4" SPLIT LOCK                                      | F05011-6  | 8    |  |
| 4   | NUT, 3/4-16 HEX  | F05010-92 | 12   |  |
| 5   | WASHER, 3/4" SAE FLAT  | F05011-62 | 8    |  |

# 3 Replacement Parts

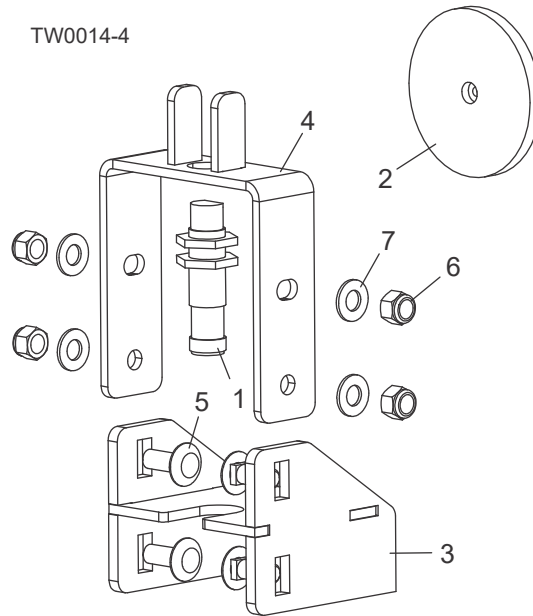
## Sensor Bracket

### 3.12 Sensor Bracket

TWC

Rev. A5.02+

TW0014-4

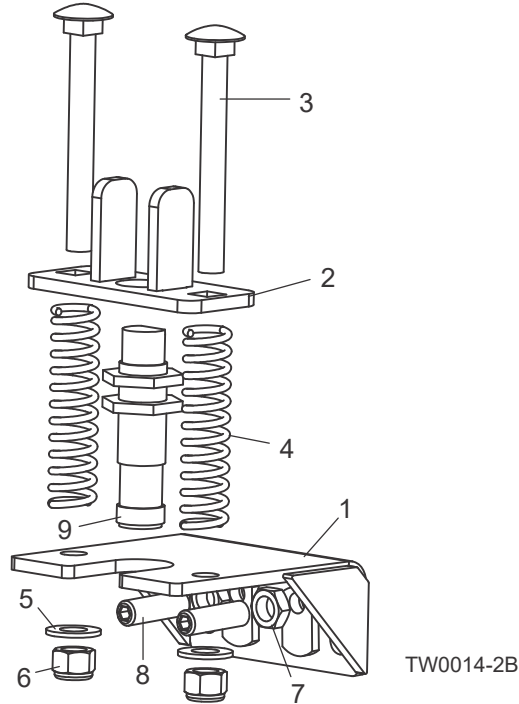


| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART #     | QTY. |
|-----|--|------------|------|
|     | <b>BRACKET ASSEMBLY, SENSOR MOUNT</b>                        | 054165     | 1    |
| 1   | Sensor, Photo RA 18mm PNP                                    | 051831     | 1  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

### 3.13 Sensor Bracket

TWC

Rev. A1.00 - A5.01



| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART #                 | QTY. |
|-----|--|------------------------|------|
|     | <b>BRACKET ASSEMBLY, SENSOR MOUNT</b>                        | 054165 <sup>1</sup>    | 1    |
| 1   | Plate Weldment, Lower Sensor Mount                           | 054676 <sup>1</sup>    | 1    |
| 2   | Plate Weldment, Upper Sensor Mount                           | 054167                 | 1    |
| 3   | Bolt, 3/8-16 x 3 1/2" Carriage Head                          | F05007-161             | 2    |
| 4   | Spring, .72" x 3" x .105" Compression                        | 014617                 | 2    |
| 5   | Washer, 3/8" SAE Flat  | F05011-3               | 2    |
| 6   | Nut, 3/8-16 Nylon Lock                                       | F05010-10              | 2    |
| 7   | Nut, 3/8-16 Hex Jam  | F05010-29 <sup>1</sup> | 2    |
| 8   | Screw, 3/8-16 x 1 1/4" Socket Head                           | F05007-18 <sup>1</sup> | 2    |
| 9   | Sensor, Photo RA 18mm PNP                                    | 051831                 | 1    |
|     | Reflector, IEC IP67 84mm                                     | 074771                 | 1    |

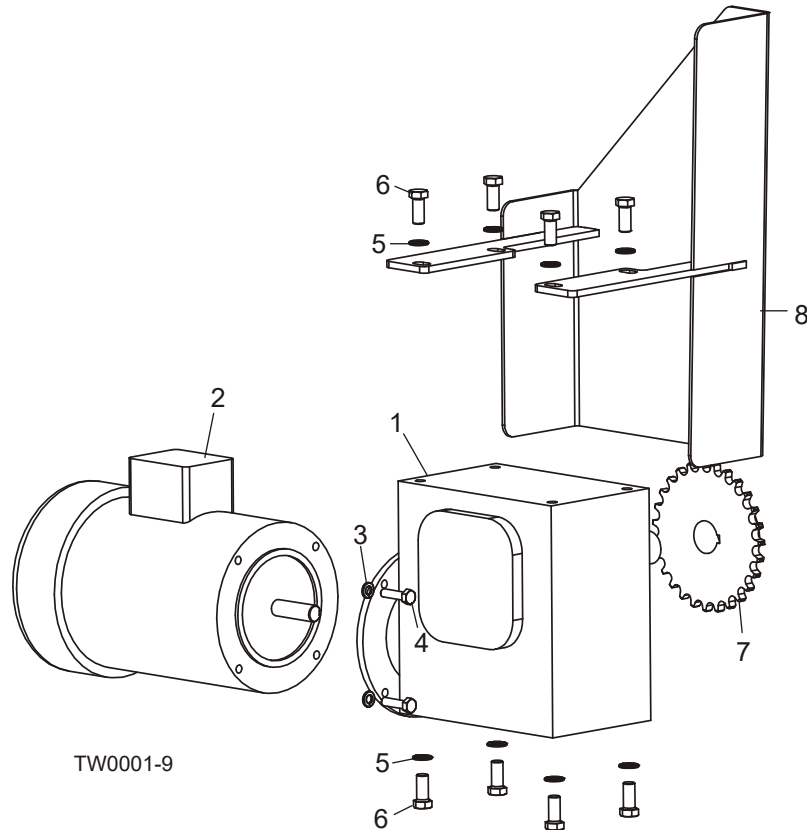
<sup>1</sup> Mount Bracket Assembly redesigned for TWC Rev. A5.02. Previously, Lower Plate Weldment 054676 replaces Lower Plate 054166, Set Screws F05007-9 and Jam Nuts F05010-29 added to improve durability and ease of adjustment (Rev. A2.00).



# 3 Replacement Parts

## Drive

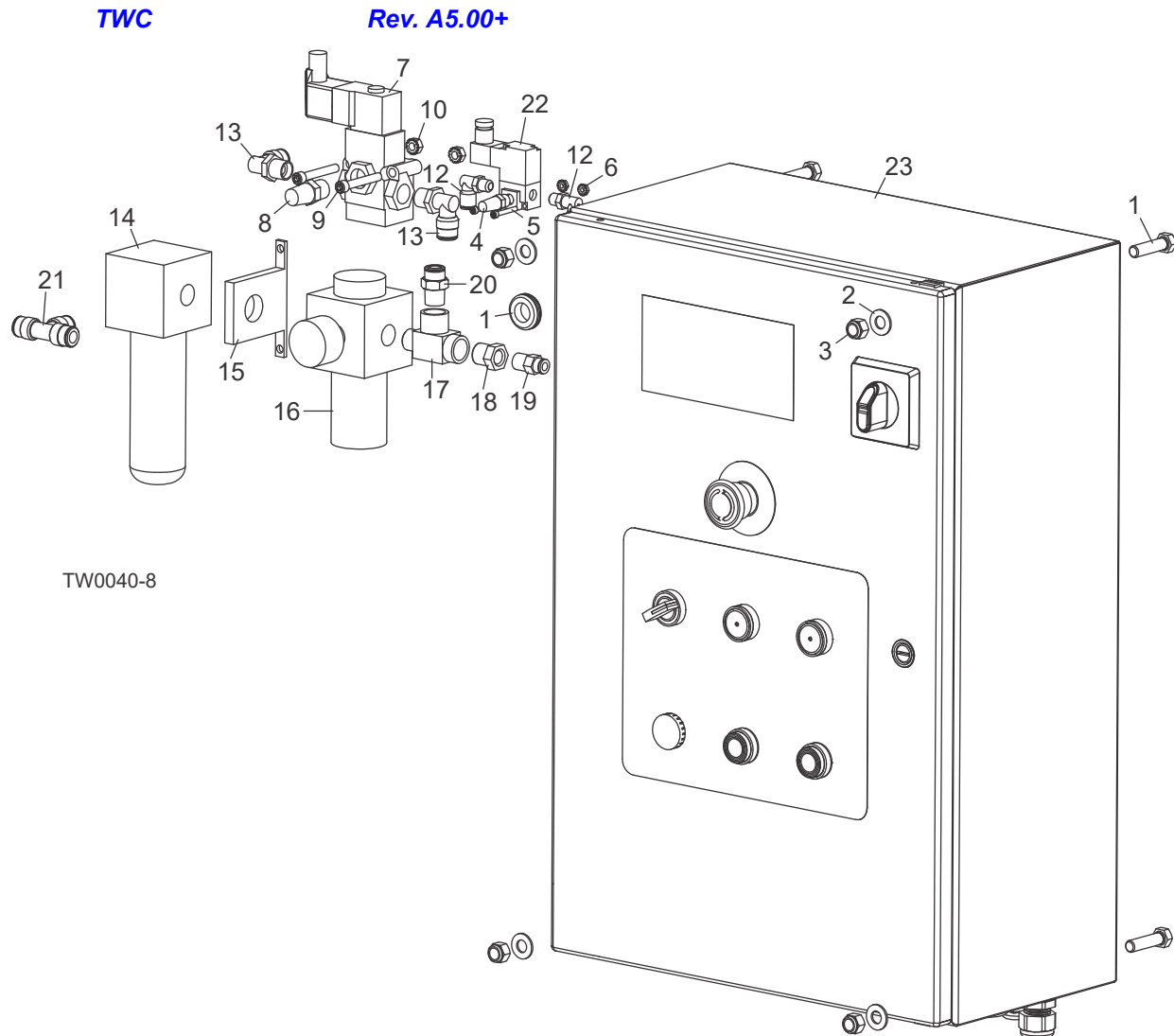
### 3.14 Drive



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

<sup>1</sup> Replaced 042390 2HP 3PH 230/460 TEFC 56C No Base Motor (Rev. A5.01).

### 3.15 Air/Electrical Controls



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

## 3

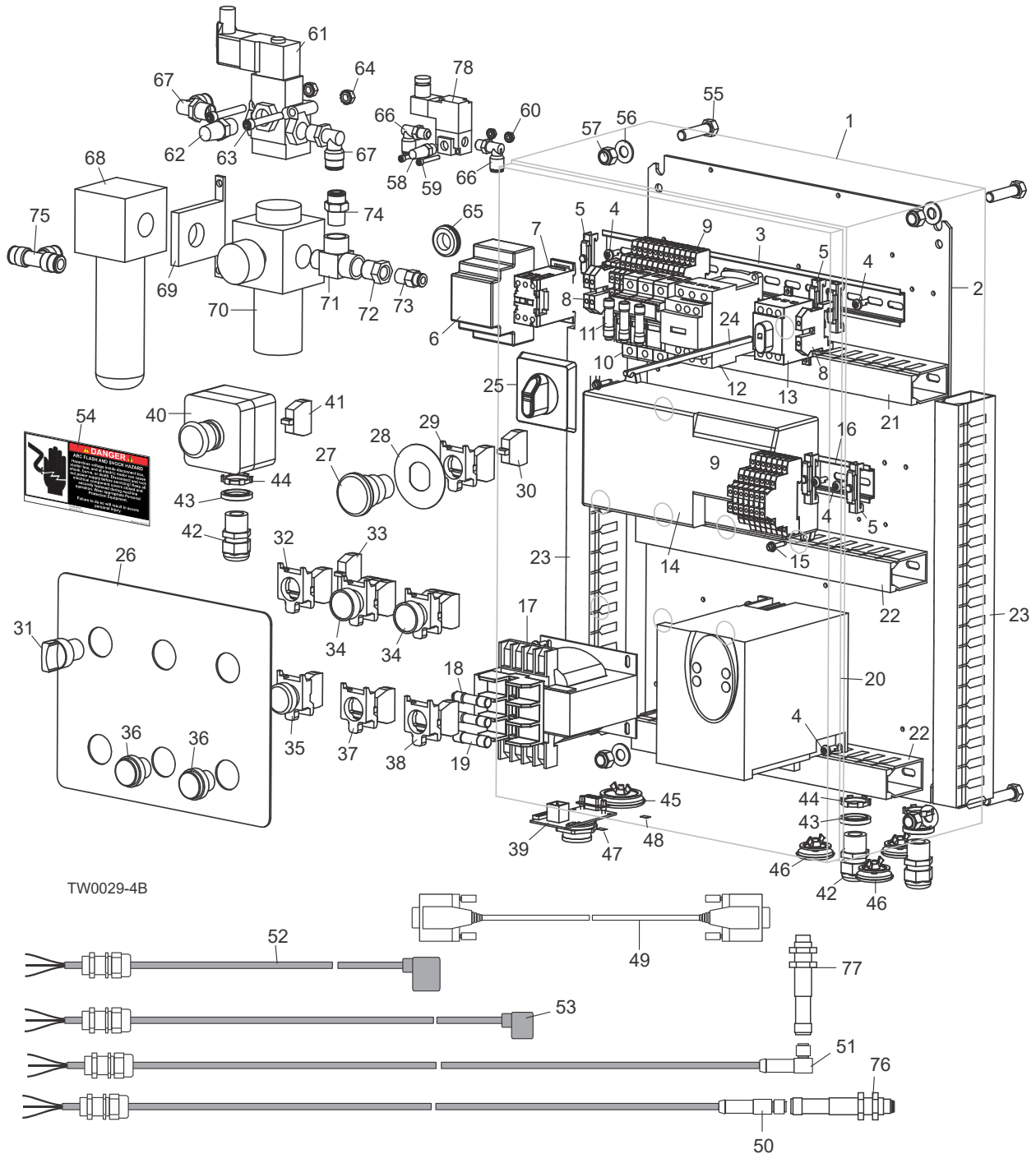
**Replacement Parts***Air/Electrical Controls*

|    |  |        |   |  |
|----|--|--------|---|--|
| 11 | GROMMET, 5/8" ID RUBBER  | P11764 | 1 |  |
| 12 | FITTING, 1/8" NPT X 1/4" TUBE SWIVEL ELBOW                                       | P09736 | 2 |  |
| 13 | FITTING, 3/8" NPT X 3/8" TUBE ELBOW  | P21526 | 2 |  |
| 14 | FILTER, AIR F18-03-SK00  | 036750 | 1 |  |
| 15 | BRACKET, AIR FILTER/REGULATOR MOUNT  | 036752 | 1 |  |
| 16 | REGULATOR, AIR R18-03-F0G0   | 036751 | 1 |  |
| 17 | FITTING, 3/8" NPT MALE RUN T   | 016822 | 1 |  |
| 18 | FITTING, 3/8" NPT X 1/4" NPT REDUCER   | 015490 | 1 |  |
| 19 | FITTING, 1/4" NPT X 1/4" TUBE  | P20903 | 1 |  |
| 20 | FITTING, 3/8" NPT X 3/8" TUBE  | P21527 | 1 |  |
| 21 | FITTING, 3/8" TUBE 'T'   | P21529 | 1 |  |
| 22 | VALVE, 1/8" NPT DIN C AIR  | 045225 | 1 |  |
| 23 | STANDALONE THREE-WAY DRIVE CONTROL ASSEMBLY ( <a href="#">See Section 3.18</a> ) |        |   |  |
|    | SENSOR, PHOTO RA 18MM PNP W/REFLECTOR  | 051831 | 1 |  |
|    | SENSOR, IND PROX M12 PNP NS EX   | 051439 | 1 |  |

### 3.16 Air/Electrical Controls

TWC

Rev. A4.00 - A4.01



## 3

## Replacement Parts

## Air/Electrical Controls

| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART #                | QTY. |  |
|-----|--|-----------------------|------|--|
|     | <b>CONTROL ASSEMBLY, STANDALONE THREE-WAY DRIVE</b>          | 053363                | 1    |  |
| 1   | Box, 3-Way Control Enclosure                                 | 051678                | 1    |  |
|     | Panel Assembly, TWC Control                                  | 053362                | 1    |  |
| 2   | Panel, TWC Control Insert                                    | 048602                | 1    |  |
| 3   | Rail, 355mm x 7.5mm x 14" Steel DIN                          | 024474-14             | 1    |  |
| 4   | Screw, #10-24 x 1/2" Phillips Pan Head Type 23               | F05015-17             | 21   |  |
| 5   | Clamp, Plastic DIN Rail                                      | E22707                | 5    |  |
| 6   | Power Supply, 24VDC 1.0A Switcher                            | 050365                | 1    |  |
| 7   | Relay, IEC Control 2 NO 24VDC                                | 051684                | 1    |  |
| 8   | Terminal Block, Green/Yellow Grounding                       | 051344                | 3    |  |
| 9   | Terminal Block, 3-Tier                                       | 024908                | 15   |  |
| 10  | Fuseholder, 3P Class CC Finger Safe                          | 052380                | 1    |  |
| 11  | Fuse, 10A 600V Class CC Delay                                | 051957                | 3    |  |
| 12  | Contactor, 9A 3P 24VDC Coil                                  | 024890                | 1    |  |
| 13  | Disconnect, 40A 3PH Non-Fused 6mm                            | 050903-1 <sup>1</sup> | 1    |  |
| 14  | PLC Assembly, Standalone TWC w/Software                      | 053361                | 1    |  |
| 15  | Screw, #8-32 x 3/4" Slotted Hex Washer Head Type F           | F05015-23             | 2    |  |
| 16  | Rail, 35mm x 7.5mm x 1m Steel DIN                            | 024474                | .05  |  |
| 17  | Transformer, 208/240/480 Primary 115Sec 150VA w/Fuse         | 051682                | 1    |  |
| 18  | Fuse, 1.5A Class CC Time Delay Rejection                     | 051686-1_5            | 2    |  |
| 19  | Fuse, 3A Midget Slo-Blow 250VAC                              | 051761                | 1    |  |
| 20  | Drive Assembly, TWC Roller AC w/Software                     | 051676                | 1    |  |
| 21  | Cable Duct, 2H x 1W x 14L Open Slot Gray                     | 024472-14             | 1    |  |
| 22  | Cable Duct, 2H x 1W x 12L Open Slot Gray                     | 024472-12             | 2    |  |
| 23  | Cable Duct, 2H x 1W x 15L Open Slot Gray                     | 024472-15             | 2    |  |
| 24  | Shaft, Disconnect 180mm x 6mm                                | 051673-1 <sup>1</sup> | 1    |  |
| 25  | Switch, Disconnect Red/Yellow 6mm                            | 050883-1 <sup>1</sup> | 1    |  |
| 26  | Decal, TWC Control Box                                       | 052214                | 1    |  |
| 27  | Switch Operator, Red Maintained 22mm ZB4 Push Button E-Stop  | 024945                | 1    |  |
| 28  | Legend, Round Yellow E-Stop                                  | 050992                | 1    |  |
| 29  | Switch Body, 1NC 22mm ZB4                                    | 025161                | 1    |  |
| 30  | Contact, NC ZBE102   | 050540                | 1    |  |
| 31  | Switch Operator, 3 Position Momentary ZB4 Selector           | 051744                | 1    |  |
| 32  | Switch Body, 1NO 22mm ZB4                                    | 025242                | 1    |  |
| 33  | Contact, NO ZB4 BE101  | 050539                | 1    |  |
| 34  | Switch, Green 22mm 1NO/1NC LED 24V XB4 Push Button           | 024974-3              | 2    |  |
| 35  | Light, Red 24V 22mm LED XB4 Pilot                            | 024970-4              | 1    |  |
| 36  | Switch Head, Red Extended                                    | 050151                | 2    |  |
| 37  | Switch Body, 1NC 22mm ZB4                                    | 025161                | 1    |  |
| 38  | Switch Body, 1NO 22mm ZB4                                    | 025242                | 1    |  |
| 39  | PCB Assembly, TWC Modbus Adaptor                             | 052937                | 1    |  |

|    |   |            |   |  |
|----|---|------------|---|--|
|    | Switch Assembly, Remote E-Stop                    | 053366     | 1 |  |
| 40 | Switch Box, 40mm 10A NC E-Stop                    | 052999     | 1 |  |
| 41 | Contact, 10A NC ZENL Series                       | 053360     | 1 |  |
| 42 | Connector, 1/2" NPT .17-.47 Cable                 | 051299     | 2 |  |
| 43 | Ring, 1/2" Sealing                                | E20460     | 2 |  |
| 44 | Nut, 1/2" NPT Connector Lock                      | E20461     | 2 |  |
| 45 | Plug, AS100 Oiltite                               | E22762     | 1 |  |
| 46 | Plug, AS050 Oiltite                               | 024685     | 3 |  |
| 47 | Decal, Connector ID (J1)                          | 024368     | 1 |  |
| 48 | Decal, Connector ID (J2)                          | 024369     | 1 |  |
| 49 | Cable, 2.5' HD15 Male/Female                      | 052992     | 1 |  |
| 50 | Cable Assembly, TWC Board Prox                    | 052219     | 1 |  |
| 51 | Cable Assembly, TWC Table Prox                    | 052220     | 1 |  |
| 52 | Cable Assembly, TWC Table Solenoid                | 052217     | 1 |  |
| 53 | Cable Assembly, TWC Latch Solenoid                | 052218     | 1 |  |
| 54 | Decal, Electrical Hazard Danger                   | S20061     | 1 |  |
| 55 | <b>BOLT, 3/8-16 X 1 1/2" HEX HEAD FULL THREAD</b> | F05007-17  | 4 |  |
| 56 | <b>WASHER, 3/8" SAE FLAT</b>                      | F05011-3   | 4 |  |
| 57 | <b>NUT, 3/8-16 NYLON LOCK</b>                     | F05010-10  | 4 |  |
| 58 | <b>MUFFLER, 1/8" NPT AIR</b>                      | P20902     | 1 |  |
| 59 | <b>SCREW, #6-32 X 1" SOCKET HEAD</b>              | F05004-70  | 2 |  |
| 60 | <b>NUT, #6-32 SELF-LOCKING HEX</b>                | F05010-59  | 2 |  |
| 61 | <b>VALVE, 3/8" NPT AIR</b>                        | 042659     | 1 |  |
| 62 | <b>MUFFLER, 3/8" NPT AIR</b>                      | P21528     | 1 |  |
| 63 | <b>SCREW, 1/4-20 X 1 3/4" SOCKET HEAD</b>         | F05005-156 | 2 |  |
| 64 | <b>NUT, 1/4-20 SELF-LOCKING HEX</b>               | F05010-9   | 2 |  |
| 65 | <b>GROMMET, 5/8" ID RUBBER</b>                    | P11764     | 1 |  |
| 66 | <b>FITTING, 1/8" NPT X 1/4" TUBE SWIVEL ELBOW</b> | P09736     | 2 |  |
| 67 | <b>FITTING, 3/8" NPT X 3/8" TUBE ELBOW</b>        | P21526     | 2 |  |
| 68 | <b>FILTER, AIR F18-03-SK00</b>                    | 036750     | 1 |  |
| 69 | <b>BRACKET, AIR FILTER/REGULATOR MOUNT</b>        | 036752     | 1 |  |
| 70 | <b>REGULATOR, AIR R18-03-F0G0</b>                 | 036751     | 1 |  |
| 71 | <b>FITTING, 3/8" NPT MALE RUN T</b>               | 016822     | 1 |  |
| 72 | <b>FITTING, 3/8" NPT X 1/4" NPT REDUCER</b>       | 015490     | 1 |  |
| 73 | <b>FITTING, 1/4" NPT X 1/4" TUBE</b>              | P20903     | 1 |  |
| 74 | <b>FITTING, 3/8" NPT X 3/8" TUBE</b>              | P21527     | 1 |  |
| 75 | <b>FITTING, 3/8" TUBE 'T'</b>                     | P21529     | 1 |  |
| 76 | <b>SENSOR, PHOTO RA 18MM PNP W/REFLECTOR</b>      | 051831     | 1 |  |
| 77 | <b>SENSOR, IND PROX M12 PNP NS EX</b>             | 051439     | 1 |  |
| 78 | <b>VALVE, 1/8" NPT DIN C AIR</b>                  | 045225     | 1 |  |

<sup>1</sup> 5mm Disconnect Shaft OXS5X180 replaced by vendor with 6mm shaft OXS6X180 (2/10). Replacement of any disconnect component requires replacement of disconnect, shaft and operator handle (050903-1, 050883-1 & 051673-1).

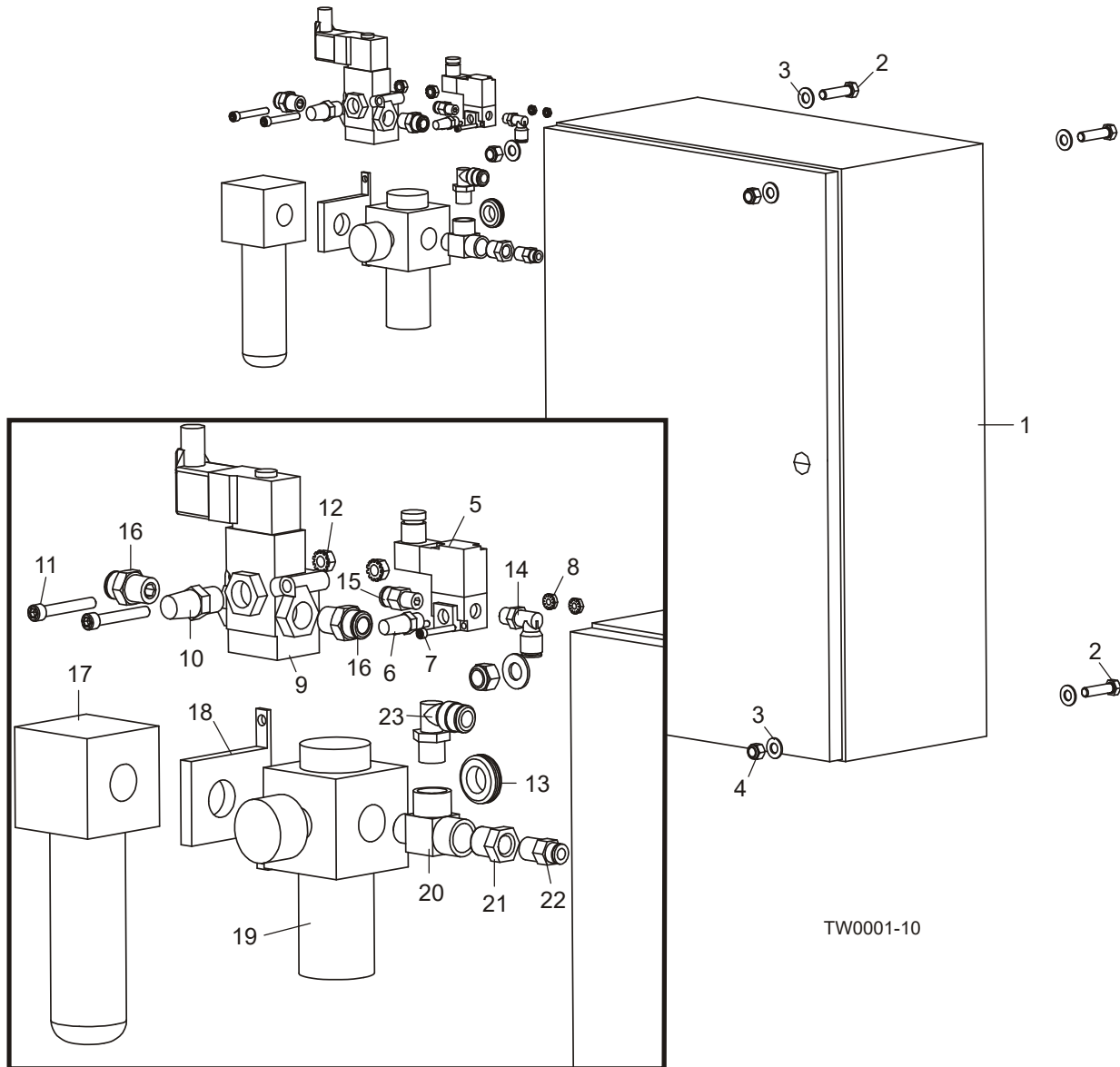
# 3 Replacement Parts

## Air/Electrical Controls

### 3.17 Air/Electrical Controls

TWC

Rev. A1.00 - A3.00



| REF      | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)   | PART #    | QTY. |
|----------|--|-----------|------|
|          | <b>CONTROL ASSEMBLY, PRIMARY THREE-WAY DRIVE</b>   | 051670    | 1    |
|          | <b>CONTROL ASSEMBLY, SECONDARY THREE-WAY DRIVE</b>   | 051821    | 1    |
| <b>1</b> | Box, 24" x 16" x 6" Wall Mount Enclosure   | 051502    | 1    |
|          | <a href="#">See Section 4.19</a> for Electrical Components   |           |      |
|          | <a href="#">See Section 3.22</a> (Rev. A3.00) or <a href="#">See Section 3.23</a> (Rev. A1.00 - A2.00) for Electrical Cable Assemblies |           |      |
| <b>2</b> | <b>BOLT, 3/8-16 X 1 1/2" HEX HEAD FULL THREAD</b>  | F05007-17 | 4    |

|    |  |            |   |  |
|----|--|------------|---|--|
| 3  | WASHER, 3/8" SAE FLAT                      | F05011-3   | 8 |  |
| 4  | NUT, 3/8-16 NYLON LOCK                     | F05010-10  | 4 |  |
| 5  | VALVE, 1/8" NPT DIN C AIR                  | 045225     | 1 |  |
| 6  | MUFFLER, 1/8" NPT AIR                      | P20902     | 1 |  |
| 7  | SCREW, #6-32 X 1" SOCKET HEAD              | F05004-70  | 2 |  |
| 8  | NUT, #6-32 SELF-LOCKING HEX                | F05010-59  | 2 |  |
| 9  | VALVE, 3/8" NPT AIR                        | 042659     | 1 |  |
| 10 | MUFFLER, 3/8" NPT AIR                      | P21528     | 1 |  |
| 11 | SCREW, 1/4-20 X 1 3/4" SOCKET HEAD         | F05005-156 | 2 |  |
| 12 | NUT, 1/4-20 SELF-LOCKING HEX               | F05010-9   | 2 |  |
| 13 | GROMMET, 5/8" ID RUBBER                    | P11764     | 1 |  |
| 14 | FITTING, 1/8" NPT X 1/4" TUBE SWIVEL ELBOW | P09736     | 1 |  |
| 15 | FITTING, 1/8" NPT X 1/4" TUBE              | P03078     | 1 |  |
| 16 | FITTING, 3/8" NPT X 3/8" TUBE              | P21527     | 2 |  |
| 17 | FILTER, AIR F18-03-SK00                    | 036750     | 1 |  |
| 18 | BRACKET, AIR FILTER/REGULATOR MOUNT        | 036752     | 1 |  |
| 19 | REGULATOR, AIR R18-03-F0G0                 | 036751     | 1 |  |
| 20 | FITTING, 3/8" NPT MALE RUN T               | 016822     | 1 |  |
| 21 | FITTING, 3/8" NPT X 1/4" NPT REDUCER       | 015490     | 1 |  |
| 22 | FITTING, 1/4" NPT X 1/4" TUBE              | P20903     | 1 |  |
| 23 | FITTING, 3/8" NPT X 3/8" TUBE ELBOW        | P21526     | 1 |  |





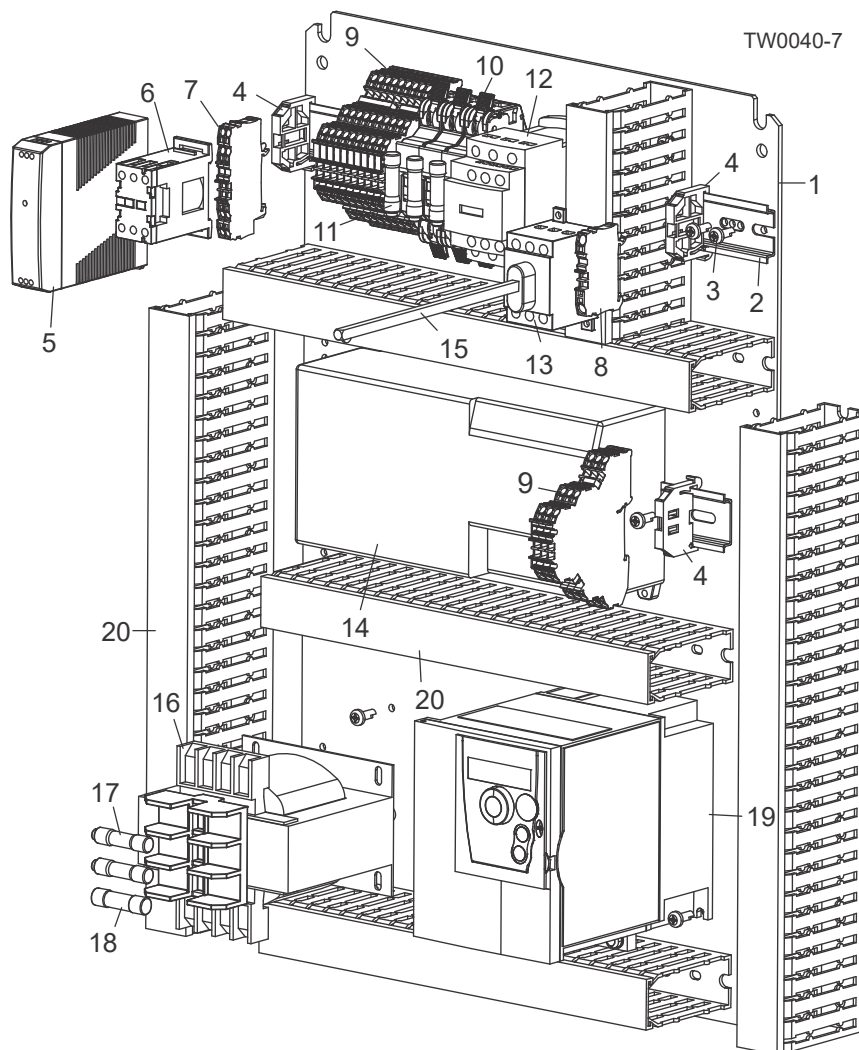
|    |  |                       |   |  |
|----|--|-----------------------|---|--|
| 11 | Contact Block, NO ZB5                  | 068920                | 1 |  |
| 12 | Switch Head, PB Green Flush Illum ZB5  | 052503                | 2 |  |
| 13 | Light Module, Green ZB5                | 068910      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

<sup>1</sup> Replaced 078357 Cable Assembly compatible only with 051676 AC Drive (Altivar 312) made obsolete by manufacturer (Rev. A6.00). Use 051676-FR Retrofit Kit to convert to 051676-1 AC Drive (Altivar 320).

### 3.19 Main Control Insert Assembly

TWC

Rev. A5.00+



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

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

<sup>1</sup> Replaced 051676 AC Drive (Altivar 312) made obsolete by manufacturer (Rev. A6.00). Use 051676-FR Retrofit Kit to convert to 051676-1 AC Drive (Altivar 320).

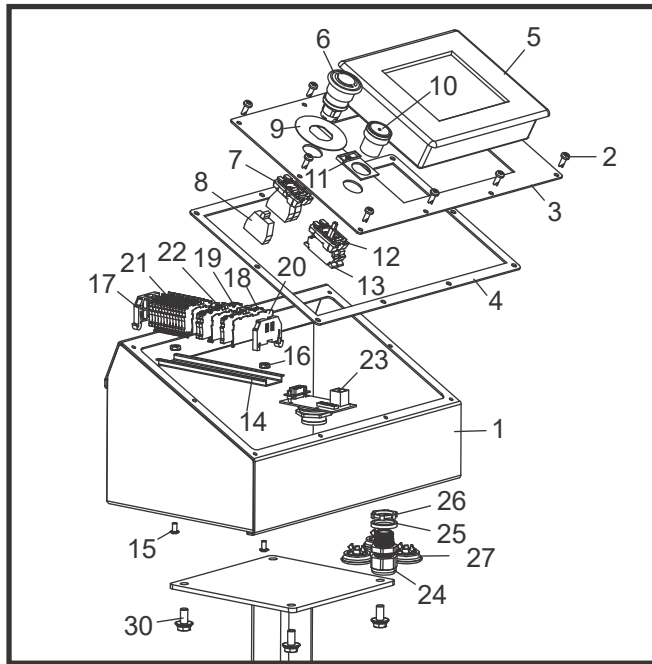
# 3 Replacement Parts

## Operator Control

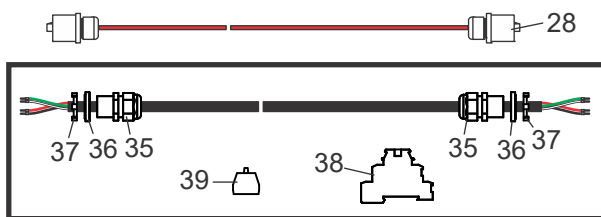
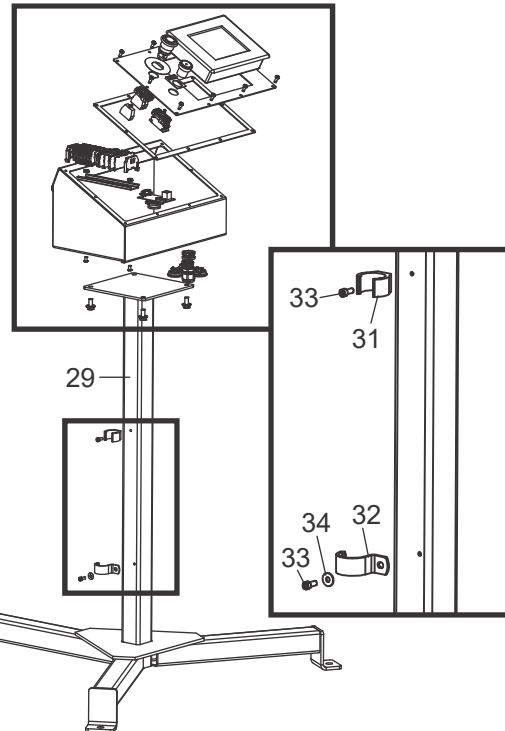
### 3.20 Operator Control

TWC

Rev. A5.00+



TW0040-2



| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART #                | QTY. |
|-----|--|-----------------------|------|
|     | <b>CONTROL KIT, THREE-WAY DECK OPERATOR</b>                  | TWC-OP                | 1    |
|     | Control Assembly, Three-Way Deck Operator                    | 078347                | 1    |
| 1   | Box Weldment, TWC Operator Control                           | 061509                | 1    |
| 2   | Screw, #10-24 x 1/2" Phillips Pan Head Type 23               | F05015-17             | 10   |
|     | Control Assembly, TWC Standalone HMI                         | 078358                | 1    |
| 3   | Plate, TWC Operator Control Panel                            | 061512                | 1    |
| 4   | Gasket, TWC Control Panel                                    | 006891                | 1    |
| 5   | Display Assembly, TWC Operator Control                       | 053364-1 <sup>1</sup> | 1    |
| 6   | Push-Button, Mshrm Mntnd Red TrnRI ZB5                       | 068940                | 1    |
| 7   | Switch Collar, Mount ZB5                                     | 068951                | 1    |
| 8   | Contact, NC ZBE102   | 050540                | 4    |
| 9   | Legend, Round Yellow E-Stop                                  | 050992                | 1    |
| 10  | Switch Head, PB Green Flush Illum ZB5                        | 052503                | 1    |

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

<sup>1</sup> Replaced 053364 Display Assembly including 053367 Touch Panel that is no longer available (12/18).

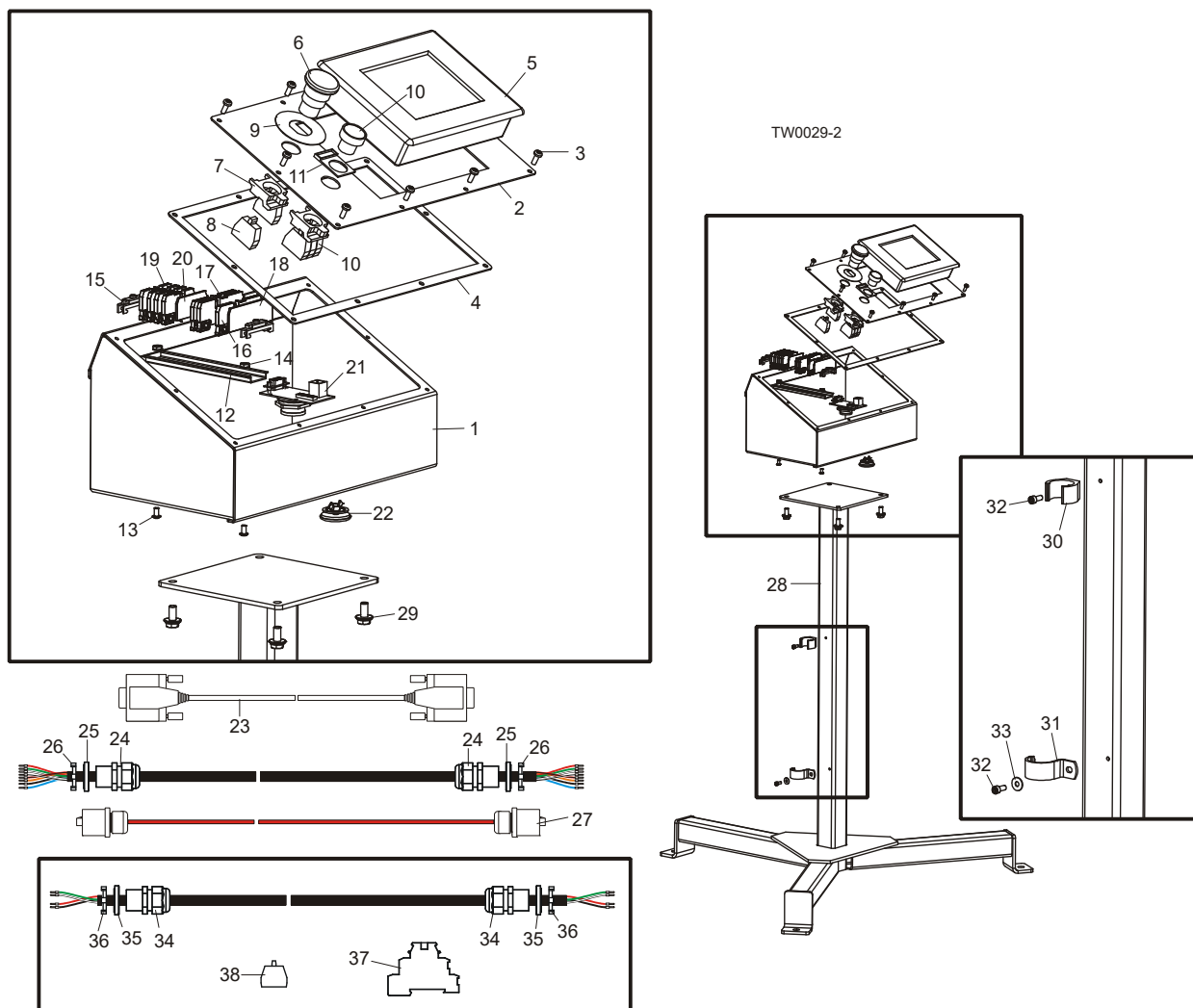
# 3 Replacement Parts

## Operator Control

### 3.21 Operator Control

TWC

Rev. A4.00 - A4.01



| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART #    | QTY. |
|-----|--|-----------|------|
|     | <b>CONTROL KIT, THREE-WAY DECK OPERATOR</b>                  | TWC-OP    | 1    |
|     | Control Assembly, Three-Way Deck Operator                    | 053365    | 1    |
| 1   | Box Weldment, TWC Operator Control                           | 061509    | 1    |
| 2   | Plate, TWC Operator Control Panel                            | 061512    | 1    |
| 3   | Screw, #10-24 x 1/2" Phillips Pan Head Type 23               | F05015-17 | 10   |
| 4   | Gasket, TWC Control Panel                                    | 006891    | 1    |
| 5   | Display Assembly, TWC Operator Control                       | 053364    | 1    |
| 6   | Switch Operator, Red 22mm ZB4 Maintained Push Button E-Stop  | 024945    | 1    |
| 7   | Switch Body, 1NC 22mm ZB4                                    | 025161    | 1    |
| 8   | Contact, NC ZBE102   | 050540    | 1    |

|    |  |            |   |  |
|----|--|------------|---|--|
| 9  | Legend, Round Yellow E-Stop                              | 050992     | 1 |  |
| 10 | Switch, Green 22mm XB4 Push Button Green 1NO/1NC LED 24V | 024974-3   | 1 |  |
| 11 | Legend, ON   | 050531     | 1 |  |
| 12 | Rail, 35mm x 7.5mm x 6" Steel DIN                        | 024474-6   | 1 |  |
| 13 | Screw, #10-24 x 3/8" Button Socket Head Stainless        | F05004-218 | 2 |  |
| 14 | Nut, #10-24 Hex Self-Locking                             | F05010-14  | 2 |  |
| 15 | Clamp, Plastic DIN Rail                                  | E22707     | 2 |  |
| 16 | Terminal Block, 4 Position Ground                        | 052135     | 1 |  |
| 17 | Terminal Block, 4 Position Common                        | 052244     | 2 |  |
| 18 | End Cap, 4X Terminal Block                               | 052243     | 1 |  |
| 19 | Terminal Block, 2 Position                               | 052254     | 4 |  |
| 20 | End Cap, 2X Terminal Block                               | 052253     | 1 |  |
| 21 | PCB Assembly, TWC Modbus Adaptor                         | 052937     | 1 |  |
| 22 | Plug, AS050 Oiltite                                      | 024685     | 1 |  |
| 23 | Cable, 2.5' HD15 Male/Female                             | 052992     | 1 |  |
|    | Harness Assembly, TWC Operator Control                   | 053383     | 1 |  |
| 24 | Connector, 1/2" NPT .17-.47 Cable                        | 051299     | 2 |  |
| 25 | Ring, 1/2" Sealing                                       | E20460     | 2 |  |
| 26 | Nut, 1/2" NPT Connector Locking                          | E20461     | 2 |  |
| 27 | Cable Assembly, 100' RJ45 Ethernet                       | 052988     | 1 |  |
|    | Stand Assembly, Three-Way Deck Operator Control          | 006903     | 1 |  |
| 28 | Stand Weldment, TWC Operator Control                     | 061519     | 1 |  |
| 29 | Bolt, 5/16-18 x 3/4" Hex Head w/Flat & Lock Washer       | F05006-101 | 4 |  |
| 30 | Bracket, 3/4" Flex Mounting                              | 038752     | 1 |  |
| 31 | Clamp, 1" EMT  | P05436     | 1 |  |
| 32 | Screw, #10-24 x 1/2" Socket Head                         | F05004-26  | 2 |  |
| 33 | Washer, #10 SAE Flat                                     | F05011-18  | 1 |  |
|    | Parts Kit, Three-Way Auxiliary E-Stop                    | 053395     | 1 |  |
| 34 | Connector, 1/2" NPT .17-.47 Cable                        | 051299     | 2 |  |
| 35 | Ring, 1/2" Sealing                                       | E20460     | 2 |  |
| 36 | Nut, 1/2" NPT Connector Locking                          | E20461     | 2 |  |
| 37 | Terminal Block, 3-Tier                                   | 024908     | 1 |  |
| 38 | Contact, NC ZBE102                                       | 050540     | 1 |  |



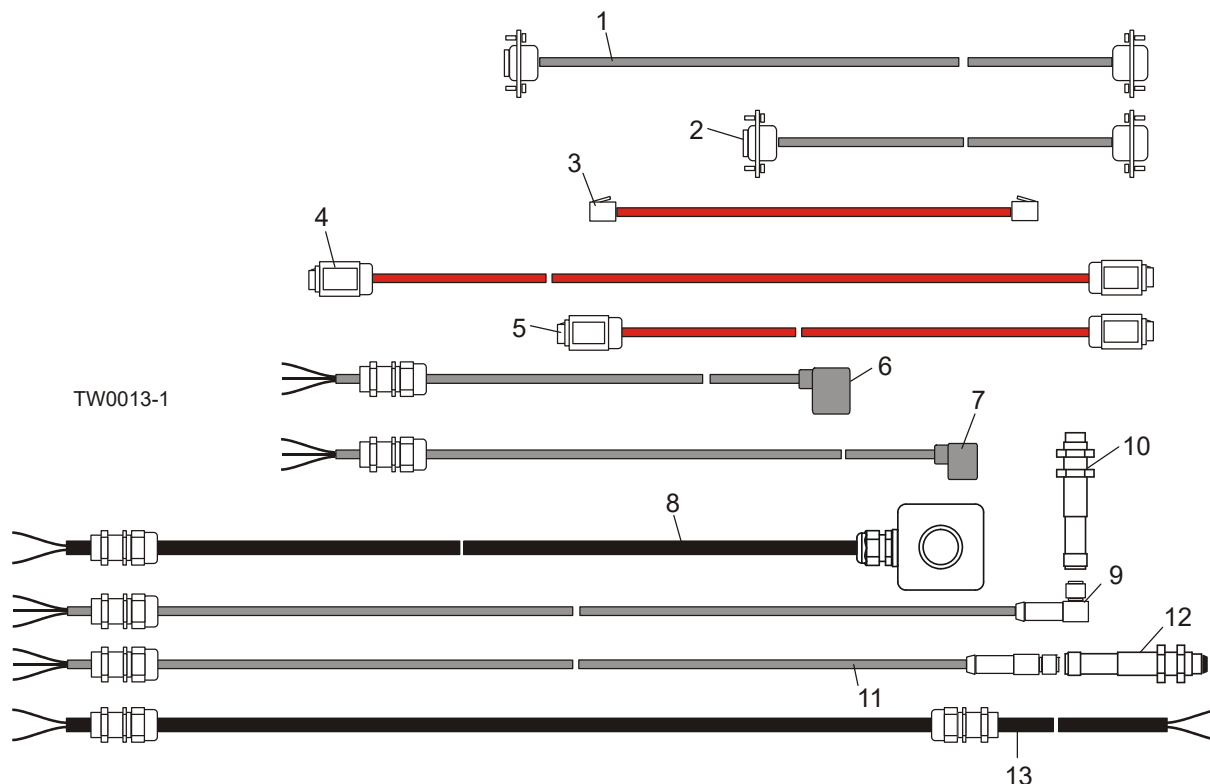
# 3 Replacement Parts

## Electrical Cables

### 3.22 Electrical Cables

TWC

Rev. A3.00



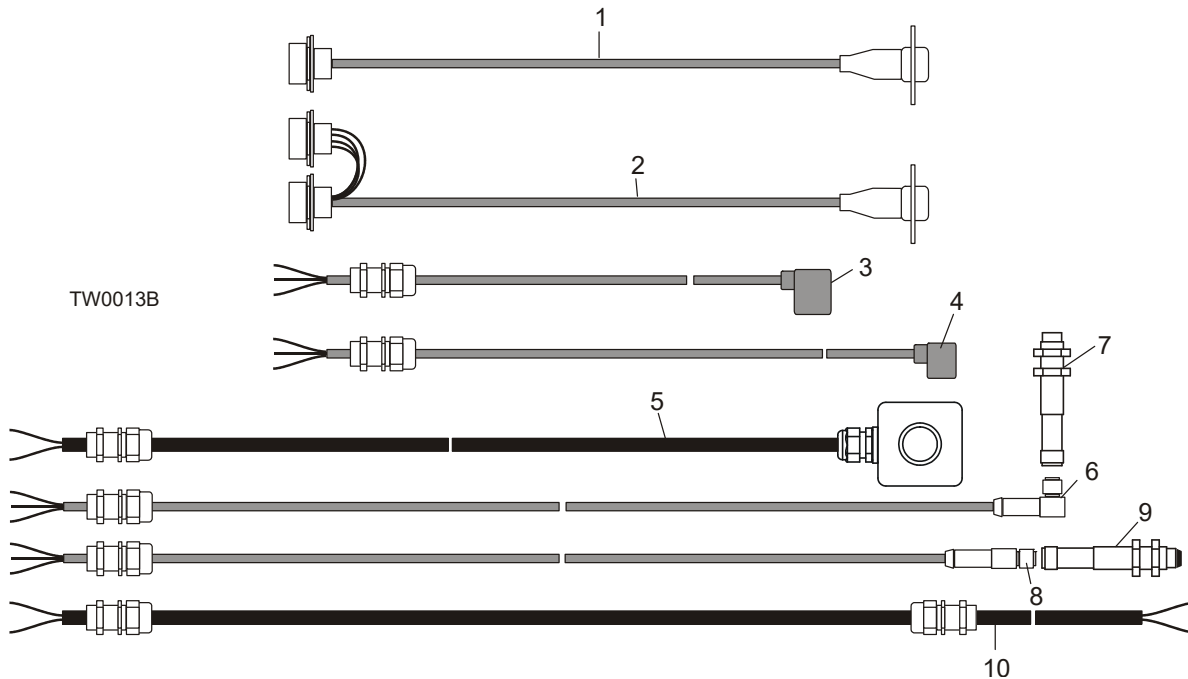
| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART # | QTY.             |
|-----|--|--------|------------------|
| 1   | CABLE, HD15 MALE/FEMALE 7.5'                                 | 052991 | 1                |
| 2   | CABLE, HD15 MALE/FEMALE 2.5'                                 | 052992 | 1/2 <sup>1</sup> |
| 3   | CABLE, RJ45 ETHERNET 1'                                      | 052994 | 1/2 <sup>1</sup> |
| 4   | CABLE ASSEMBLY, RJ45 INDUSTRIAL ETHERNET 75'                 | 052995 | 1                |
| 5   | CABLE ASSEMBLY, RJ45 INDUSTRIAL ETHERNET 30' (5-WAY ONLY)    | 052996 | 1                |
| 6   | CABLE ASSEMBLY, TABLE SOLENOID 5M                            | 052217 | 1                |
| 7   | CABLE ASSEMBLY, LATCH SOLENOID 10M                           | 052218 | 1                |
| 8   | CABLE ASSEMBLY, REMOTE E-STOP 25'                            | 052216 | 1                |
| 9   | CABLE ASSEMBLY, TABLE PROX SENSOR 2M                         | 052220 | 1                |
| 10  | SENSOR, IND PROX M12 PNP NS EX                               | 051439 | 1                |
| 11  | CABLE ASSEMBLY, BOARD PHOTO SENSOR 7M                        | 052219 | 1                |
| 12  | SENSOR, PHOTO RA 18MM PNP W/REFLECTOR                        | 051831 | 1                |
| 13  | CABLE ASSEMBLY, LT300 E-STOP 100'                            | 052221 | 1                |

<sup>1</sup> One required for 3-Way configurations; Two required for 5-Way configurations.

### 3.23 Electrical Cables

TWC

Rev. A1.00 - A2.00



| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only) | PART #              | QTY. |   |
|-----|--|---------------------|------|---|
| 1   | CABLE ASSEMBLY, TWC-1 CONTROL INTERFACE 4'                   | 051768 <sup>1</sup> | 1    | ◆ |
| 2   | CABLE ASSEMBLY, TWC-2 CONTROL INTERFACE 4'                   | 051767 <sup>1</sup> | 1    | ◆ |
| 3   | CABLE ASSEMBLY, TABLE SOLENOID 5M                            | 052217              | 1    |   |
| 4   | CABLE ASSEMBLY, LATCH SOLENOID 10M                           | 052218              | 1    |   |
| 5   | CABLE ASSEMBLY, REMOTE E-STOP 25'                            | 052216              | 1    |   |
| 6   | CABLE ASSEMBLY, TABLE PROX SENSOR 2M                         | 052220              | 1    |   |
| 7   | SENSOR, IND PROX M12 PNP NS EX                               | 051439              | 1    |   |
| 8   | CABLE ASSEMBLY, BOARD PHOTO SENSOR 7M                        | 052219              | 1    |   |
| 9   | SENSOR, PHOTO RA 18MM PNP W/REFLECTOR                        | 051831              | 1    |   |
| 10  | CABLE ASSEMBLY, LT300 E-STOP 100'                            | 052221              | 1    |   |

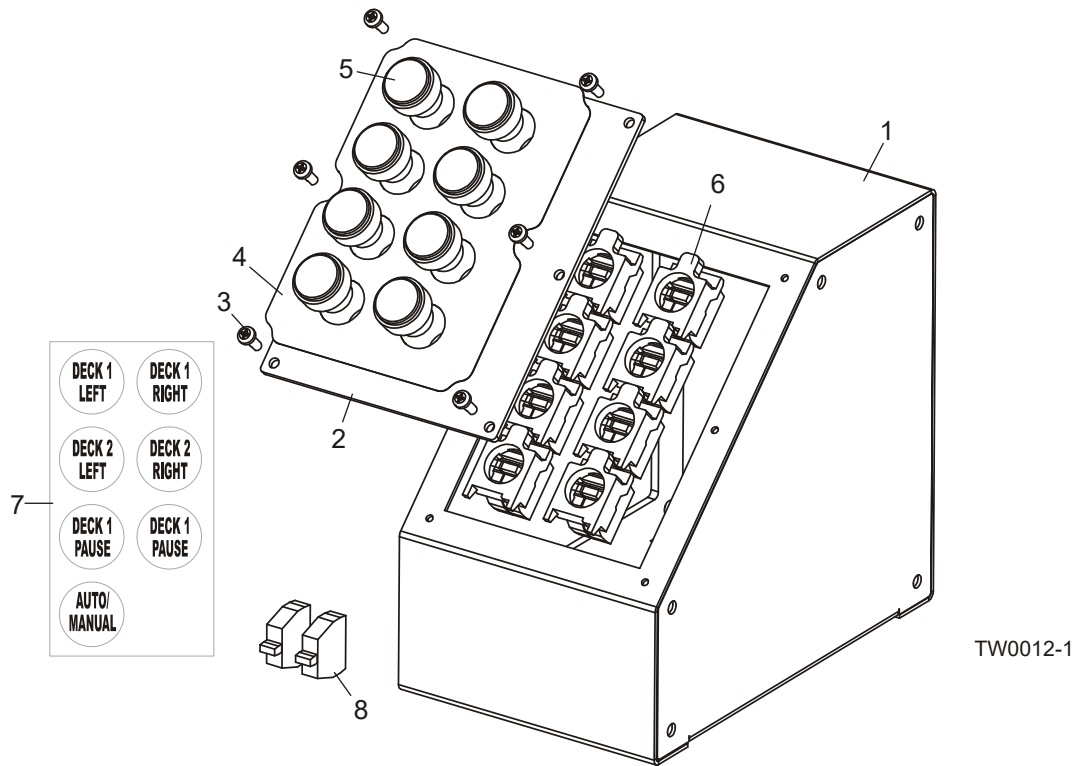
<sup>1</sup> Cables obsolete Rev. A3.00. Use Retrofit 052997 for 3-Way configurations or 052998 for 5-Way configurations to replace cabling and improve reliability.

# 3 Replacement Parts Installation Kit

## 3.24 Installation Kit

TWC

Rev. A3.00

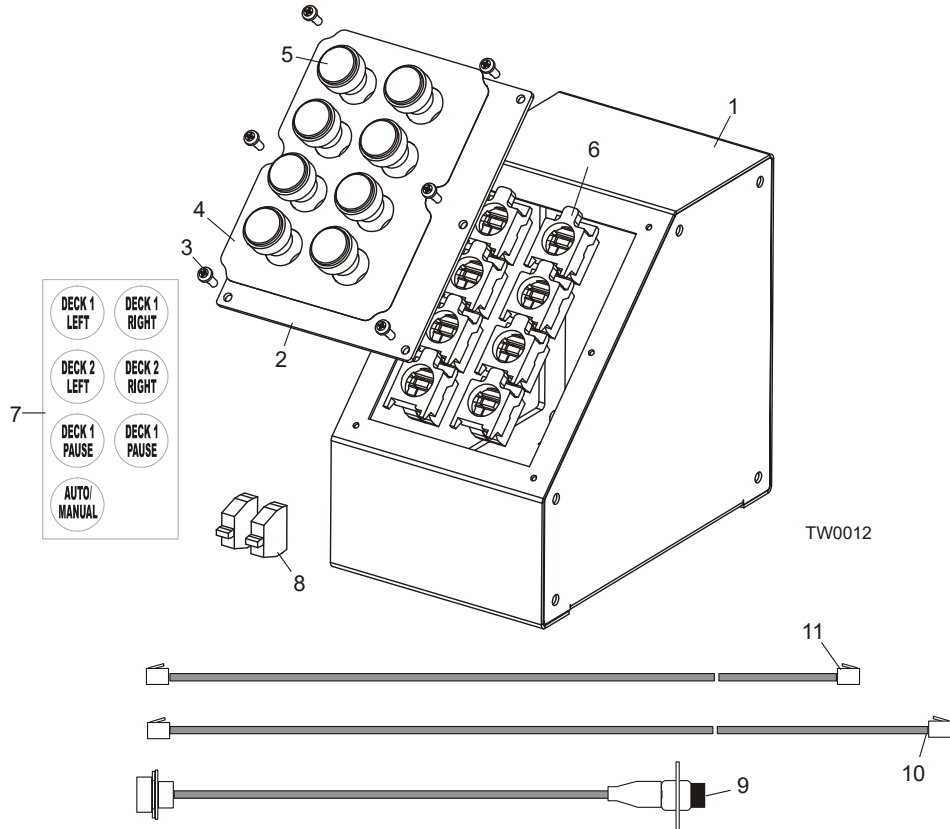


| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)           | PART #    | QTY. |
|-----|--|-----------|------|
|     | <b>INSTALLATION KIT, THREE-WAY CONTROL</b>                             | 051828    | 1    |
|     | Box Assembly, Auxiliary Control  | 051763    | 1    |
| 1   | Box Weldment, Auxiliary Control  | 035794    | 1    |
| 2   | Plate, Auxiliary Control Face  | 035797    | 1    |
| 3   | Screw, #10-24 x 1/2" Phillips Pan Head Type 23                         | F05015-17 | 6    |
| 4   | Decal, Auxiliary Control   | 052261    | 1    |
| 5   | Button, 22mm Mom Ext LED White SB4 Switch                              | 025237-13 | 8    |
| 6   | Switch, 22mm White LED 1NO 24V XB4 Body                                | 025236-11 | 8    |
| 7   | Decal, 3-Way Button Labels   | 052262    | 1    |
| 8   | Contact, NC ZBE102 Switch (For LT300 E-Stop - one per TWC-1 and TWC-2) | 050540    | 2    |

### 3.25 Installation Kit

TWC

Rev. A1.00 - A2.00



| REF | DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)           | PART #              | QTY. |   |
|-----|--|---------------------|------|---|
|     | <b>INSTALLATION KIT, THREE-WAY CONTROL</b>                             | 051828 <sup>1</sup> | 1    |   |
|     | Box Assembly, Auxiliary Control  | 051763              | 1    |   |
| 1   | Box Weldment, Auxiliary Control  | 035794              | 1    |   |
| 2   | Plate, Auxiliary Control Face  | 035797              | 1    |   |
| 3   | Screw, #10-24 x 1/2" Phillips Pan Head Type 23                         | F05015-17           | 6    |   |
| 4   | Decal, Auxiliary Control   | 052261              | 1    |   |
| 5   | Button, 22mm Mom Ext LED White SB4 Switch                              | 025237-13           | 8    |   |
| 6   | Switch, 22mm White LED 1NO 24V XB4 Body                                | 025236-11           | 8    |   |
| 7   | Decal, 3-Way Button Labels   | 052262              | 1    |   |
| 8   | Contact, NC ZBE102 Switch (For LT300 E-Stop - one per TWC-1 and TWC-2) | 050540              | 2    |   |
| 9   | Cable, 4' LT300 Interface (LT300 PLC to cabinet hole)                  | 051766 <sup>1</sup> | 1    | ◆ |
| 10  | Cable, 60' Ethernet (LT300 Interface Cable to First Deck Control)      | 051818 <sup>1</sup> | 1    | ◆ |
| 11  | Cable, 30' Ethernet (First Deck to Second Deck, if applicable)         | 051817 <sup>1</sup> | 1    | ◆ |

<sup>1</sup> Cables obsolete and removed from Installation Kit 051828 Rev. A3.00. Use Retrofit 052997 for 3-Way configurations or 052998 for 5-Way configurations to replace cabling and improve reliability.

# 4 Electrical Information

## Electrical Symbol Diagram (TWC)

### SECTION 4 ELECTRICAL INFORMATION

#### 4.1 Electrical Symbol Diagram (TWC)

TWC Rev. A6.00+

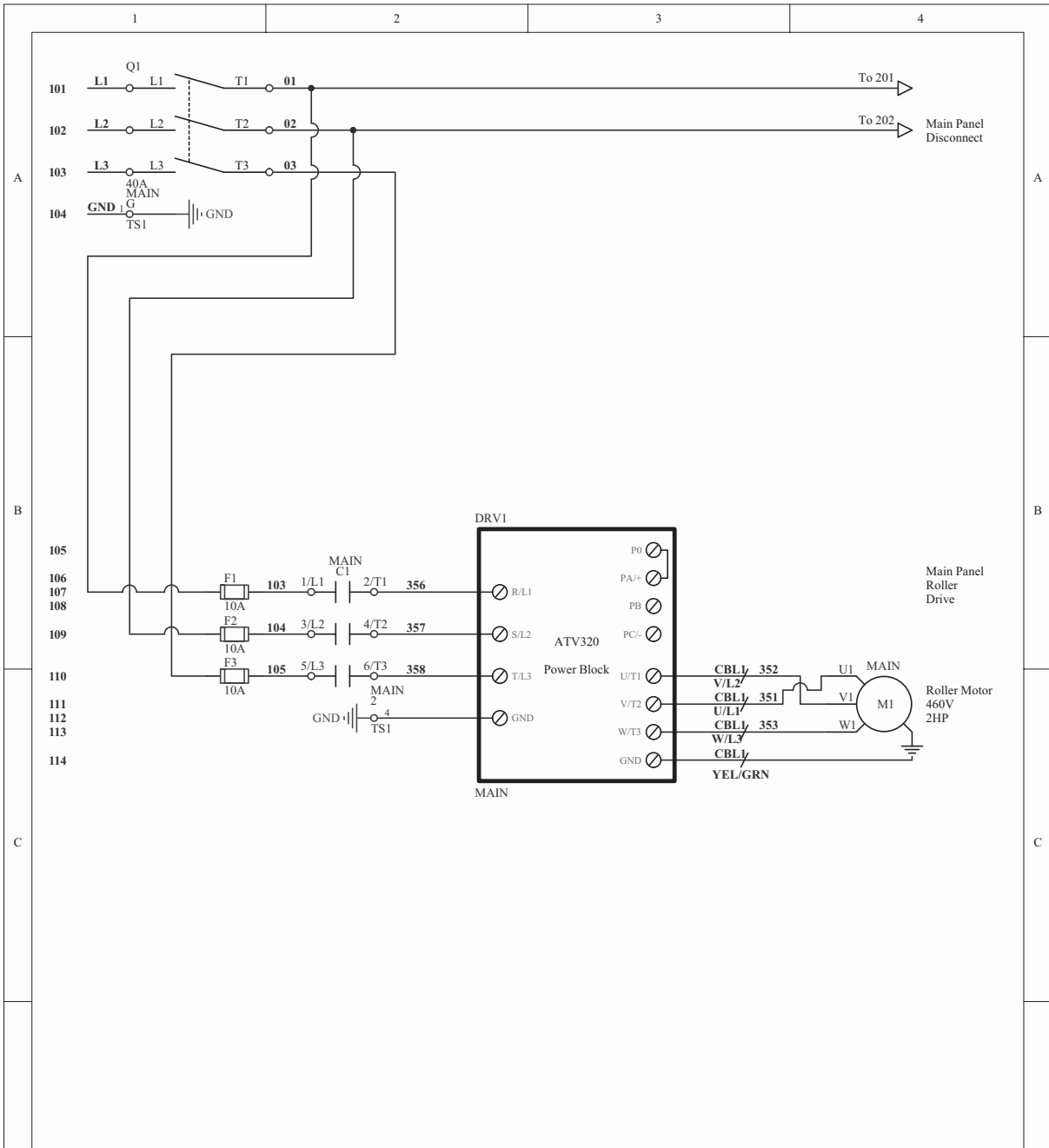
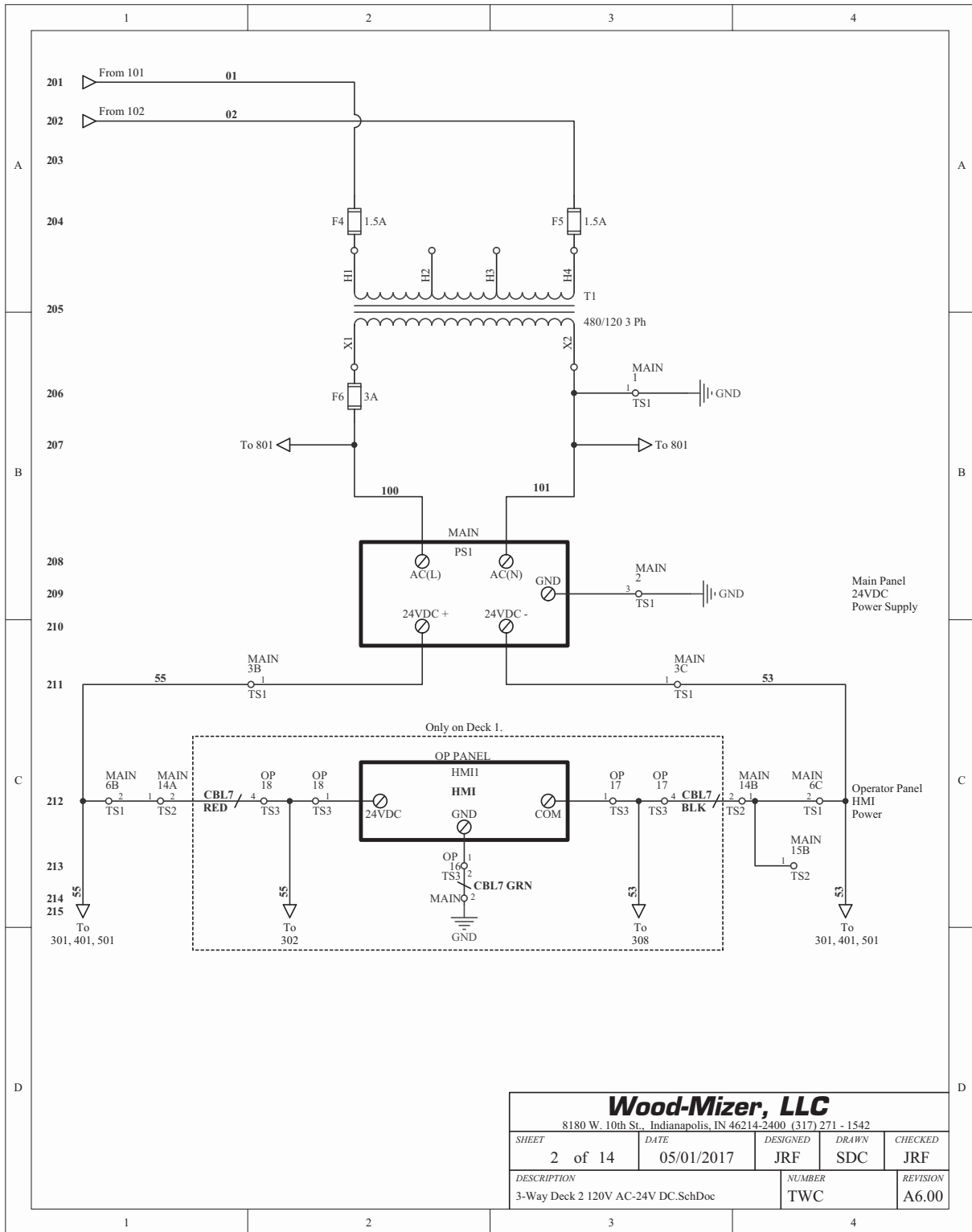


FIG. 4-1 (PAGE 1 OF 13)



| Wood-Mizer, LLC  |            |          |        |          |
|--|------------|----------|--------|----------|
| 8180 W. 10th St., Indianapolis, IN 46214-2400 (317) 271 - 1542 |            |          |        |          |
| SHEET  | DATE       | DESIGNED | DRAWN  | CHECKED  |
| 2 of 14  | 05/01/2017 | JRF      | SDC    | JRF      |
| DESCRIPTION  |            |          | NUMBER | REVISION |
| 3-Way Deck 2 120V AC-24V DC.SchDoc                             |            |          | TWC    | A6.00    |

FIG. 4-2 (PAGE 2 OF 13)

# 4

## Electrical Information Electrical Symbol Diagram (TWC)

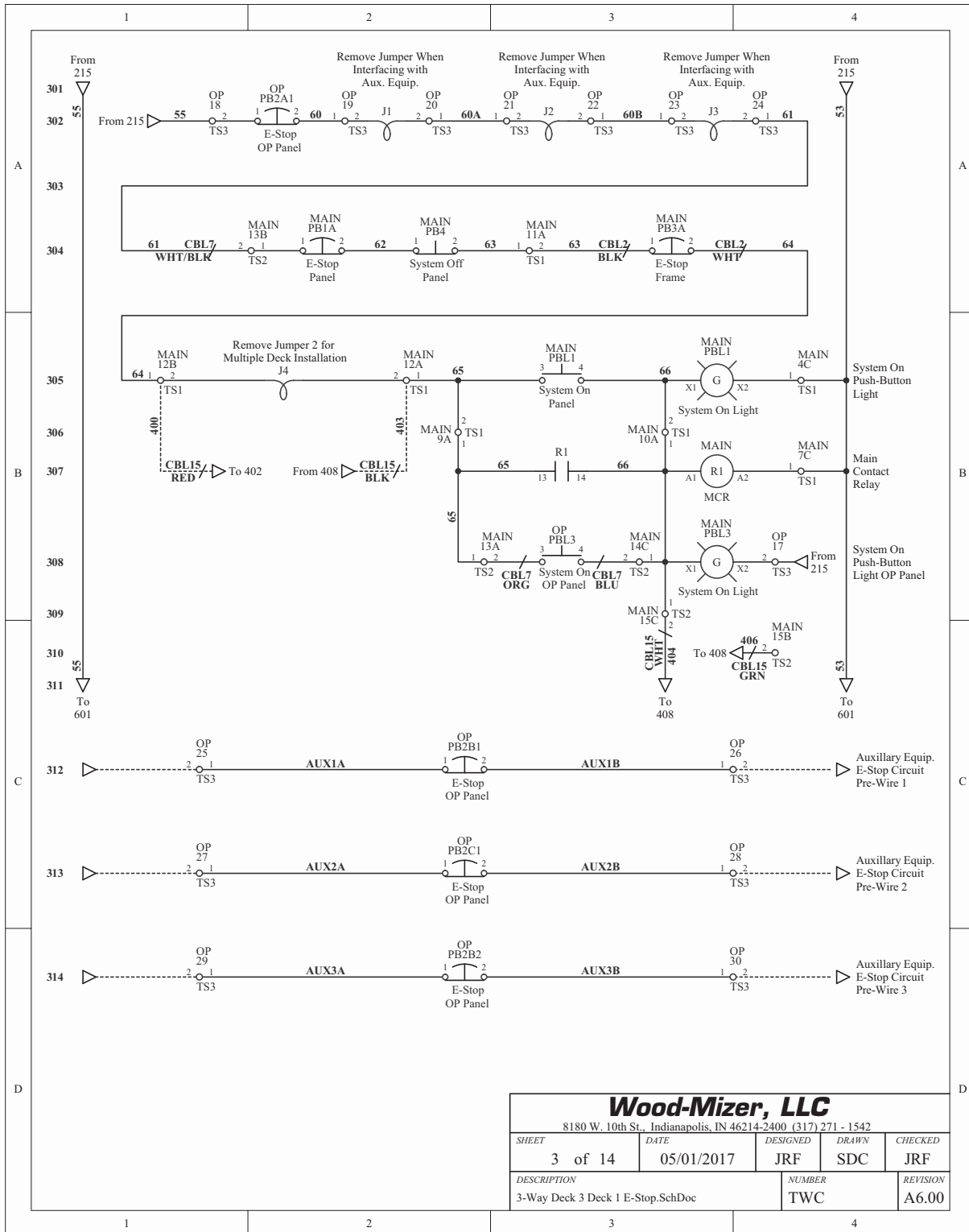
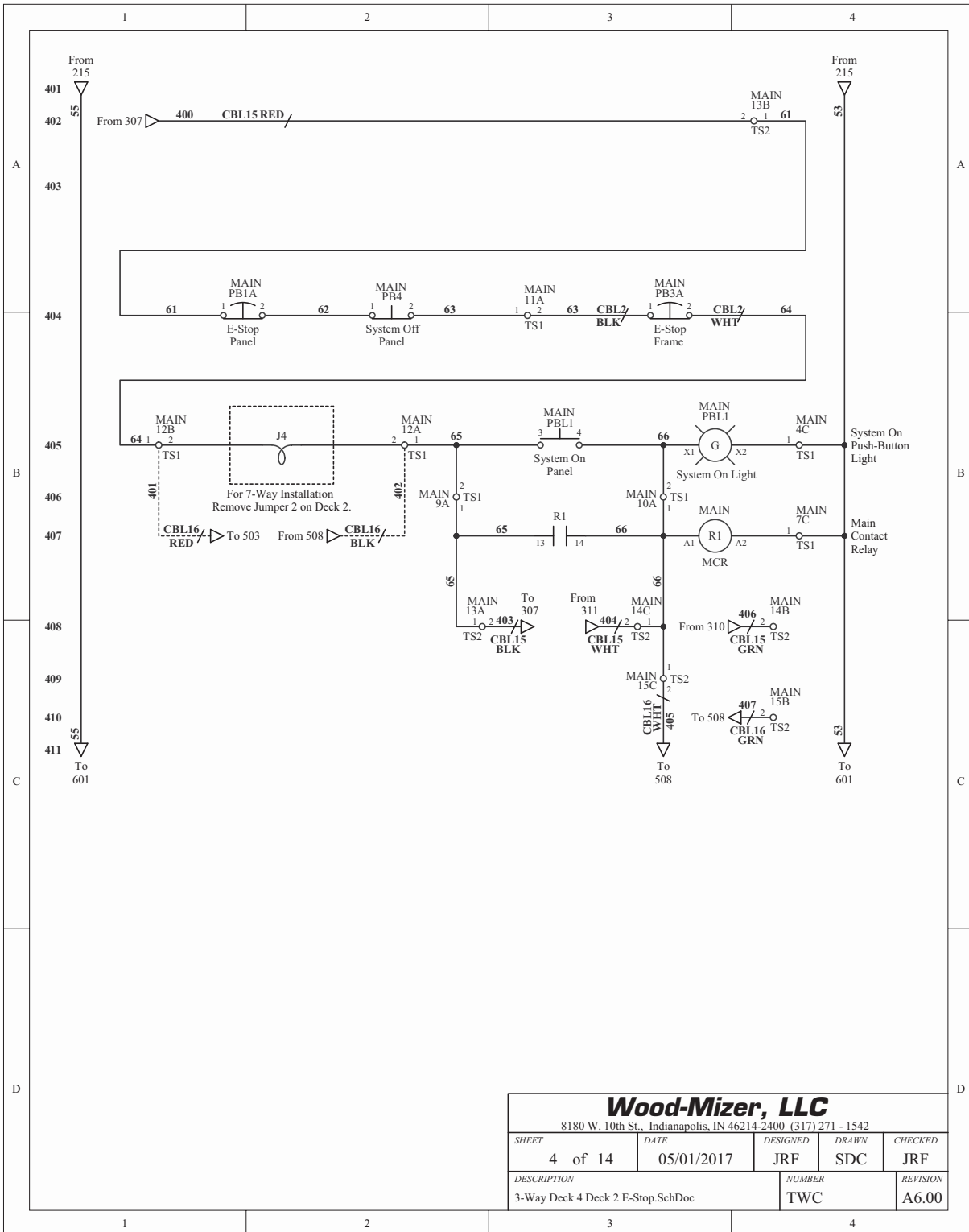
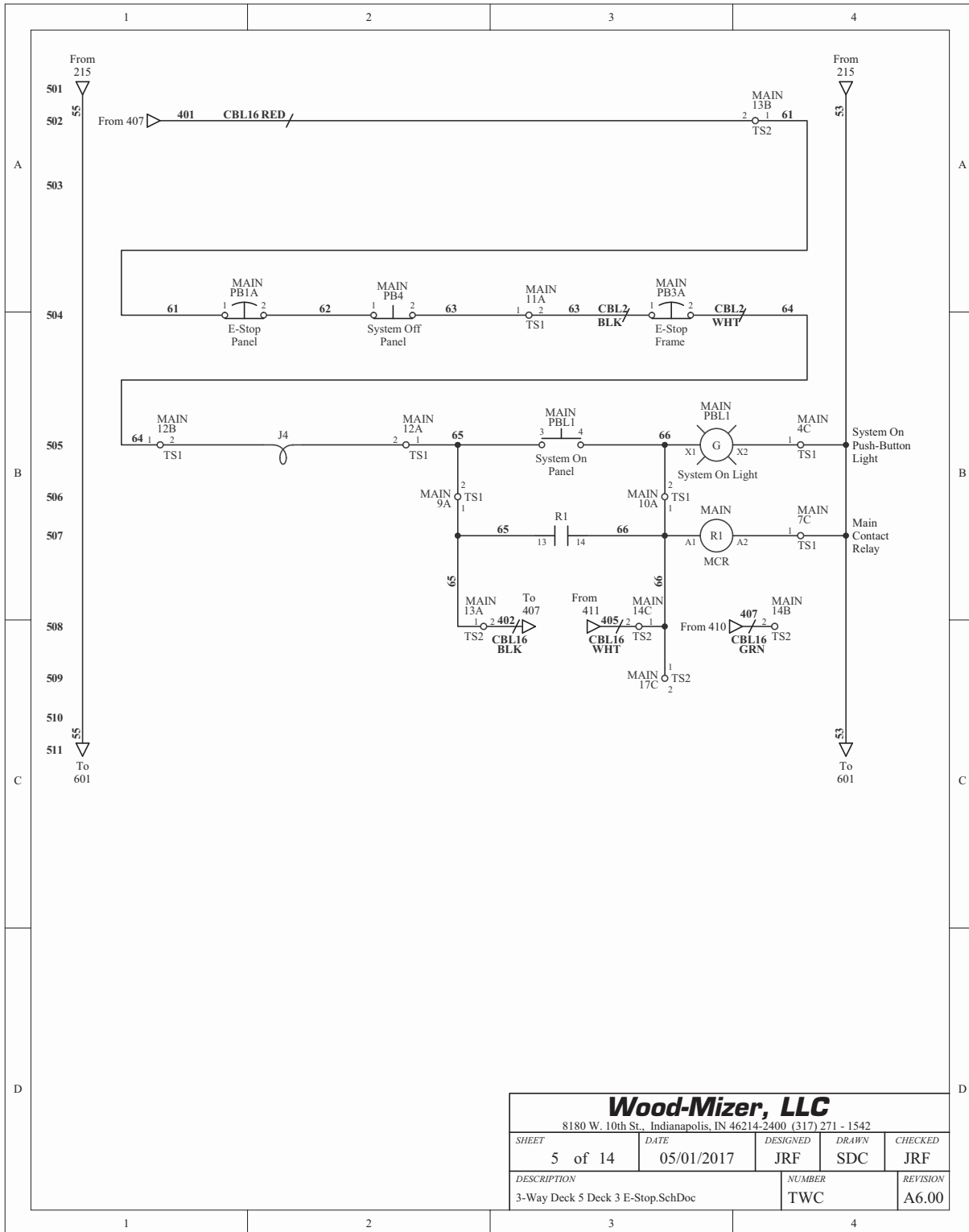


FIG. 4-3 (PAGE 3 OF 13)



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





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

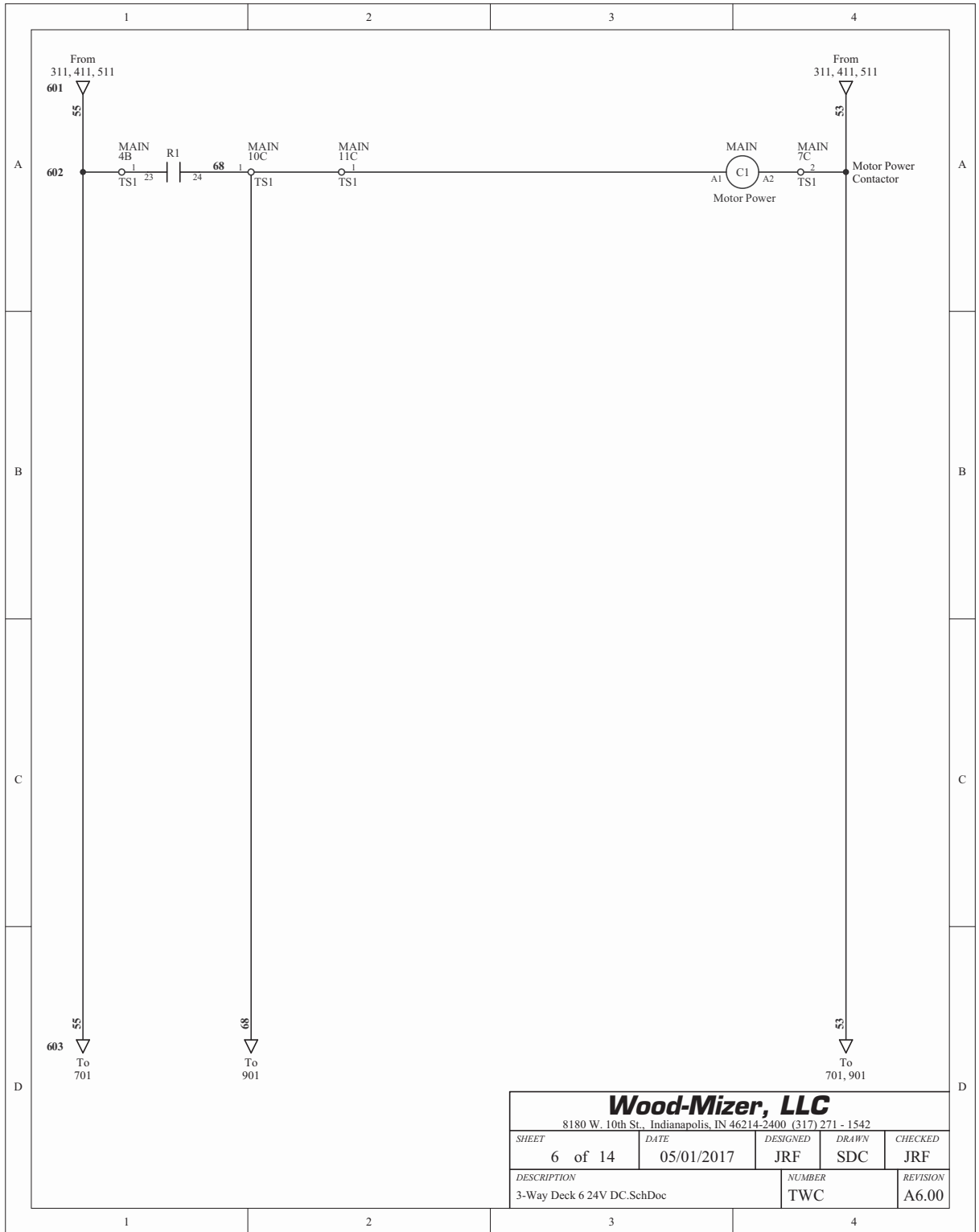


FIG. 4-6 (PAGE 6 OF 13)

# 4

## Electrical Information Electrical Symbol Diagram (TWC)

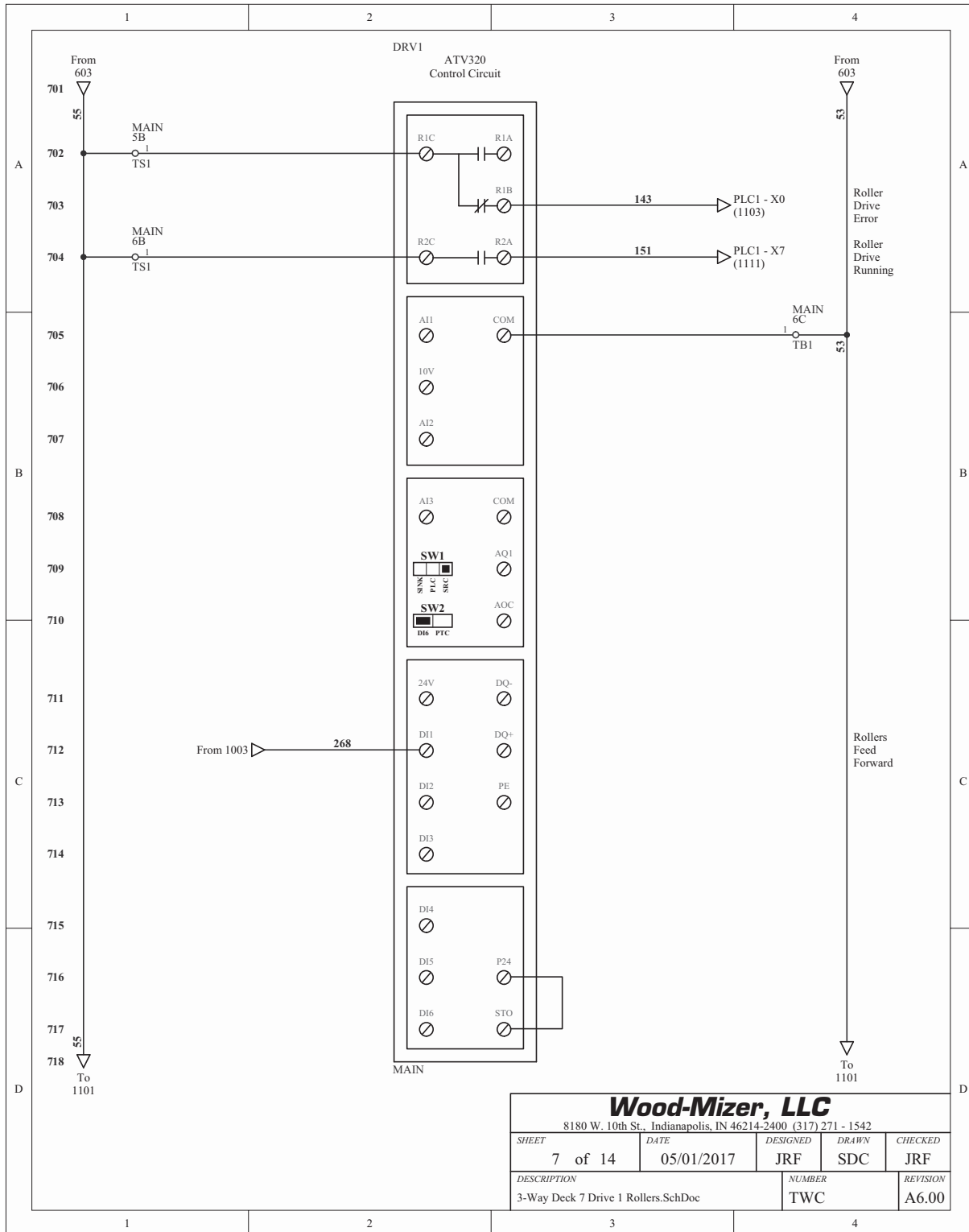


FIG. 4-7 (PAGE 7 OF 13)

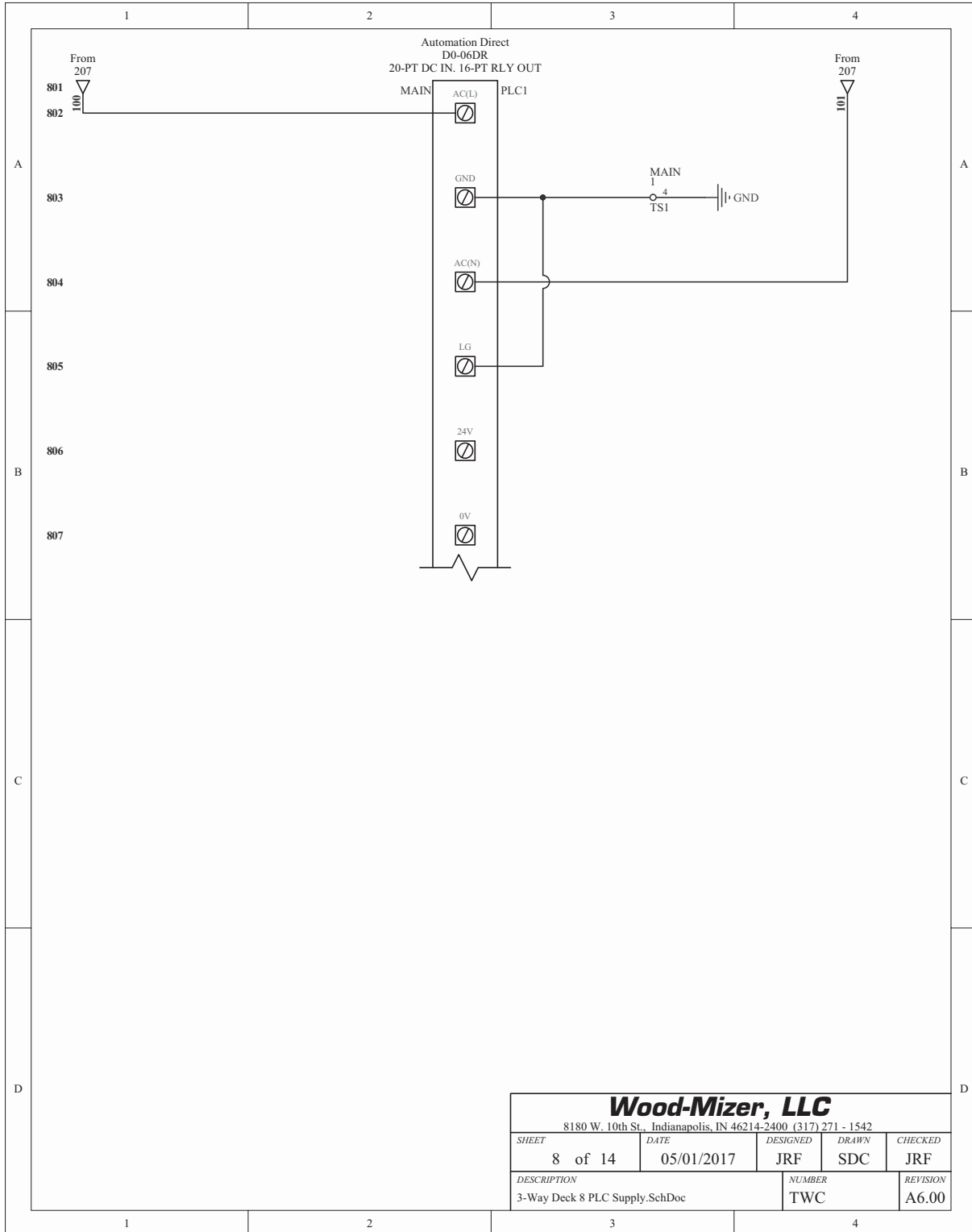
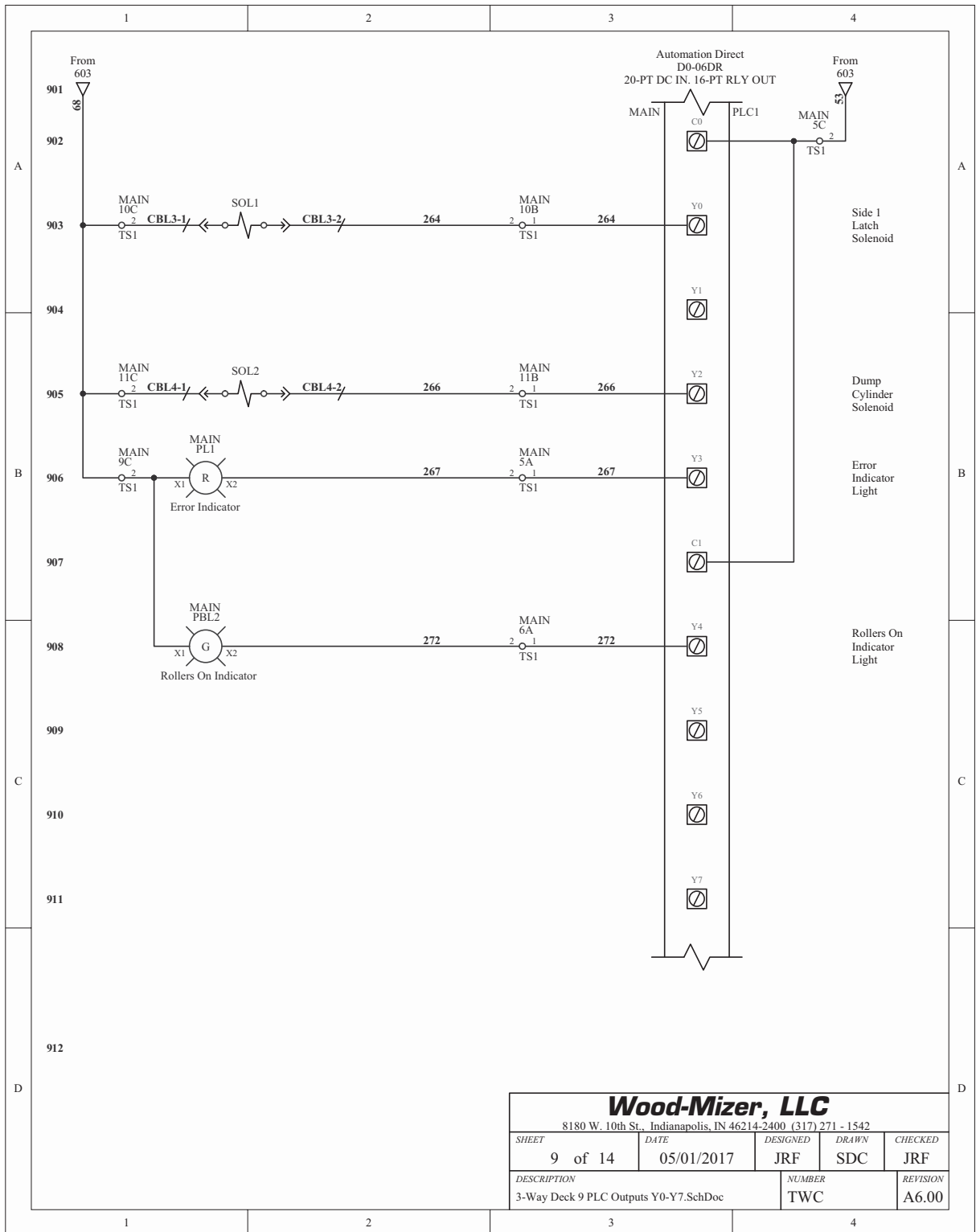


FIG. 4-8 (PAGE 8 OF 13)

# 4

## Electrical Information

### Electrical Symbol Diagram (TWC)



**FIG. 4-9 (PAGE 9 OF 13)**

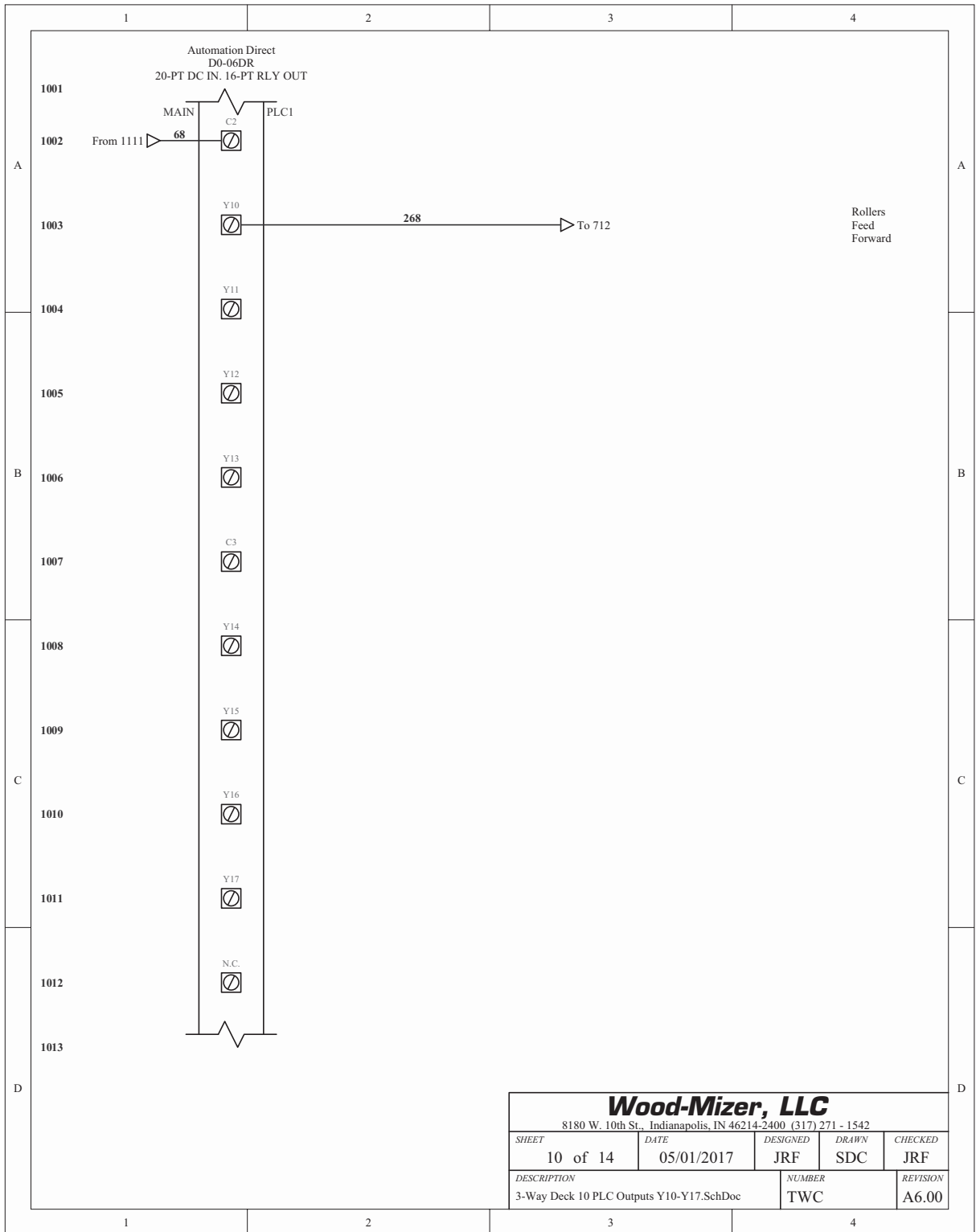


FIG. 4-10 (PAGE 10 OF 13)

# 4

## Electrical Information

### Electrical Symbol Diagram (TWC)

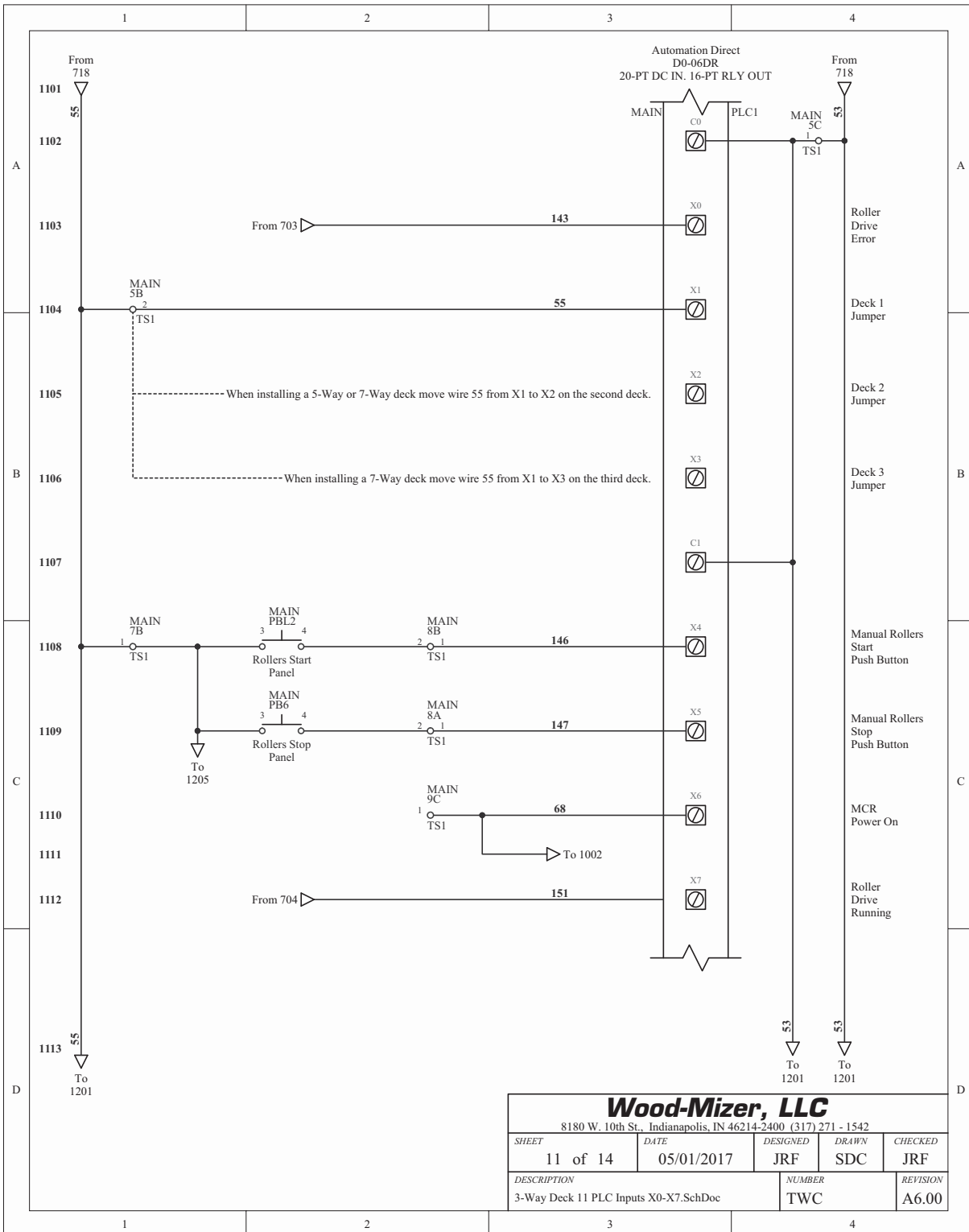


FIG. 4-11 (PAGE 11 OF 13)

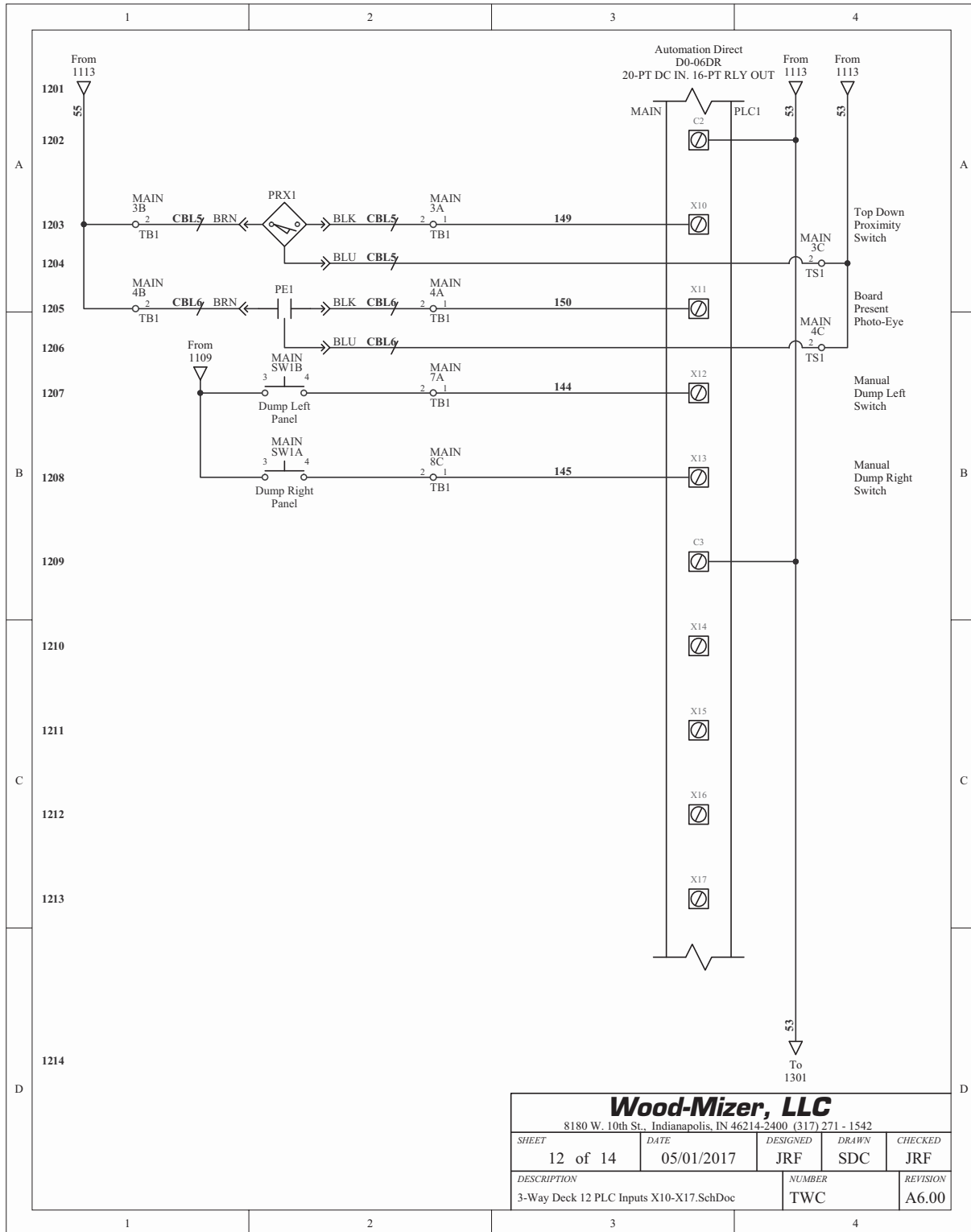


FIG. 4-12 (PAGE 12 OF 13)



# 4 Electrical Information

## Electrical Symbol Diagram (TWC)

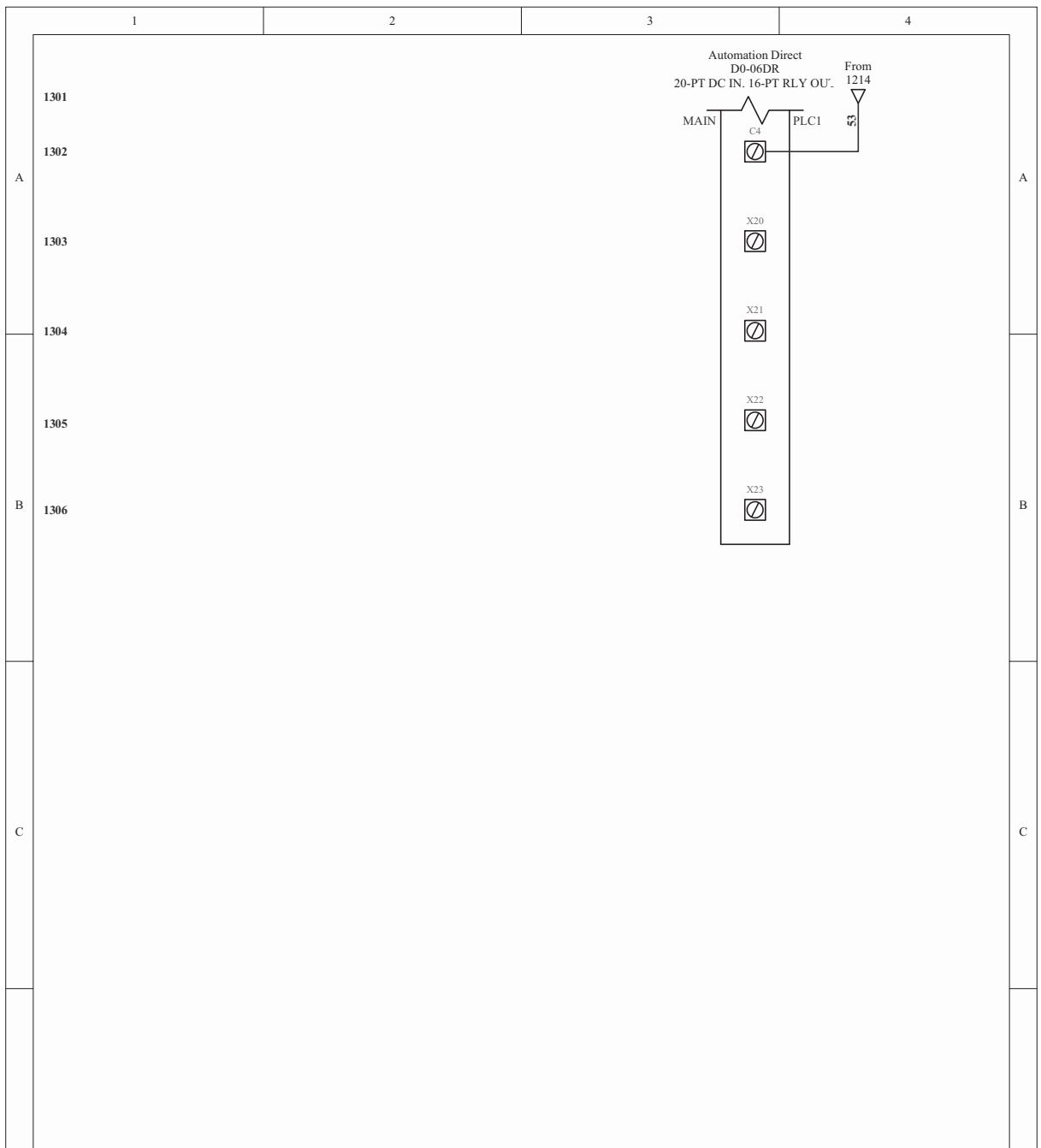


FIG. 4-13 (PAGE 13 OF 13)

### 4.2 Electrical Symbol Diagram (TWC)

TWC

Rev. A5.00 - A5.02

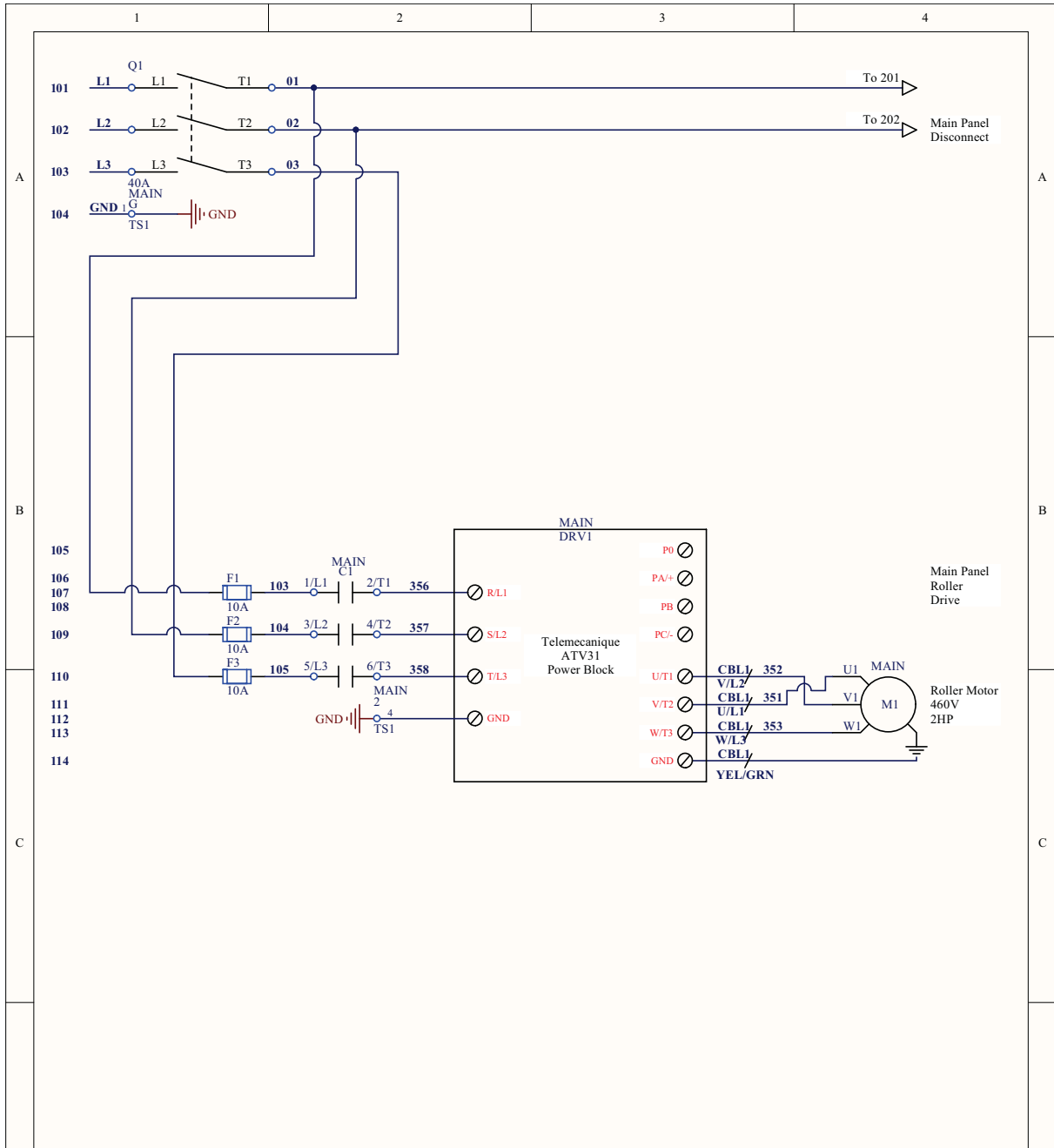
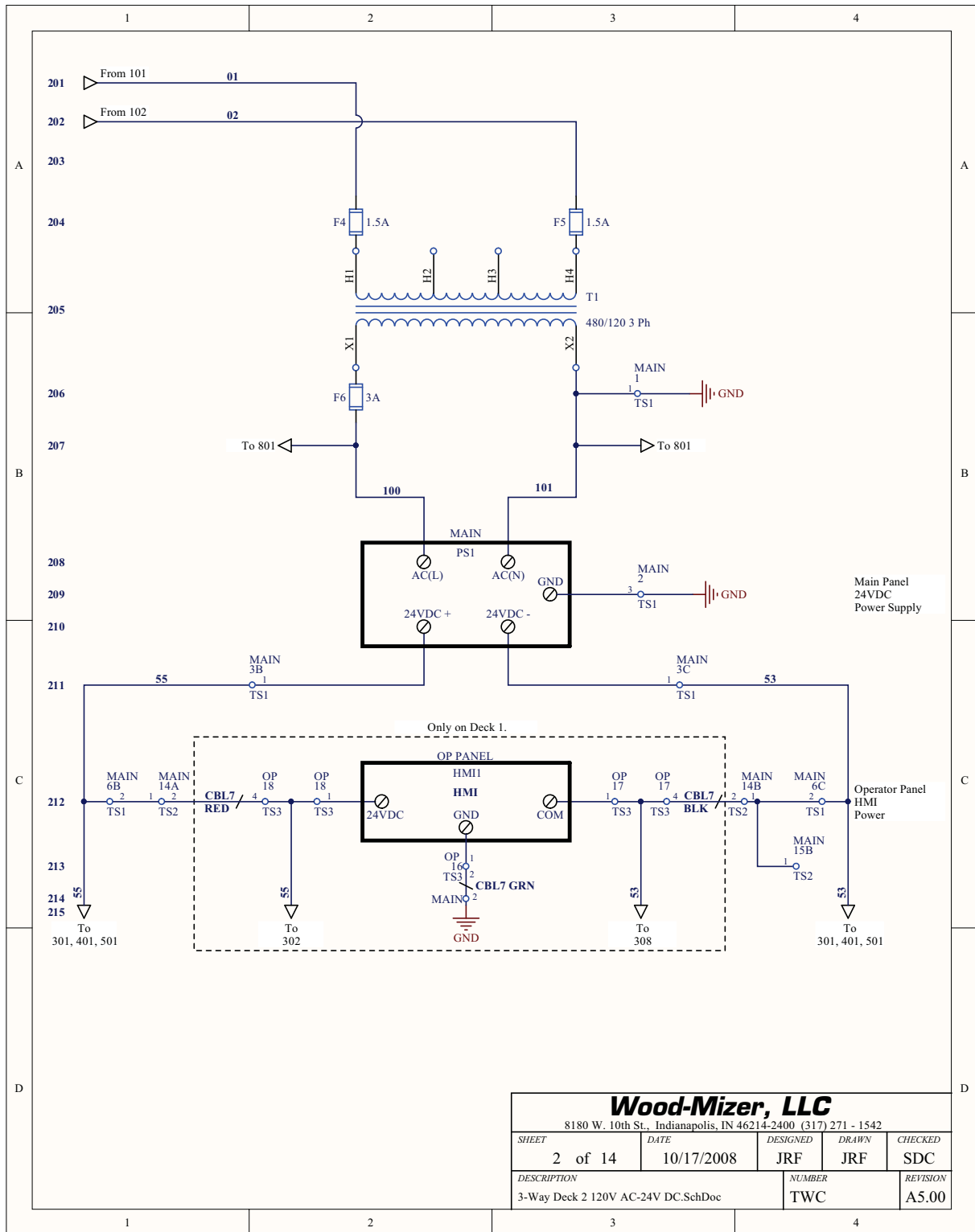


FIG. 4-14 (PAGE 1 OF 13)

# 4

## Electrical Information

### Electrical Symbol Diagram (TWC)



|  |            |          |        |          |
|--|------------|----------|--------|----------|
| <b>Wood-Mizer, LLC</b>   |            |          |        |          |
| 8180 W. 10th St., Indianapolis, IN 46214-2400 (317) 271 - 1542 |            |          |        |          |
| SHEET  | DATE       | DESIGNED | DRAWN  | CHECKED  |
| 2 of 14  | 10/17/2008 | JRF      | JRF    | SDC      |
| DESCRIPTION  |            |          | NUMBER | REVISION |
| 3-Way Deck 2 120V AC-24V DC.SchDoc                             |            |          | TWC    | A5.00    |

FIG. 4-15 (PAGE 2 OF 13)

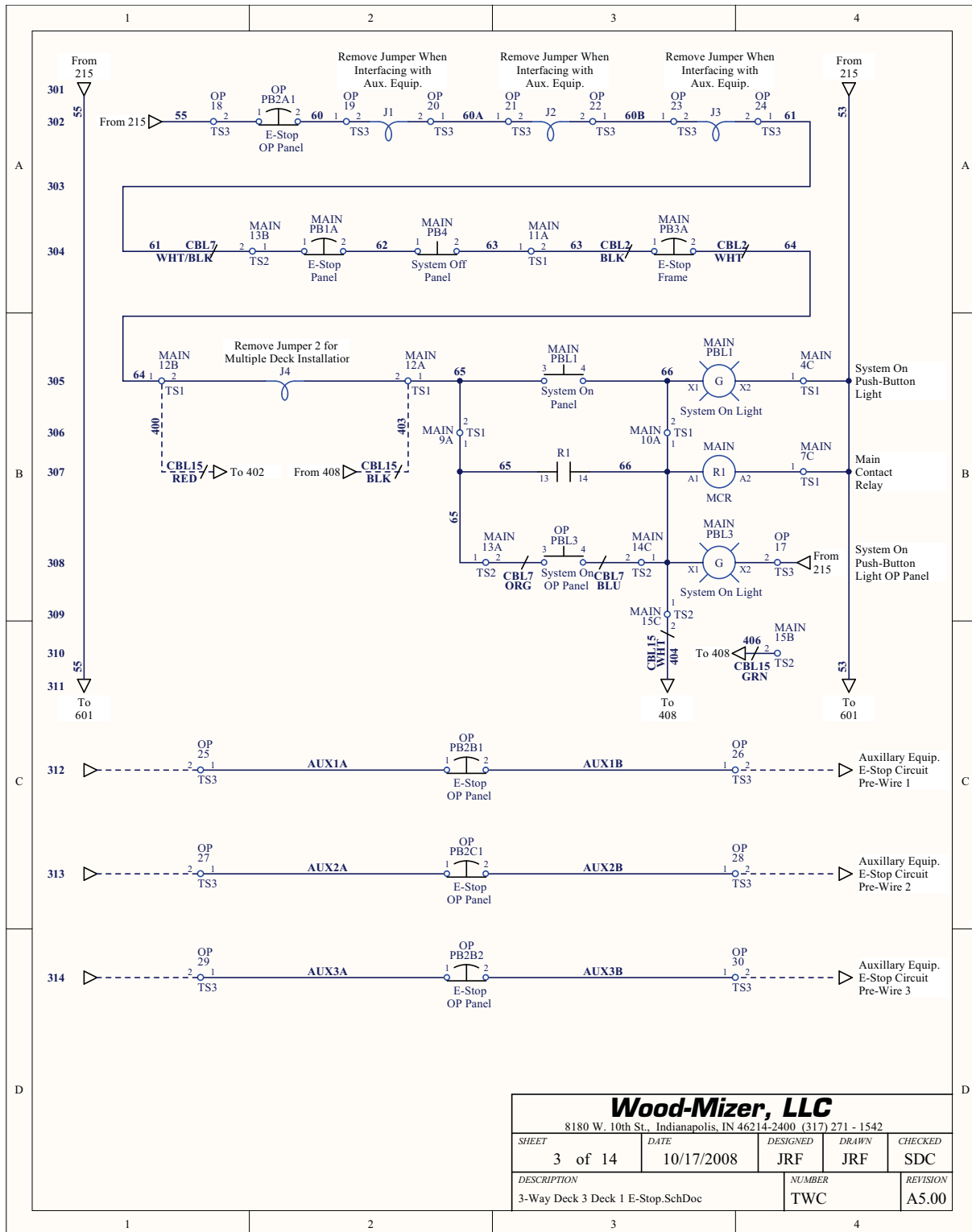


FIG. 4-16 (PAGE 3 OF 13)



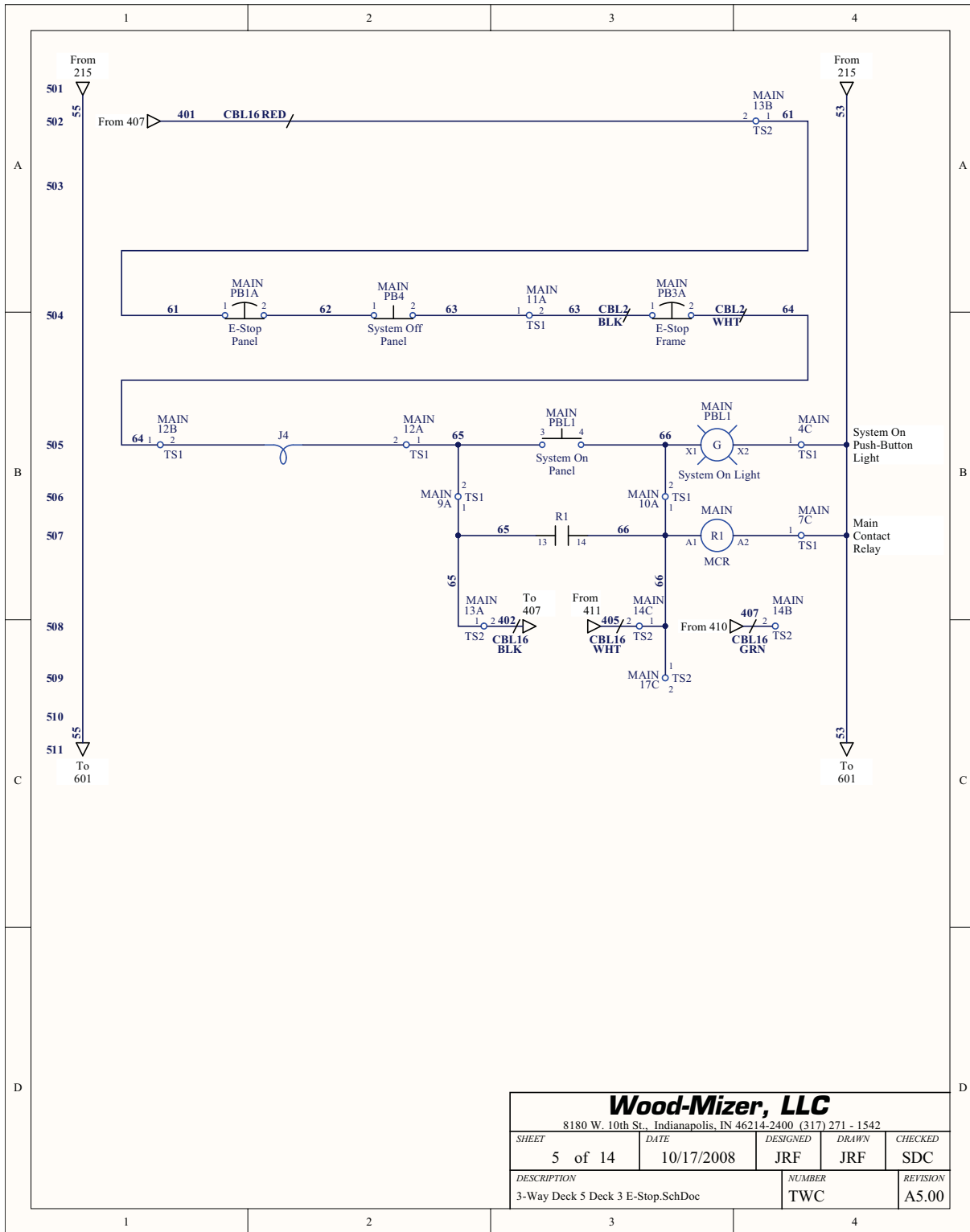


FIG. 4-18 (PAGE 5 OF 13)

# 4

## Electrical Information

### Electrical Symbol Diagram (TWC)

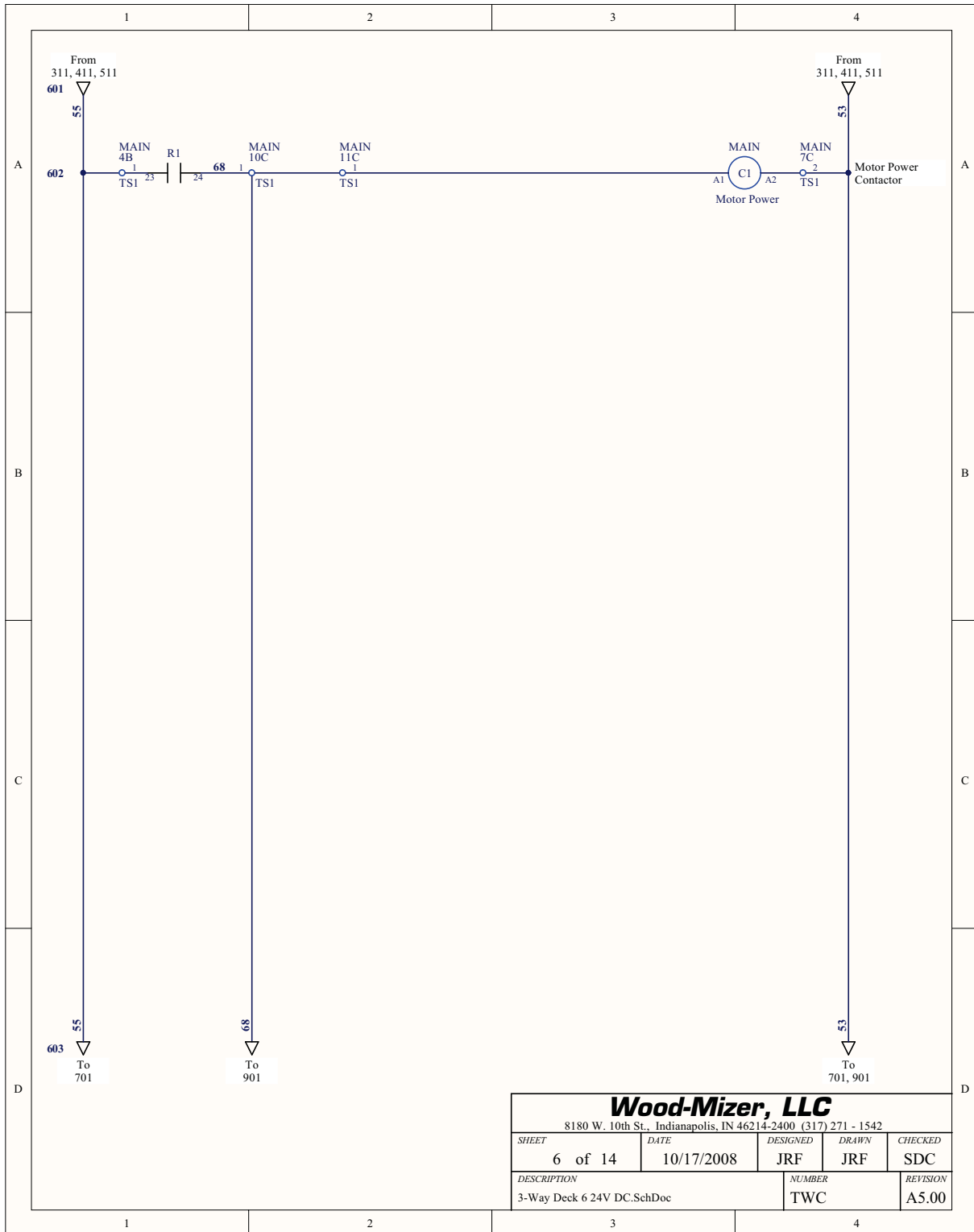


FIG. 4-19 (PAGE 6 OF 13)

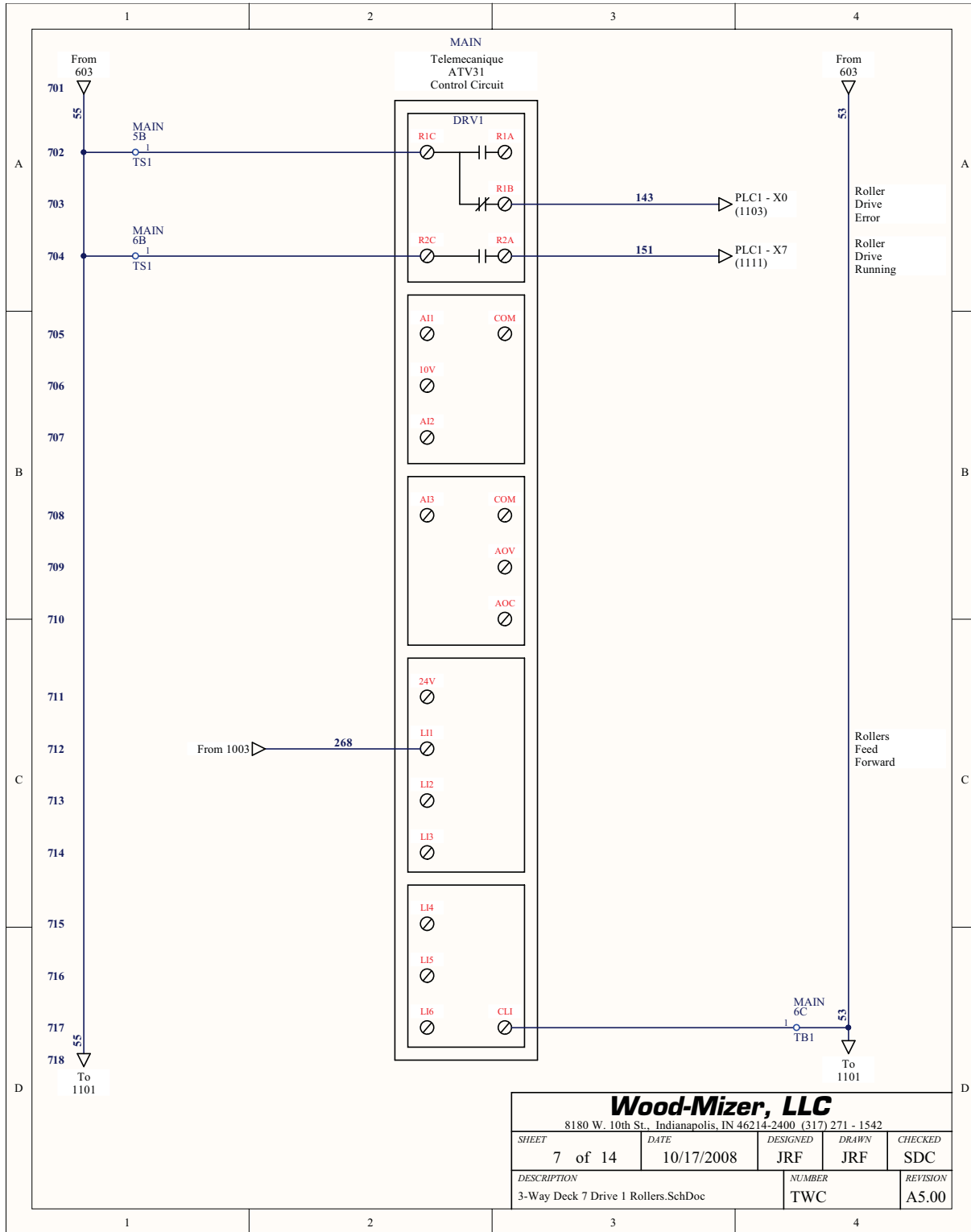


FIG. 4-20 (PAGE 7 OF 13)



# 4

## Electrical Information

### Electrical Symbol Diagram (TWC)

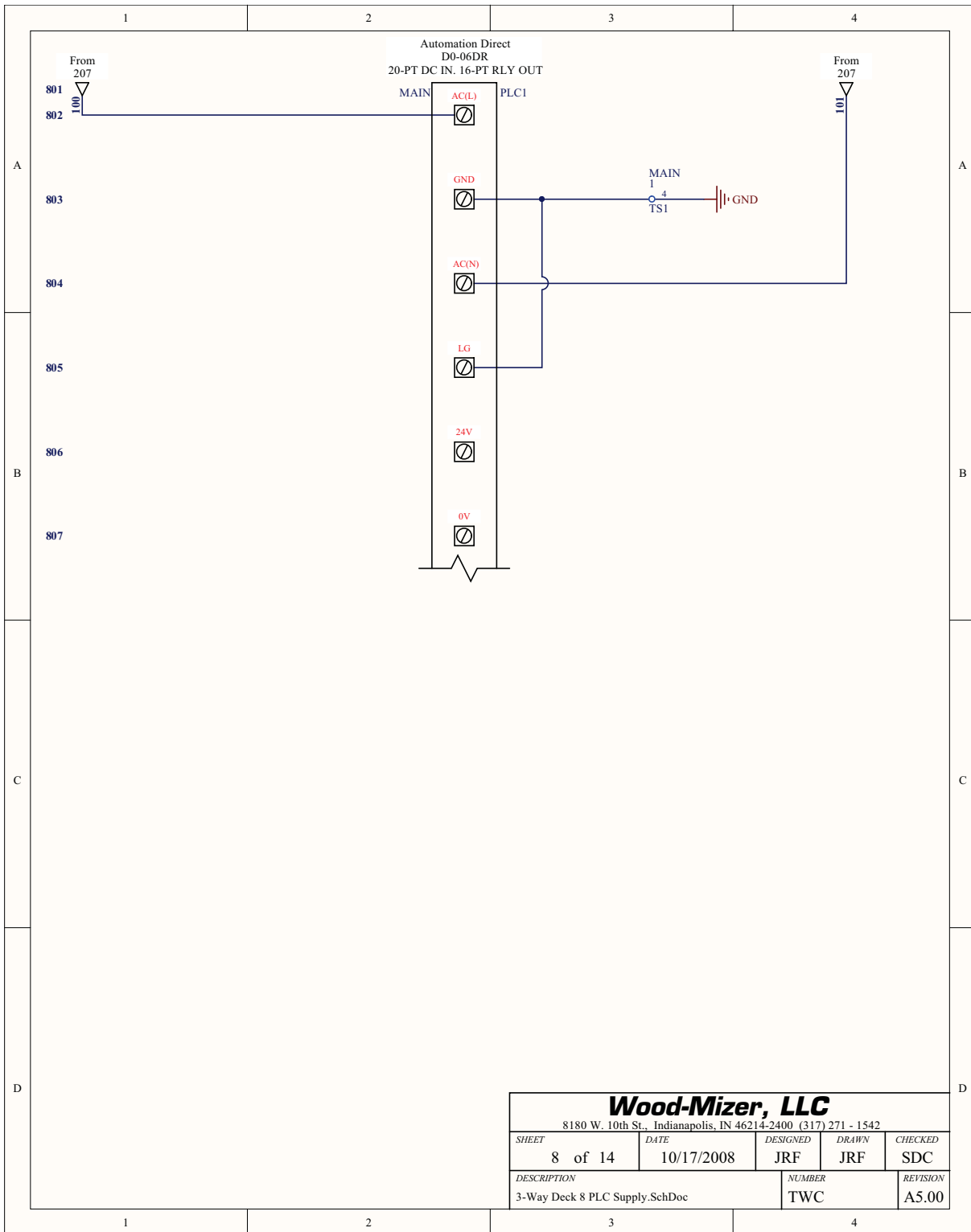


FIG. 4-21 (PAGE 8 OF 13)

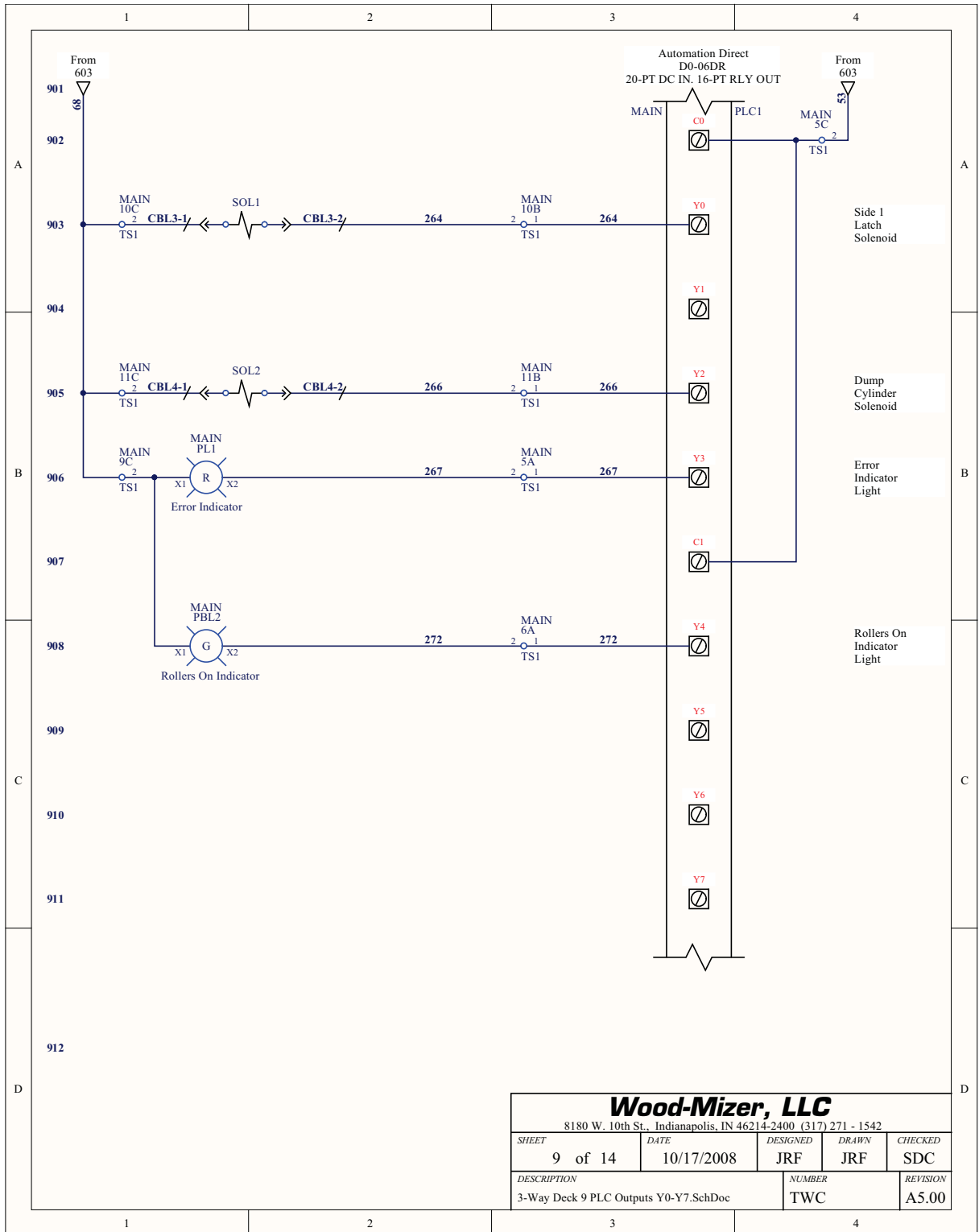


FIG. 4-22 (PAGE 9 OF 13)

# 4

## Electrical Information

### Electrical Symbol Diagram (TWC)

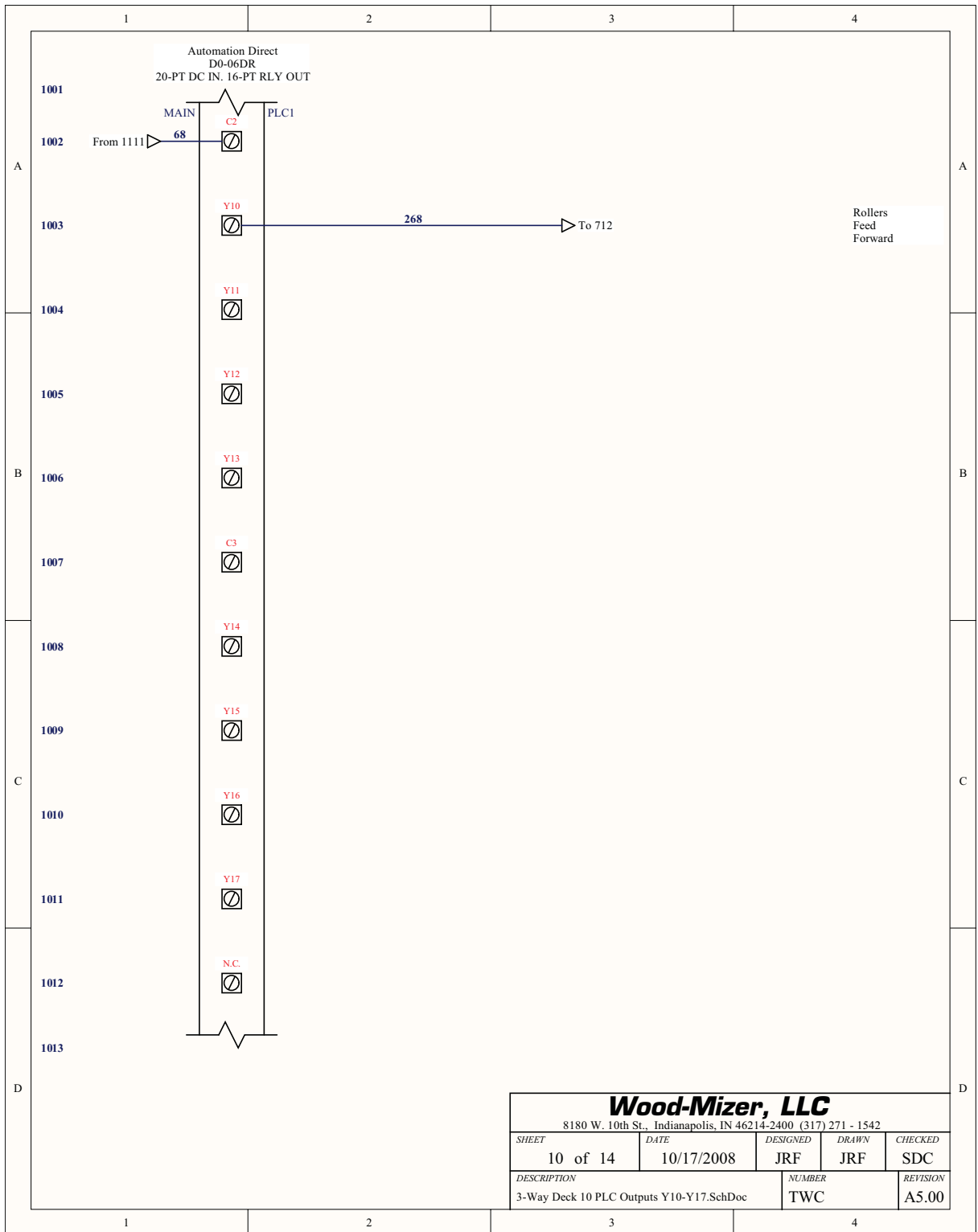


FIG. 4-23 (PAGE 10 OF 13)

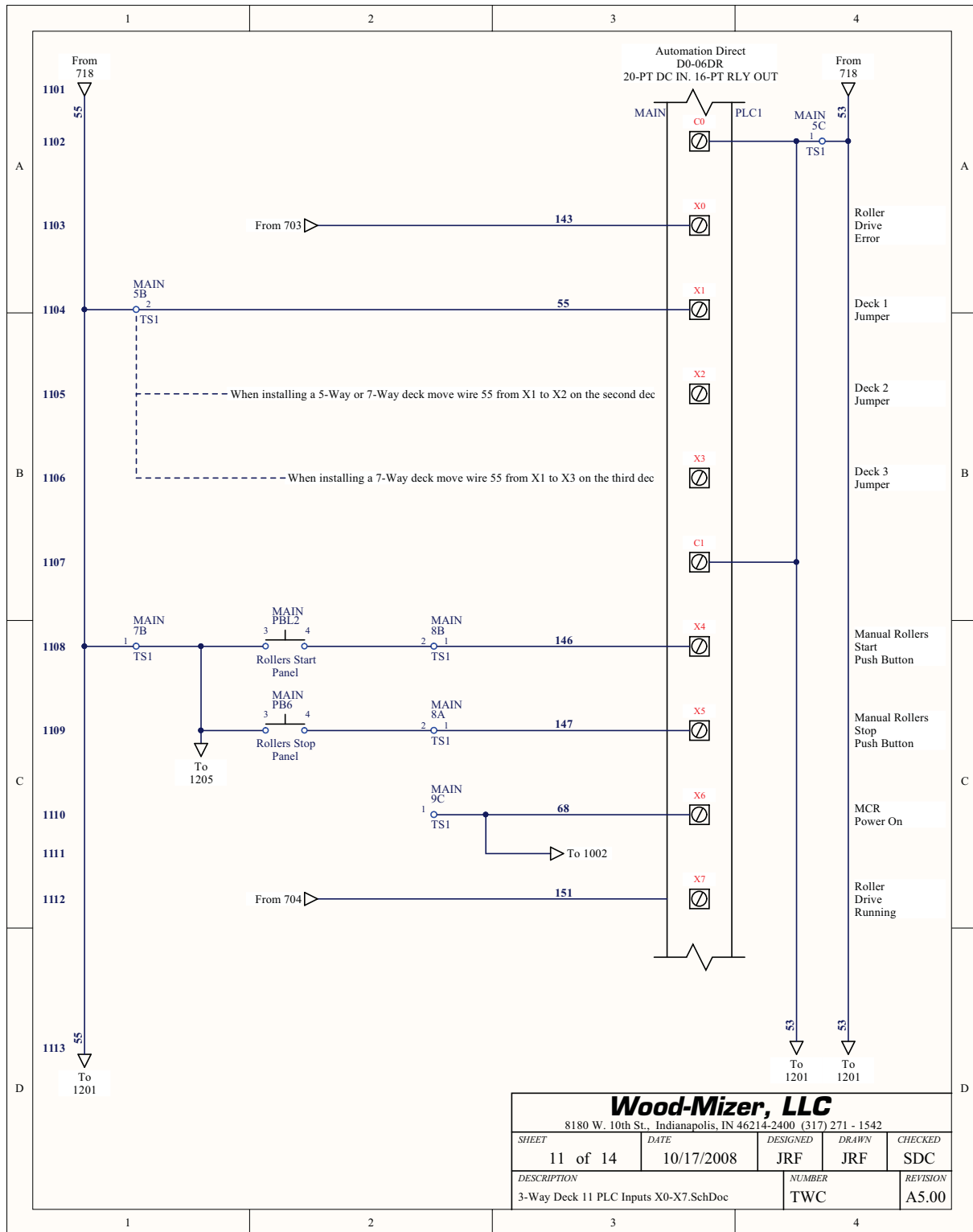


FIG. 4-24 (PAGE 11 OF 13)

# 4

## Electrical Information

### Electrical Symbol Diagram (TWC)

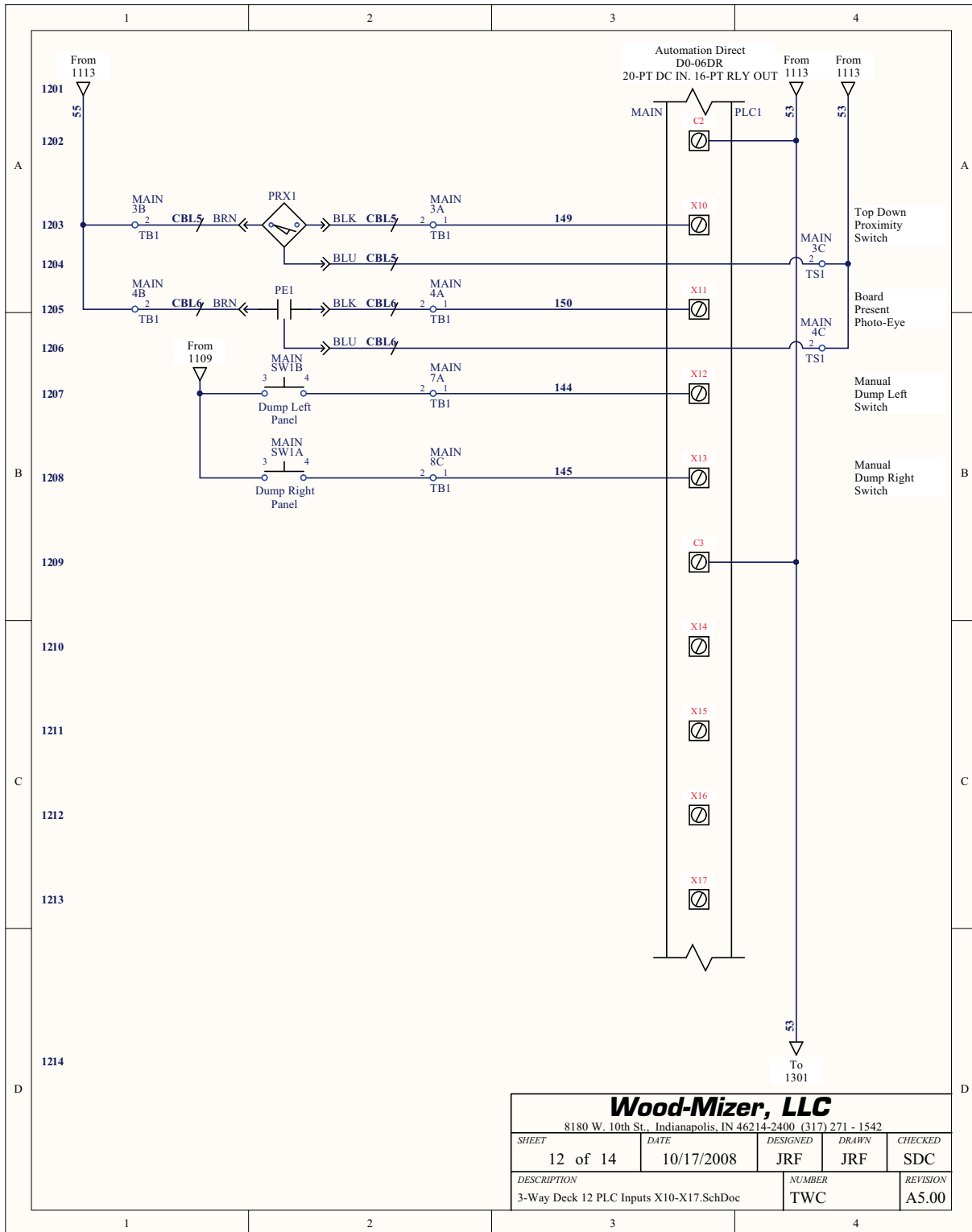


FIG. 4-25 (PAGE 12 OF 13)

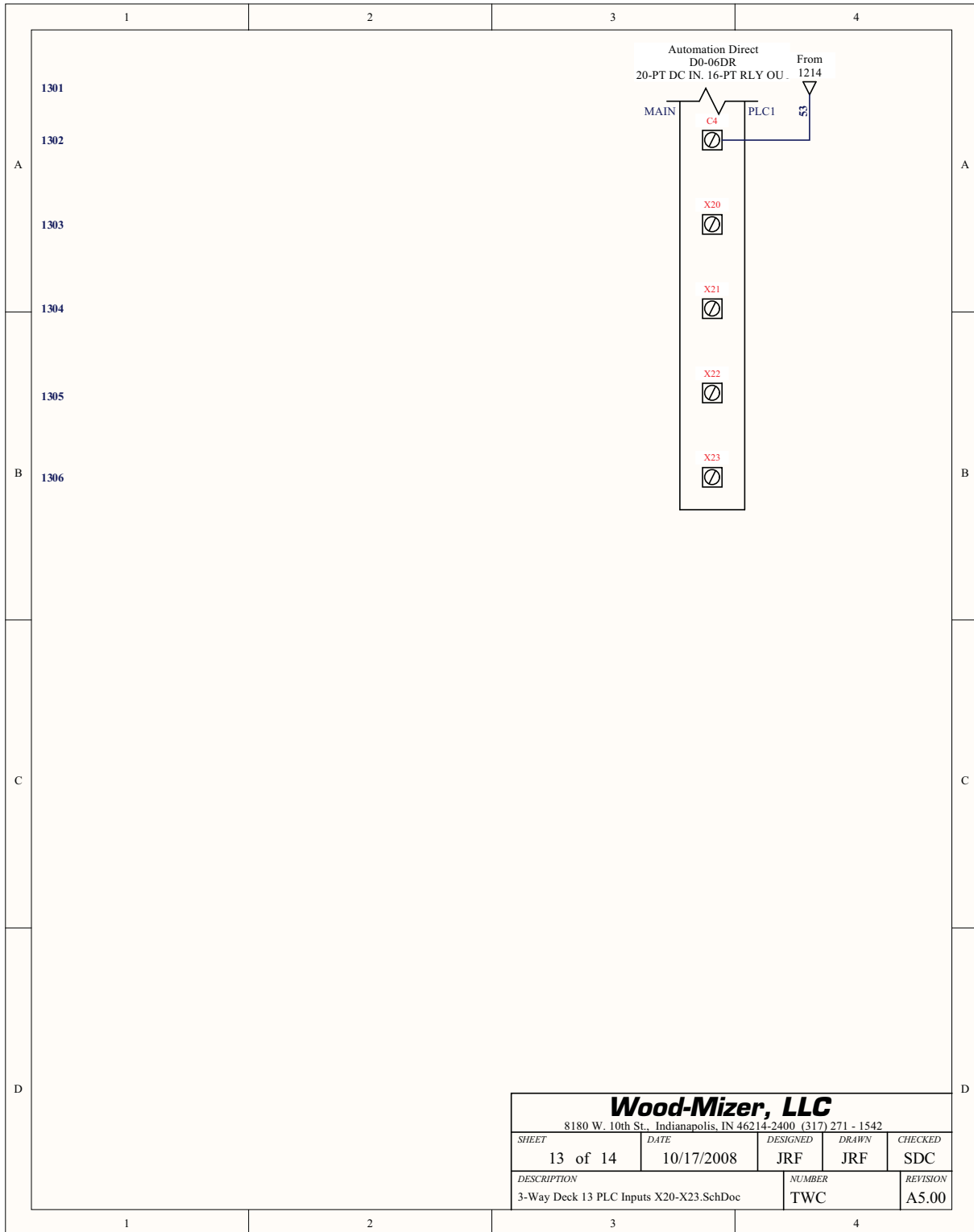


FIG. 4-26 (PAGE 13 OF 13)

# 4 Electrical Information

## Electrical Symbol Diagram (TWC)

### 4.3 Electrical Symbol Diagram (TWC)

TWC Rev. A4.00 - A4.01

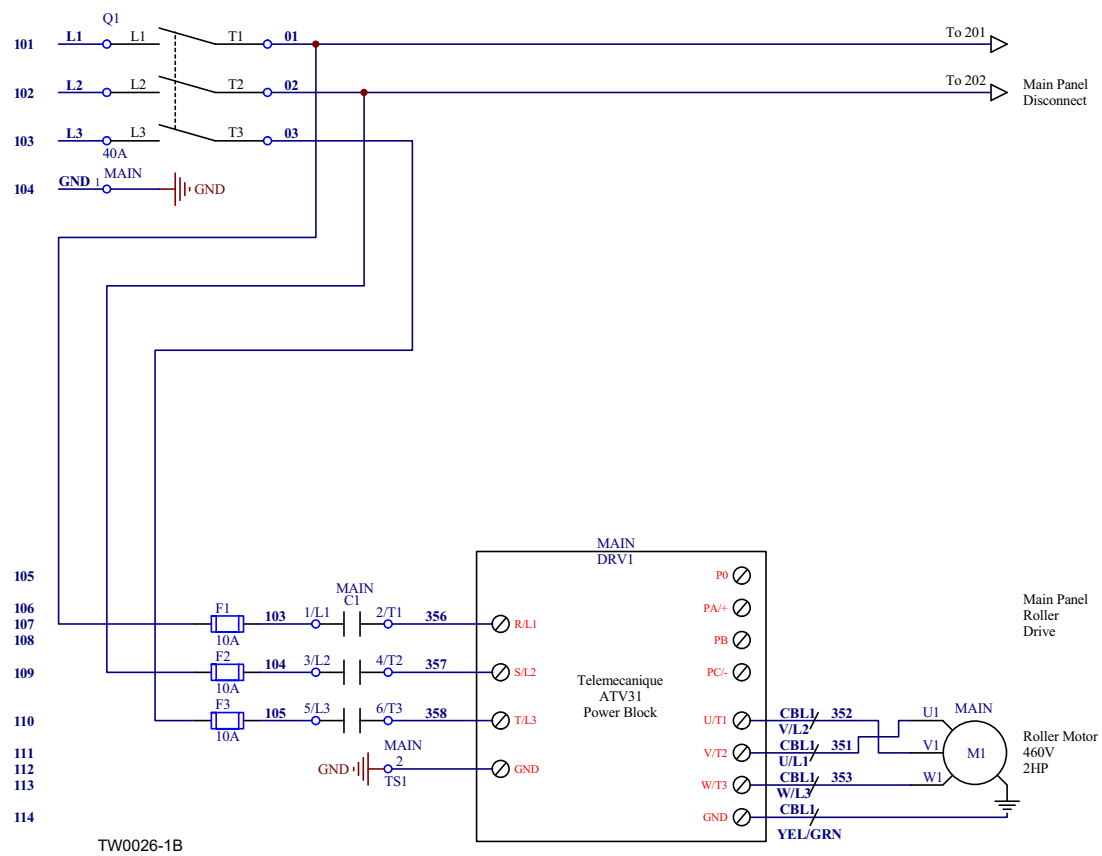


FIG. 4-27 (PAGE 1 OF 13)

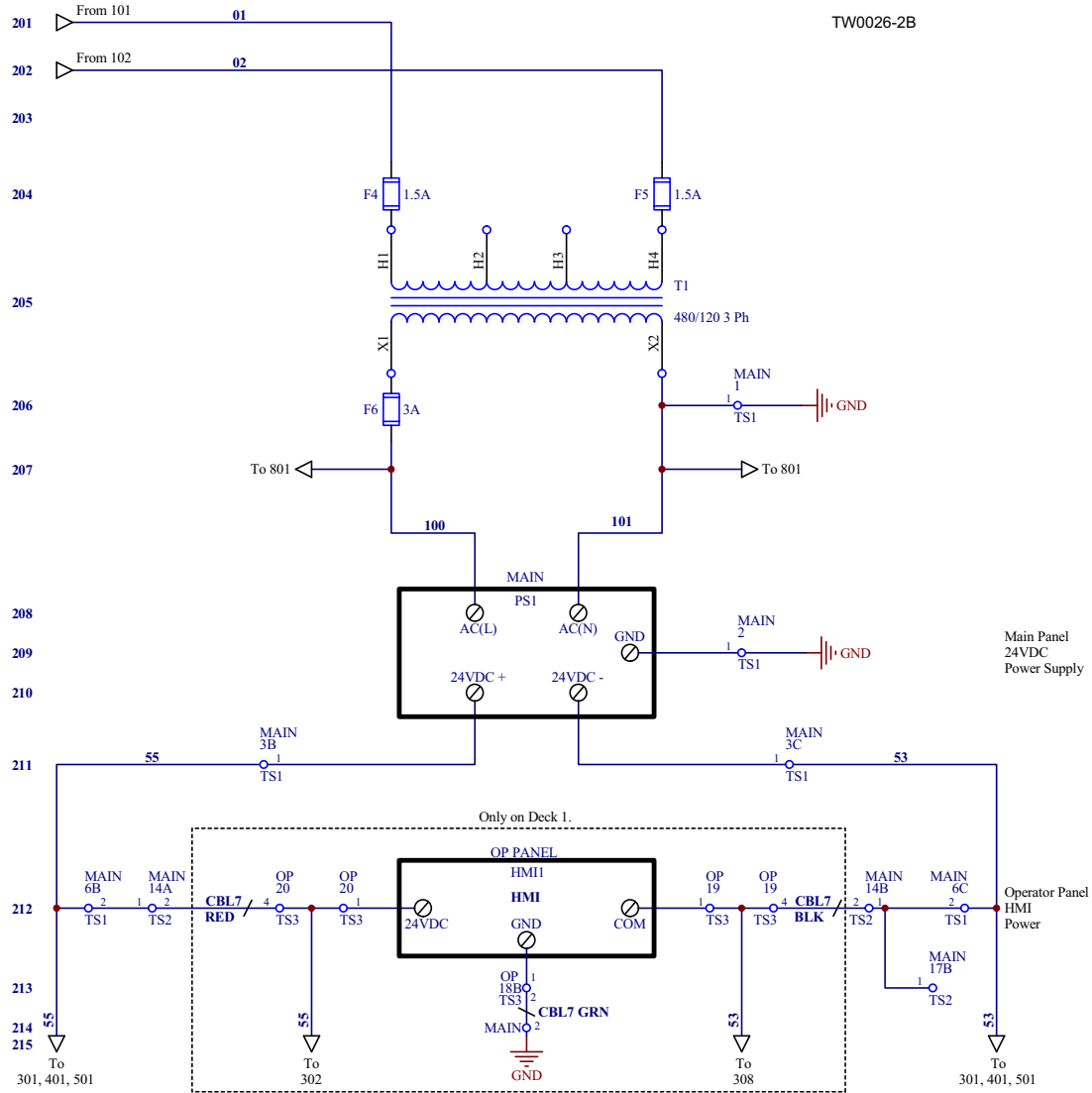


FIG. 4-28 (PAGE 2 OF 13)



# 4

## Electrical Information

### Electrical Symbol Diagram (TWC)

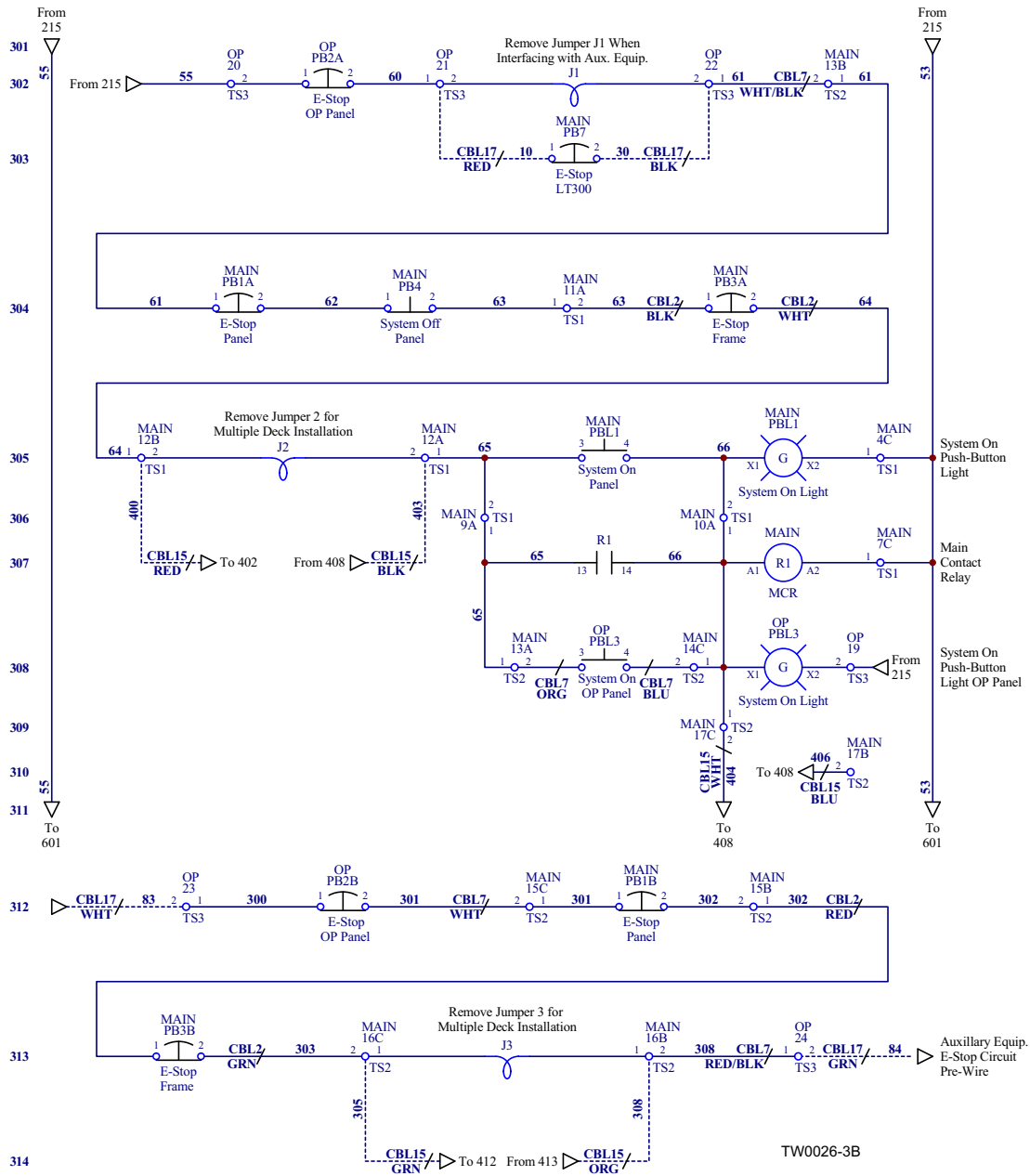


FIG. 4-29 (PAGE 3 OF 13)

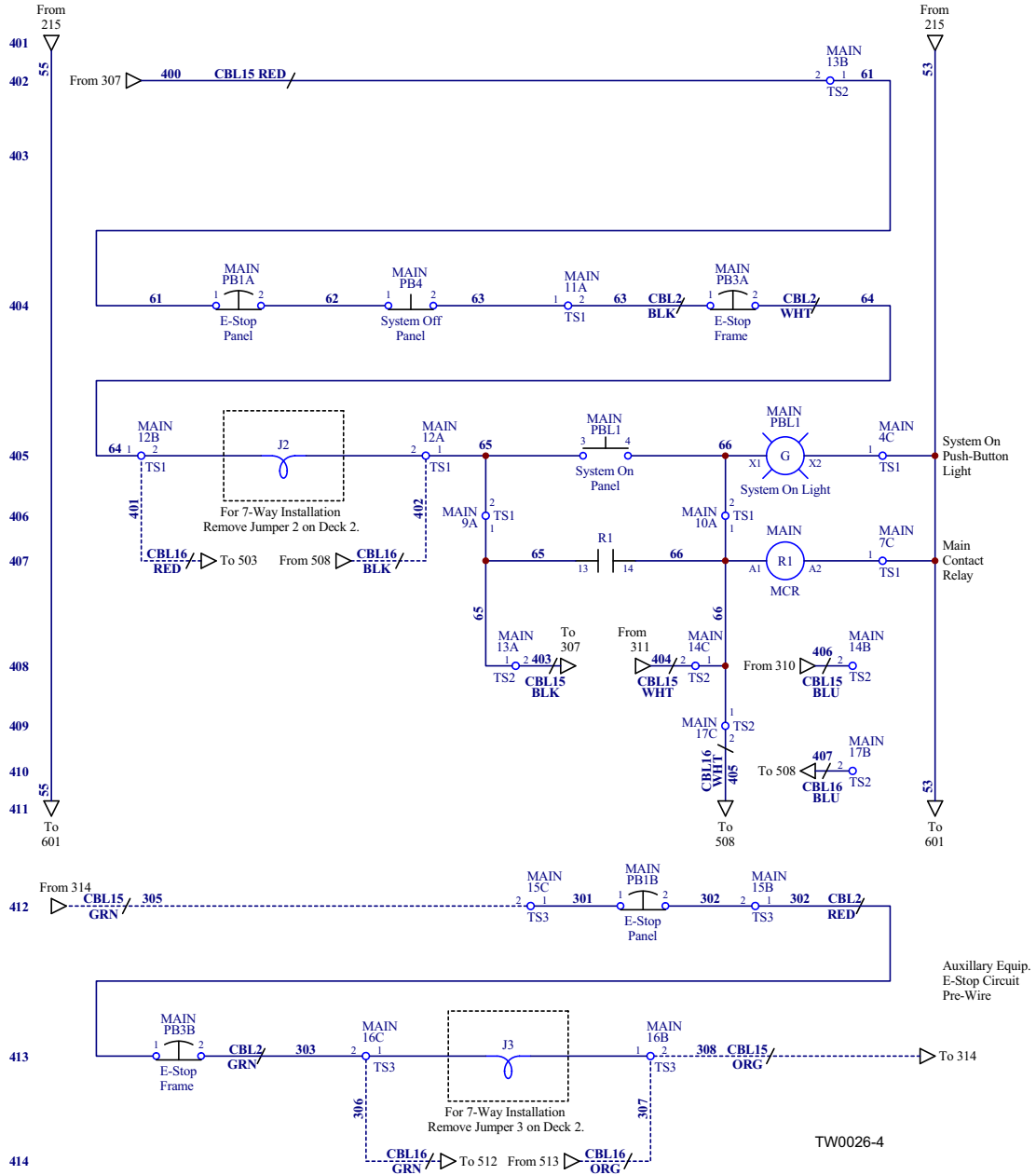
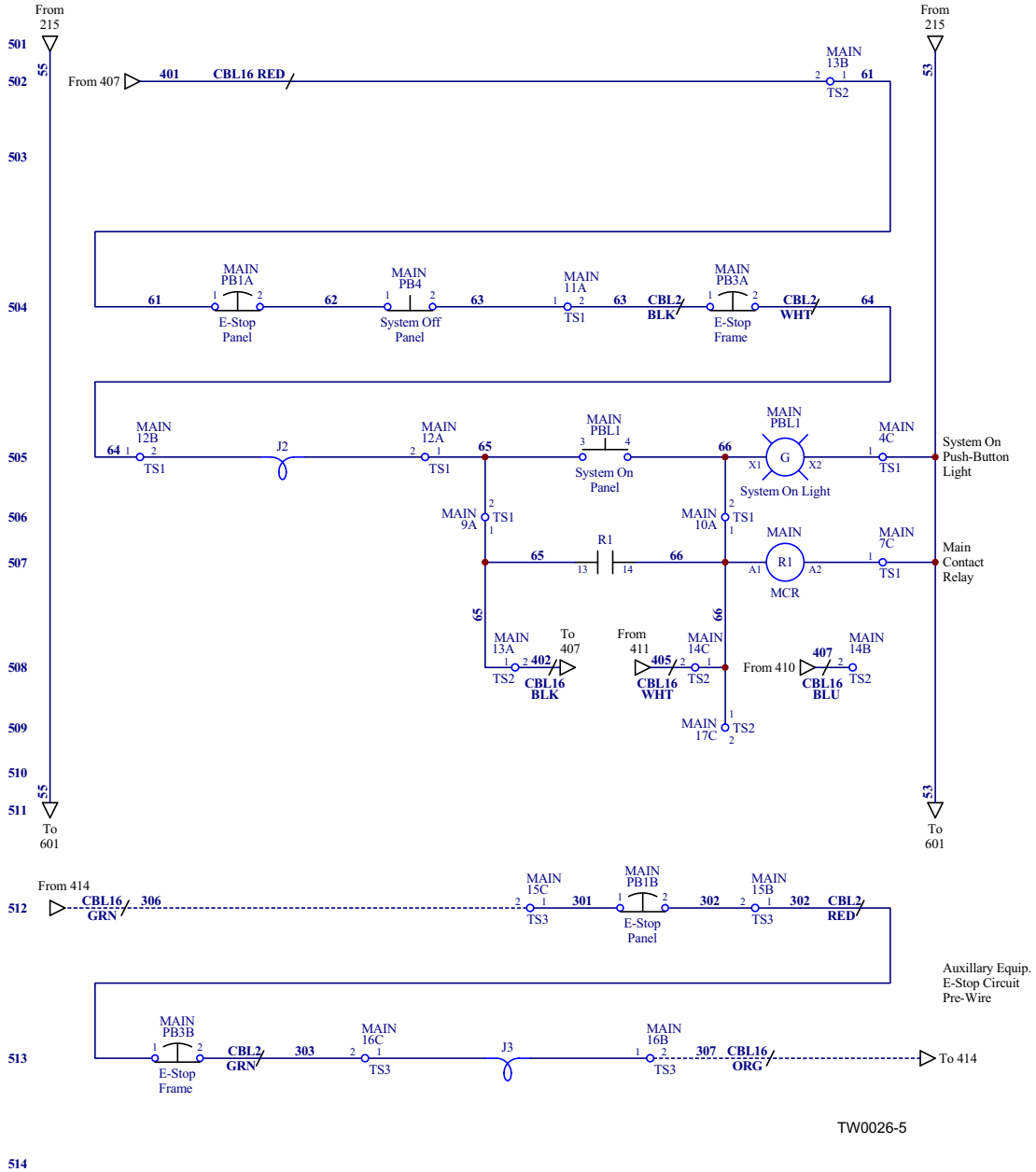


FIG. 4-30 (PAGE 4 OF 13)

# 4

## Electrical Information

### Electrical Symbol Diagram (TWC)



TW0026-5

FIG. 4-31 (PAGE 5 OF 13)

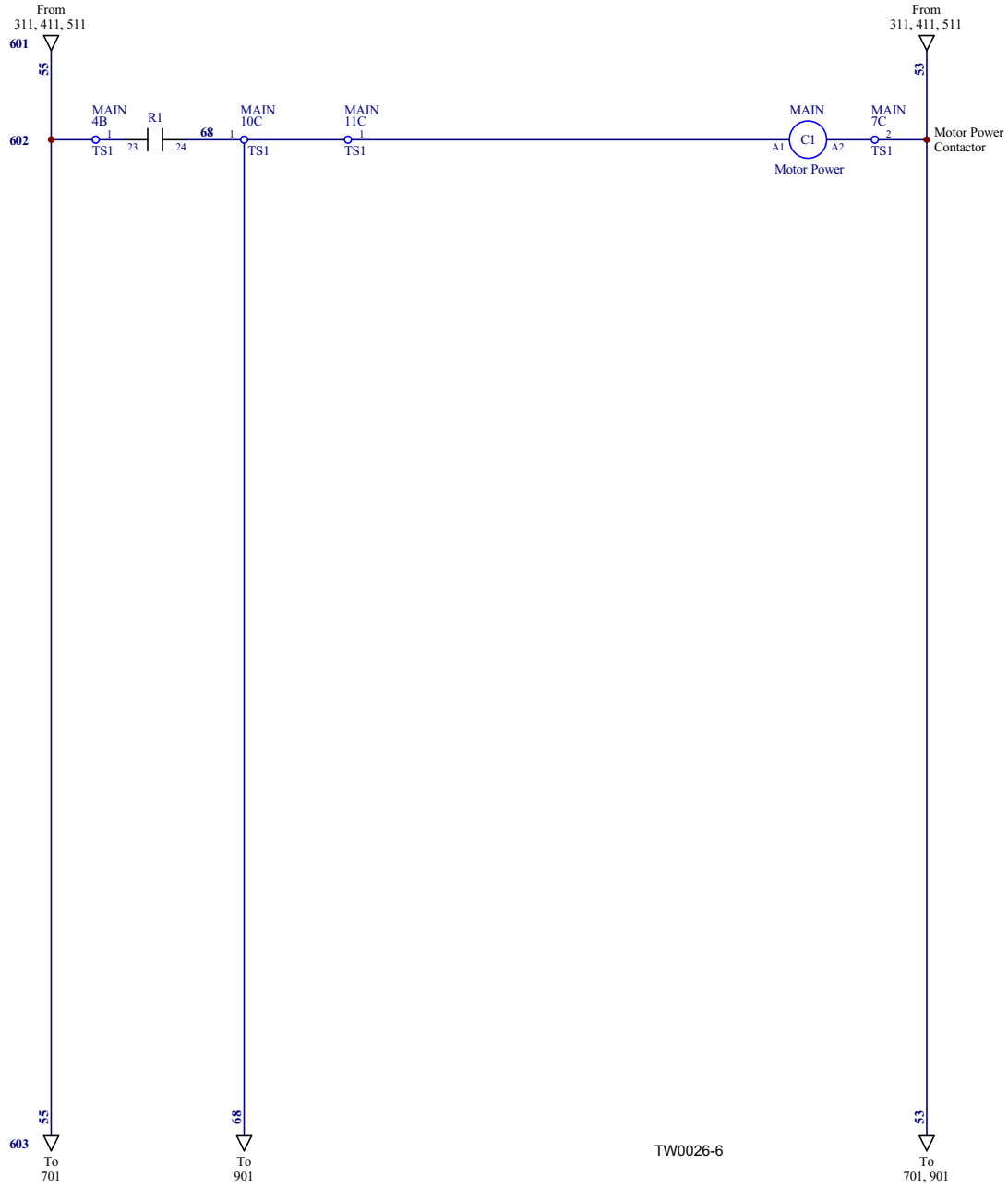


FIG. 4-32 (PAGE 6 OF 13)

# 4

## Electrical Information Electrical Symbol Diagram (TWC)

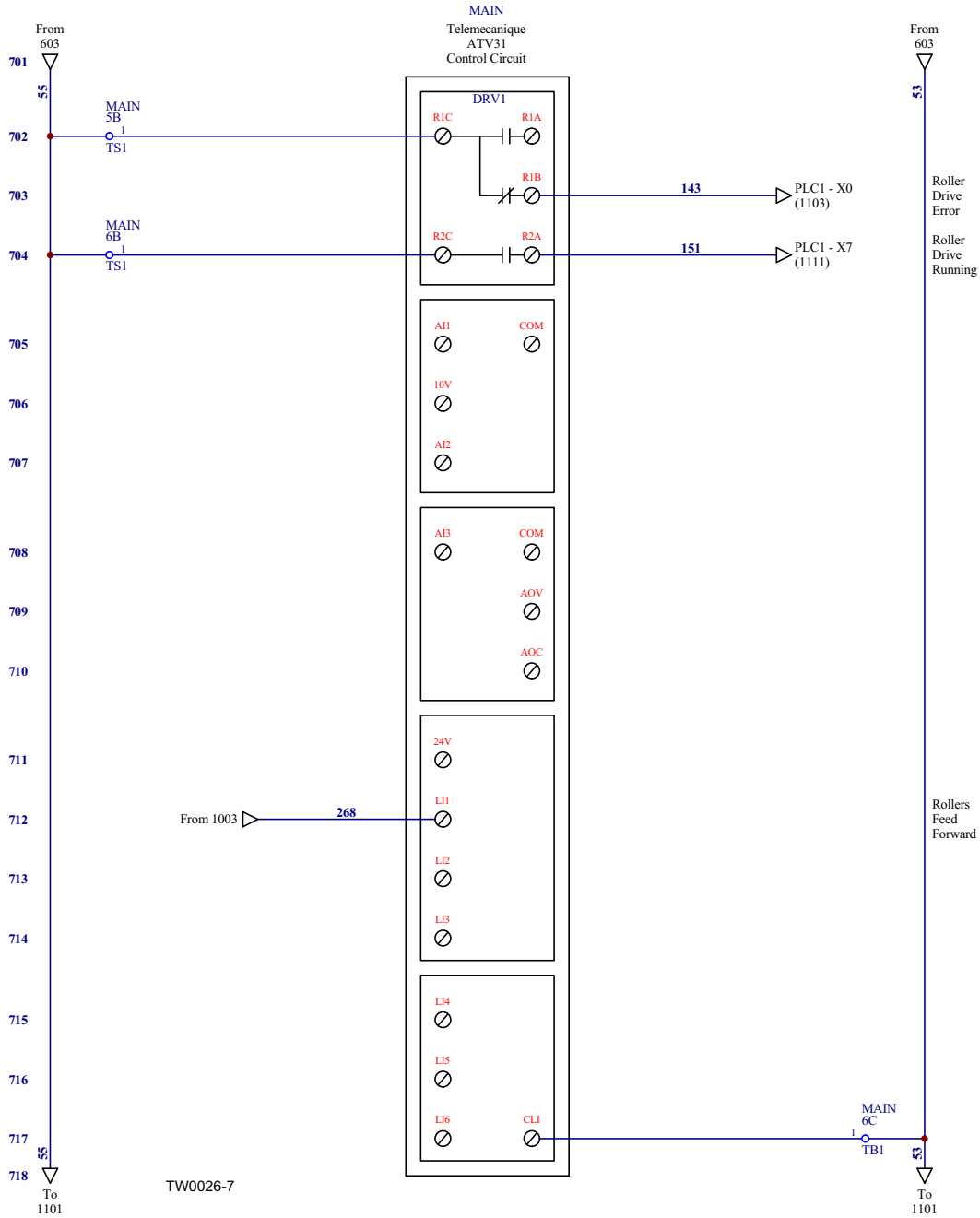


FIG. 4-33 (PAGE 7 OF 13)

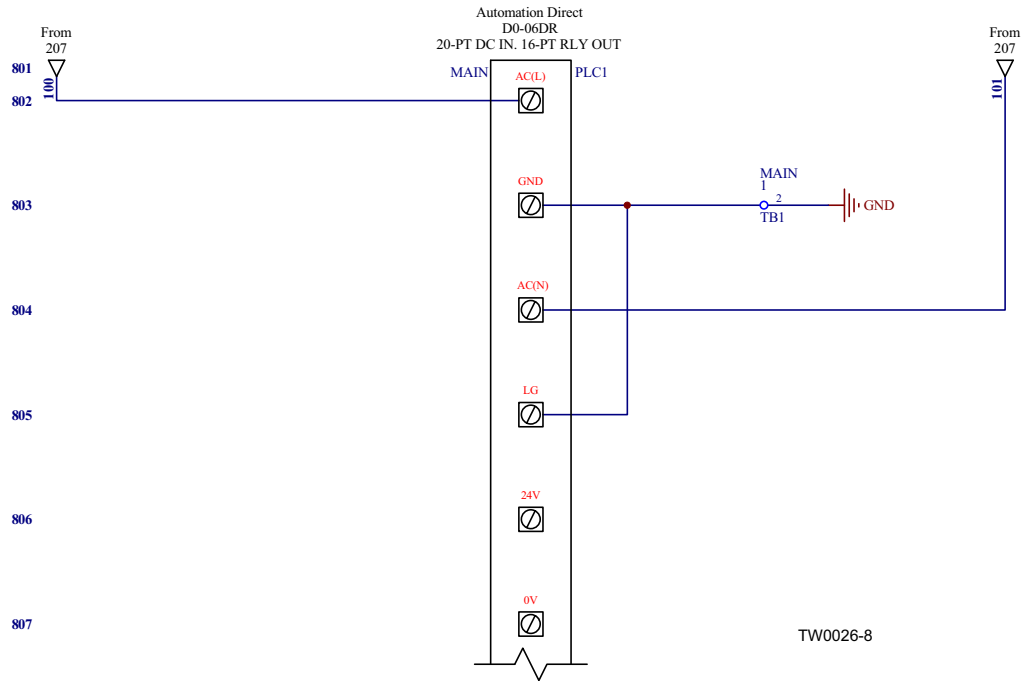
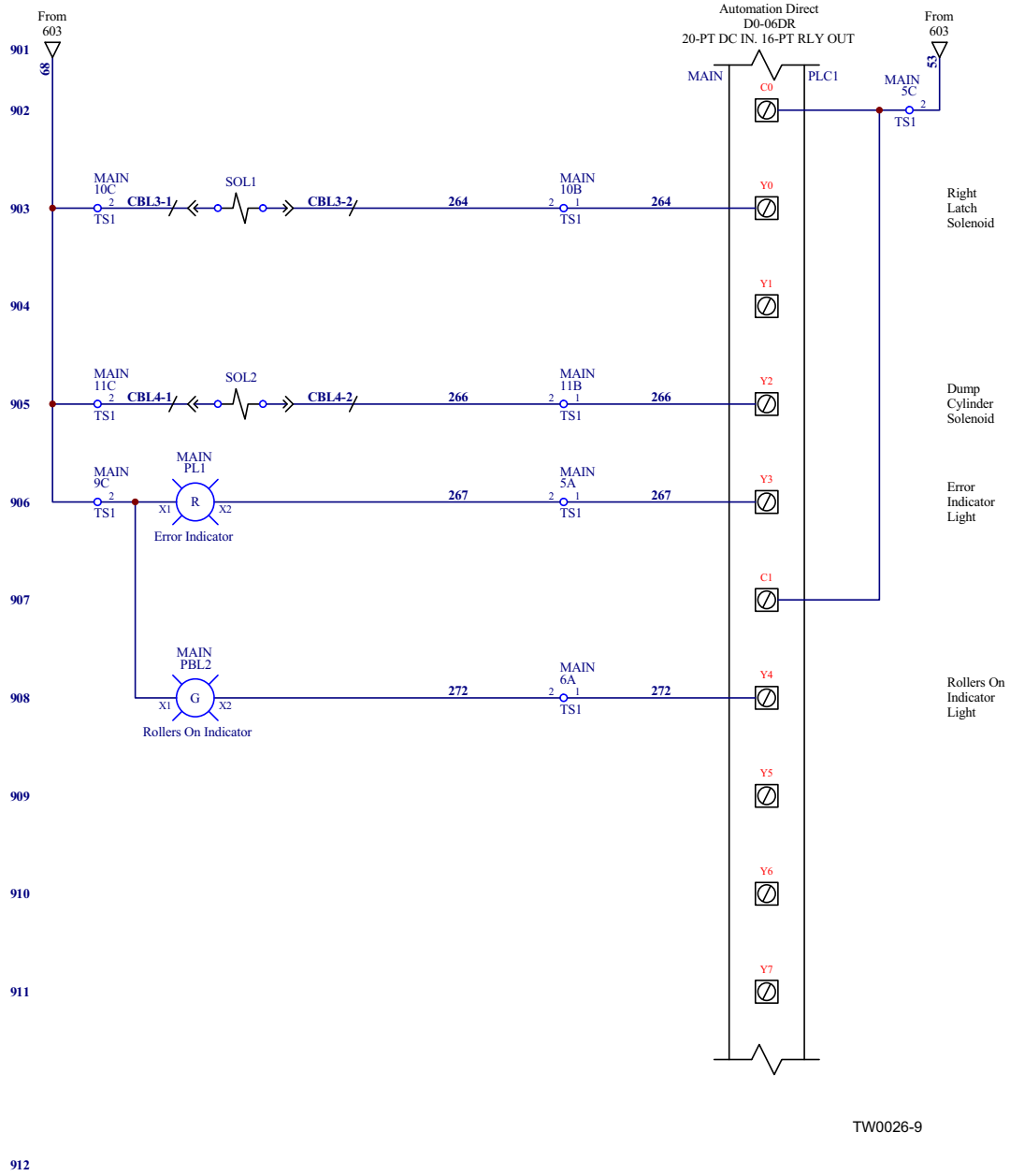


FIG. 4-34 (PAGE 8 OF 13)

# 4

## Electrical Information Electrical Symbol Diagram (TWC)



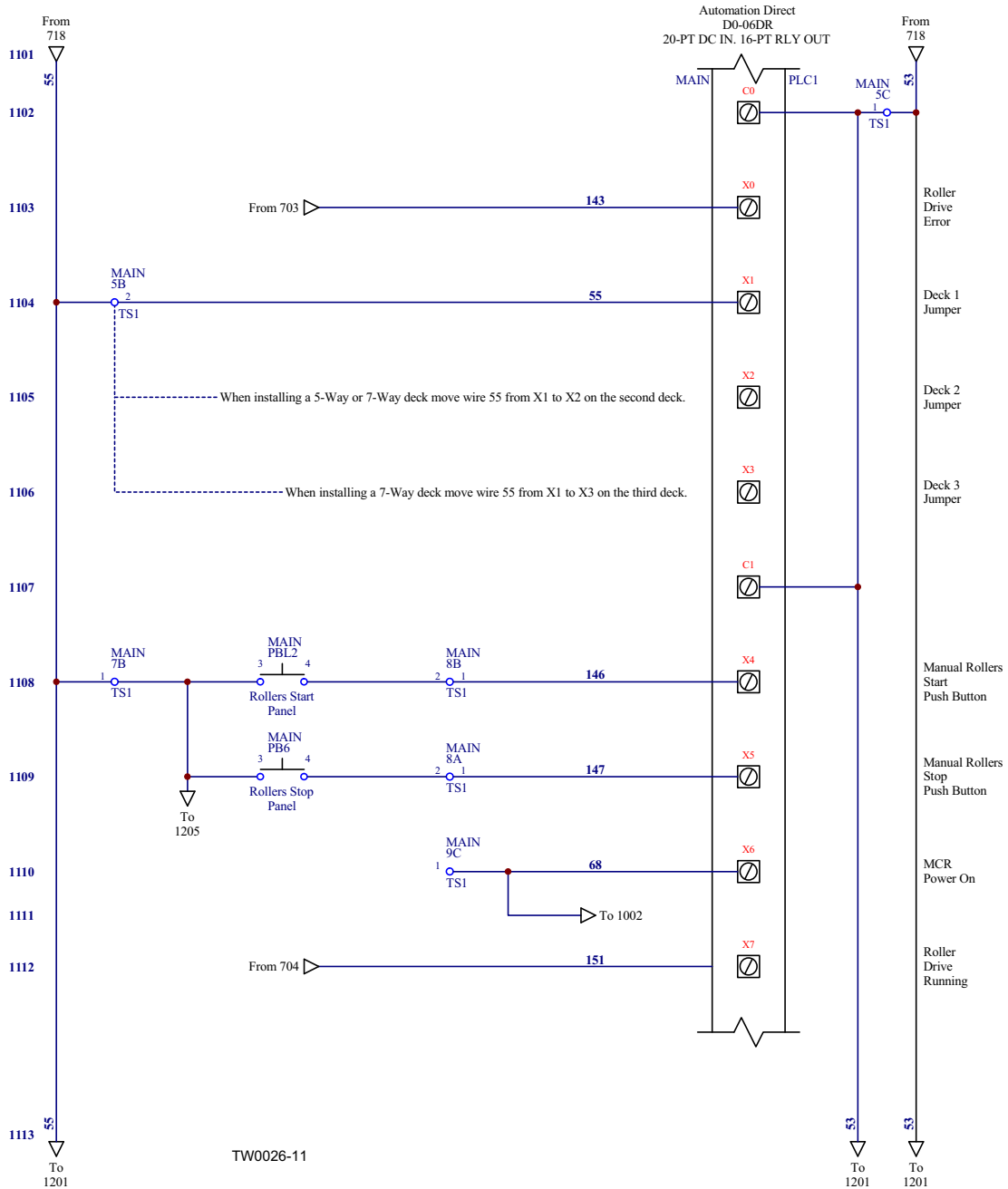
TW0026-9

FIG. 4-35 (PAGE 9 OF 13)

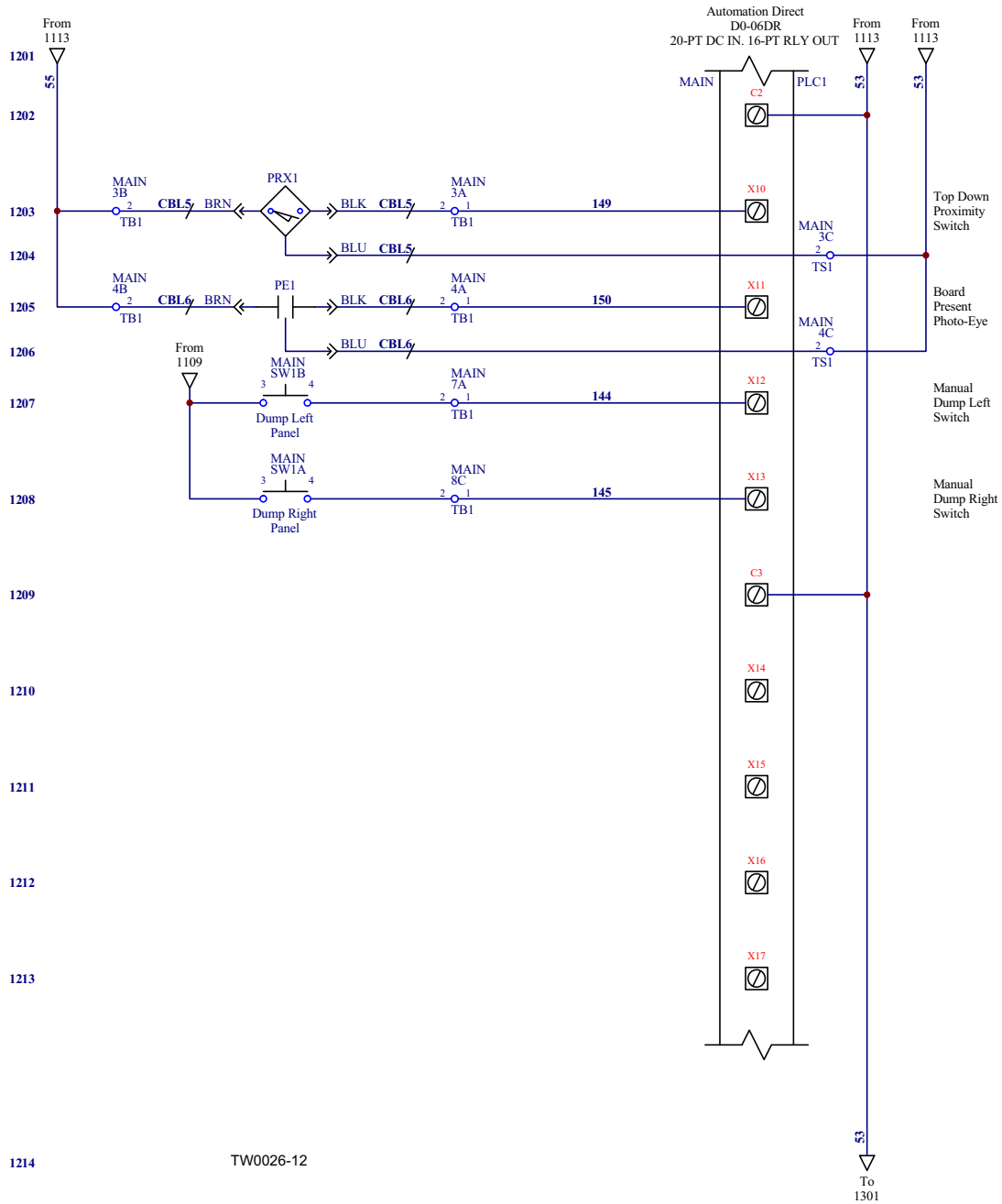


FIG. 4-36 (PAGE 10 OF 13)





**FIG. 4-37 (PAGE 11 OF 13)**



TW0026-12

12 14 10/17/2008 JRF JRF JRF  
 3-Way Deck PLC Inputs X10 - X17 000000 0.00

FIG. 4-38 (PAGE 12 OF 13)

# 4

## Electrical Information

*Electrical Symbol Diagram (TWC)*

1301

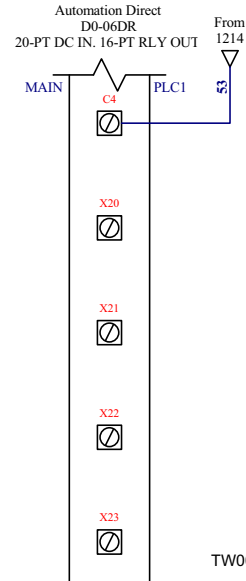
1302

1303

1304

1305

1306



**FIG. 4-39 (PAGE 13 OF 13)**

### 4.4 Electrical Symbol Diagram (TWC-1)

TWC

Rev. A1.00 - A3.00

**NOTE:** The switch connections for the Deck Right and Deck Left functions are shown correctly in these diagrams. The diagrams supplied with LT300 sawmills before 1/06 show these connections incorrectly reversed. Use these diagrams to troubleshoot/service the three-way deck option.

Page 1

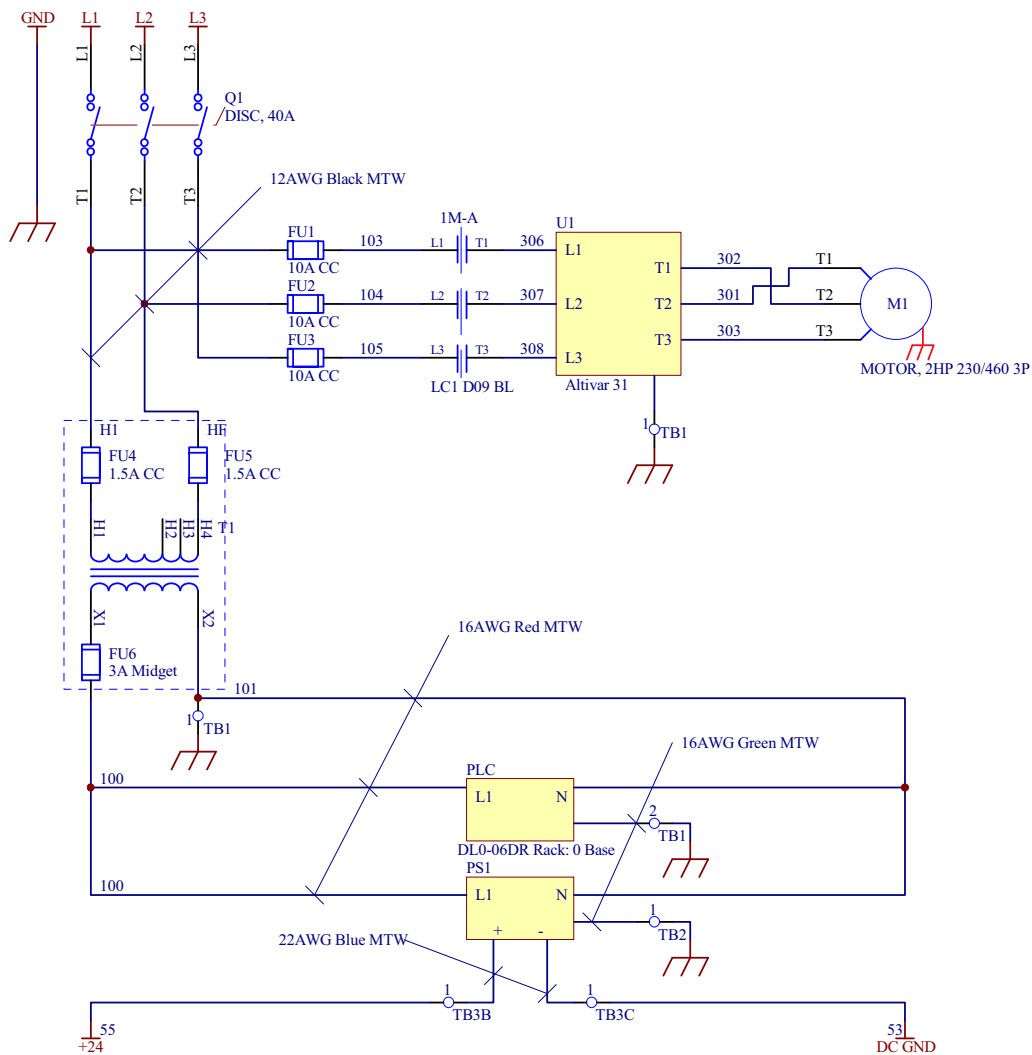
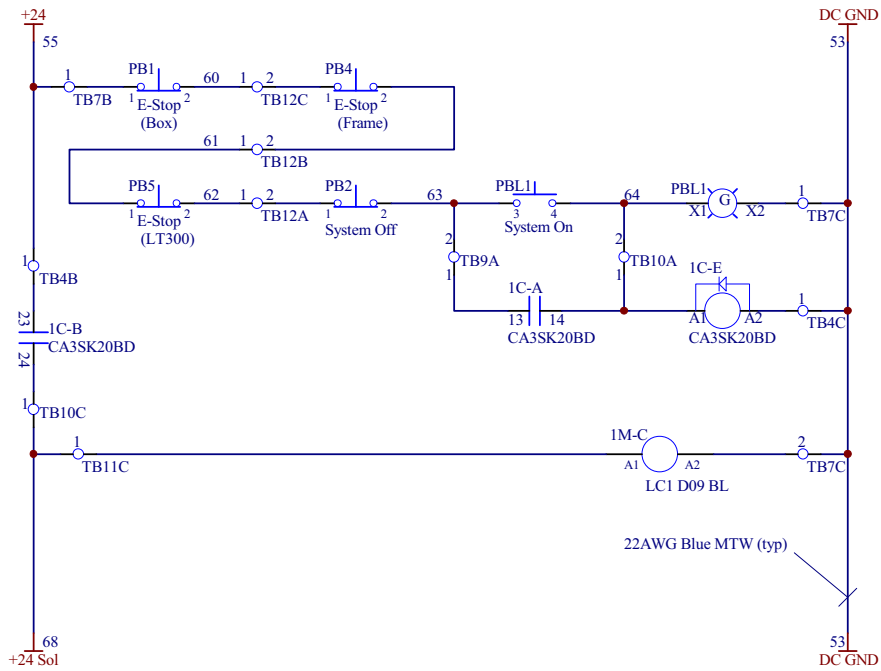


FIG. 4-40 (PAGE 1 OF 6)



TW0004-2B

**FIG. 4-41 (PAGE 2 OF 6)**

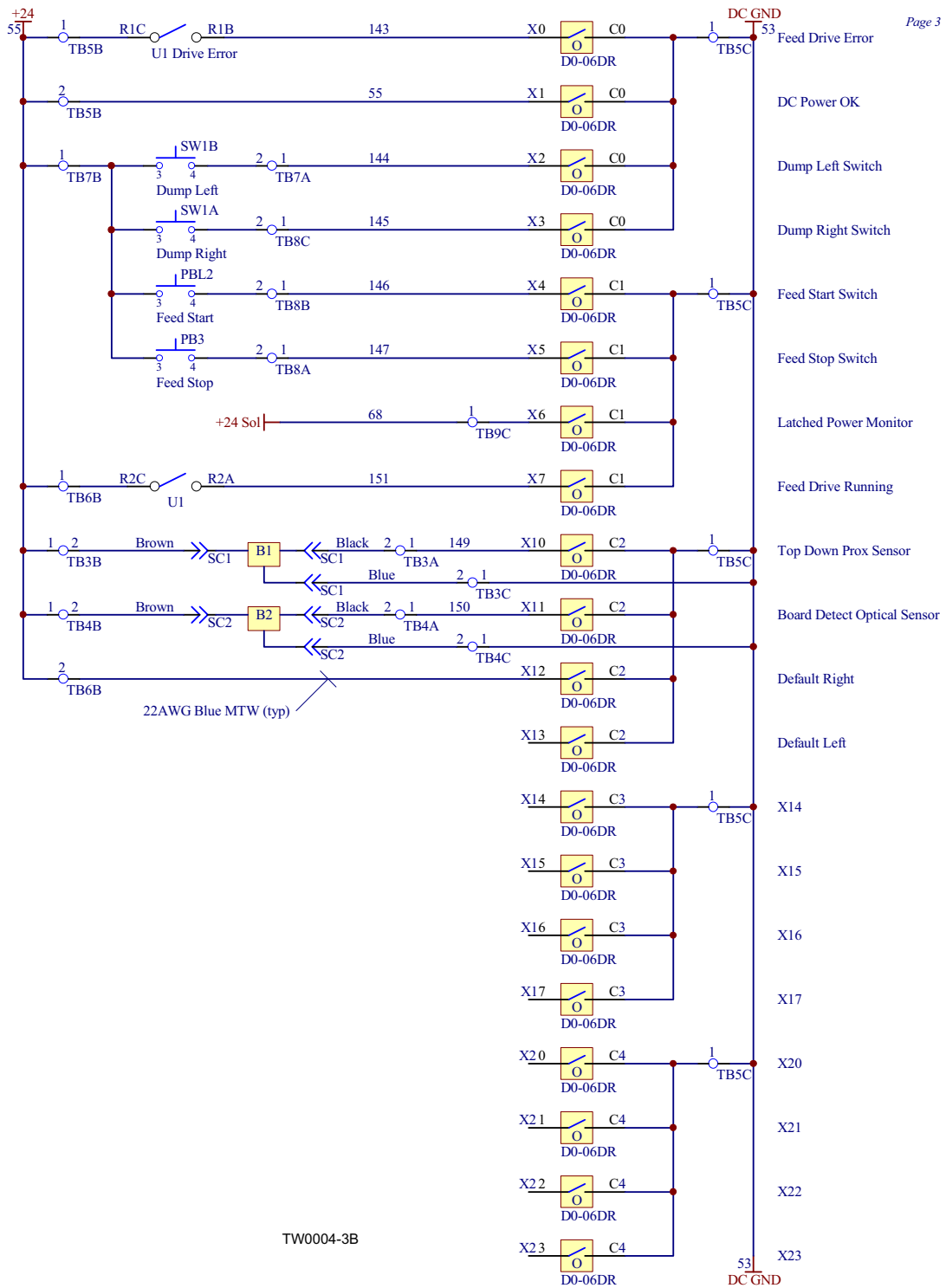
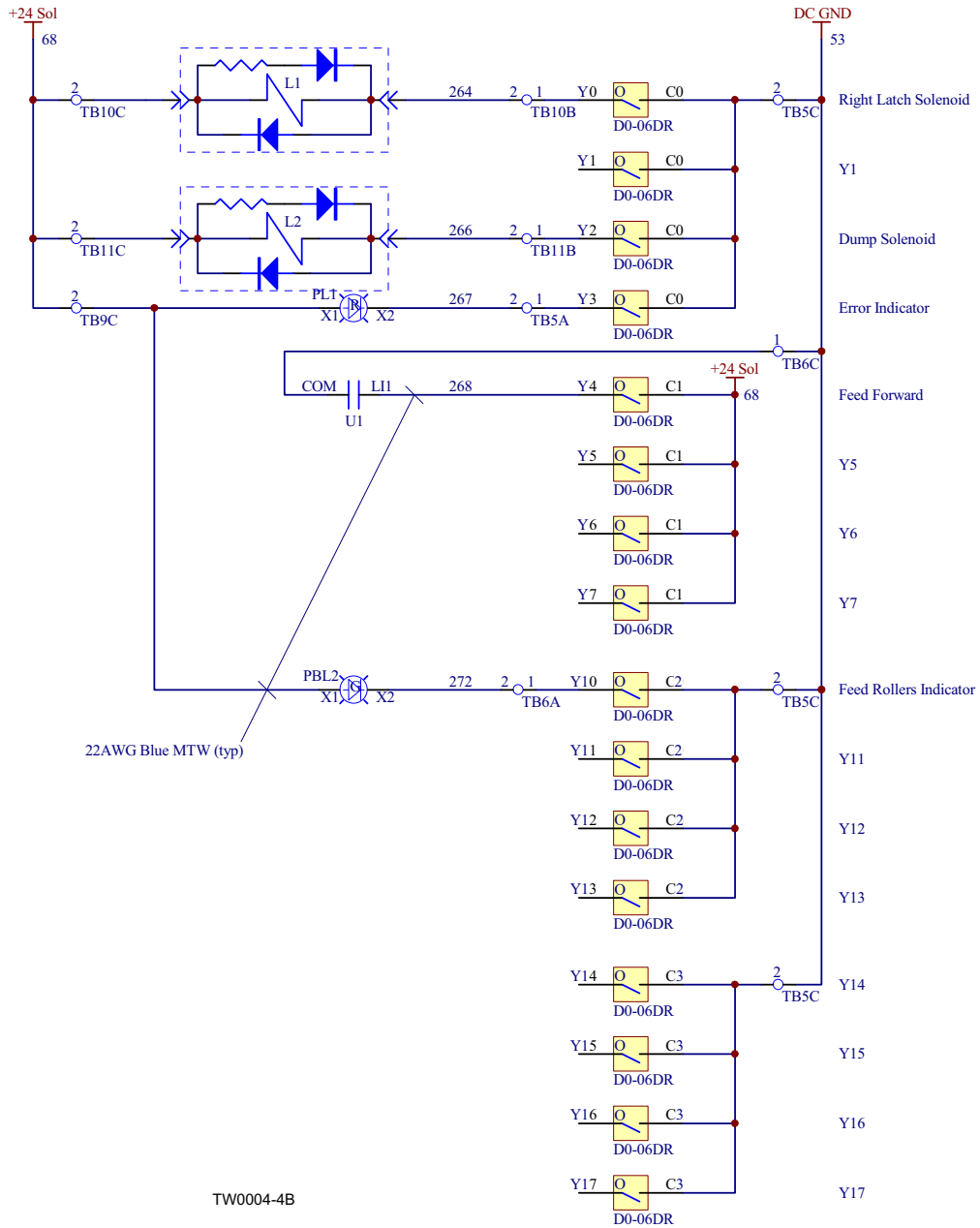
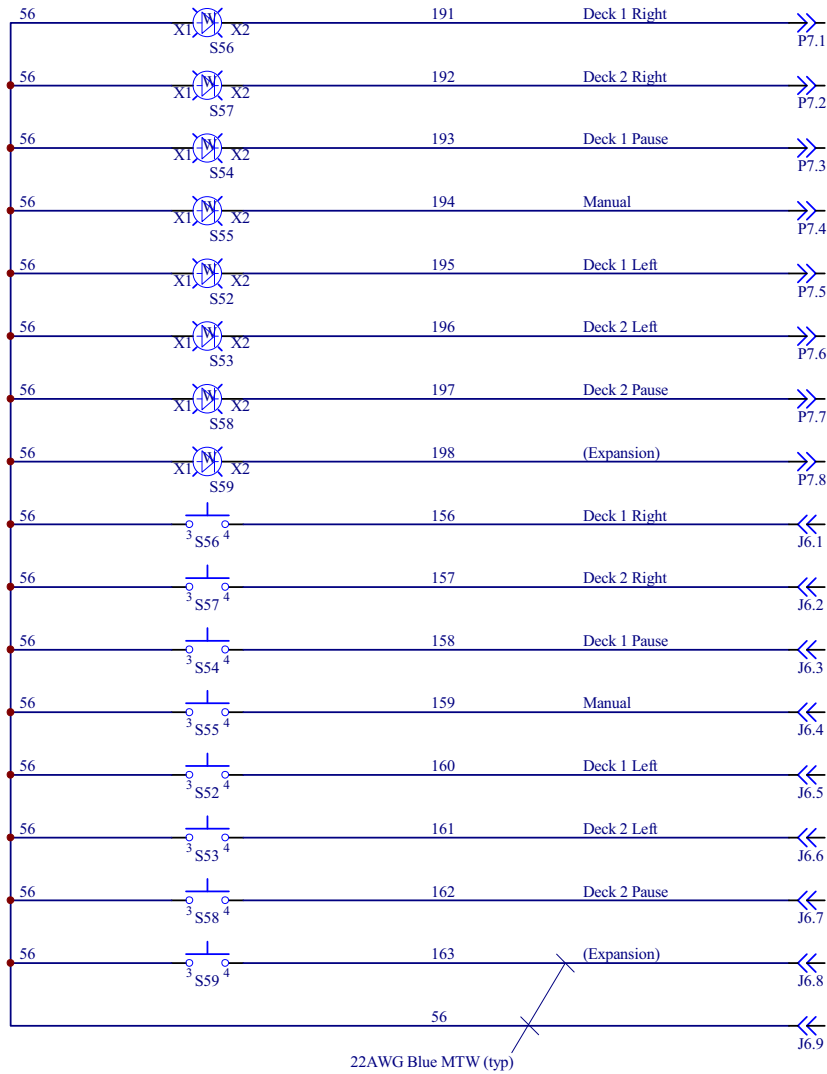


FIG. 4-42 (PAGE 3 OF 6)



**FIG. 4-43 (PAGE 4 OF 6)**



TW0004-5B

FIG. 4-44 (PAGE 5 OF 6)



# 4

## Electrical Information

### Electrical Symbol Diagram (TWC-1)

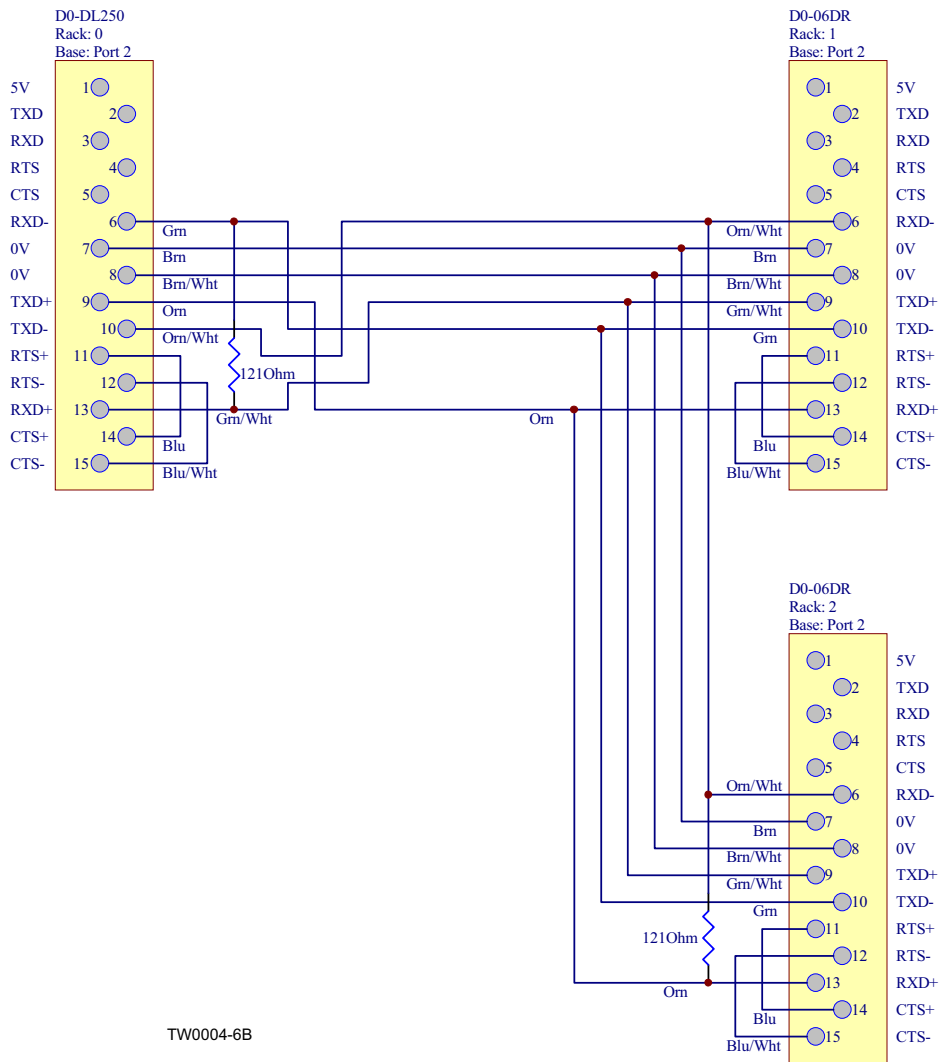


FIG. 4-45 (PAGE 6 OF 6)

4.5 Electrical Symbol Diagram (PCB Modbus)

TWC

Rev. A6.00+

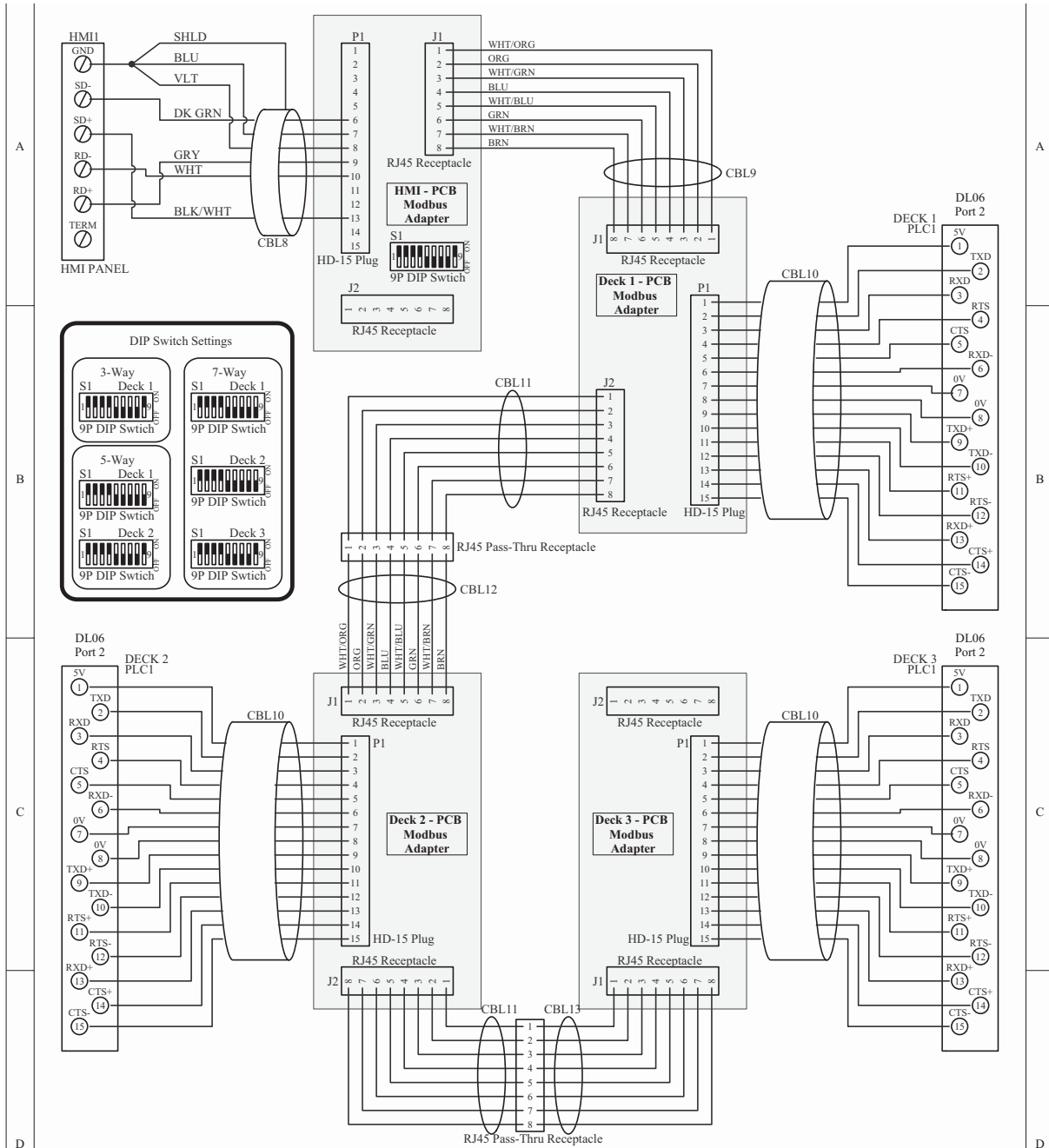
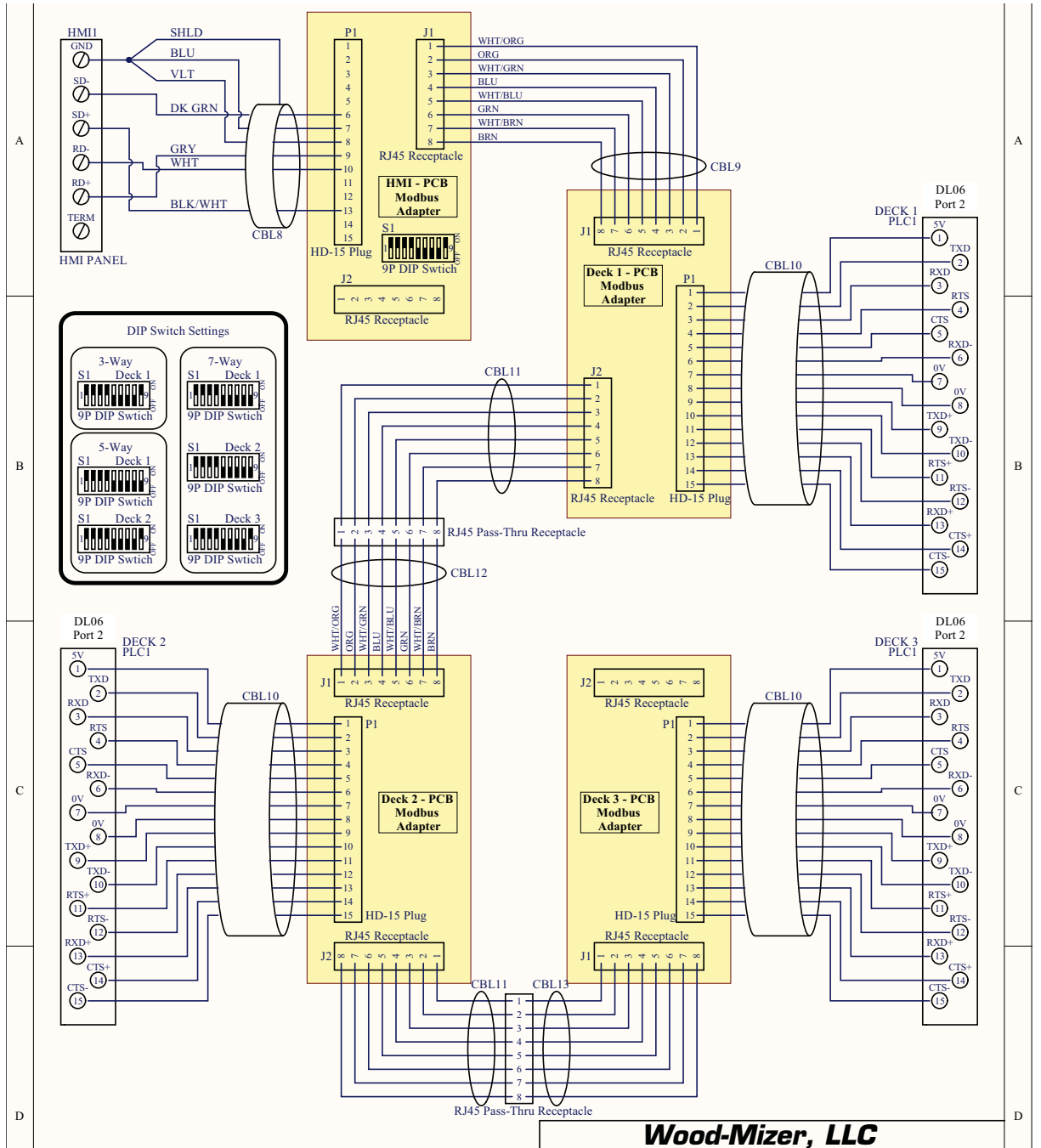


FIG. 4-46

4.6 Electrical Symbol Diagram (PCB Modbus)

TWC

Rev. A5.00 - A5.02



Wood-Mizer, LLC

FIG. 4-47

4.7 Electrical Symbol Diagram (PCB Modbus)

TWC

Rev. A4.00 - A4.01

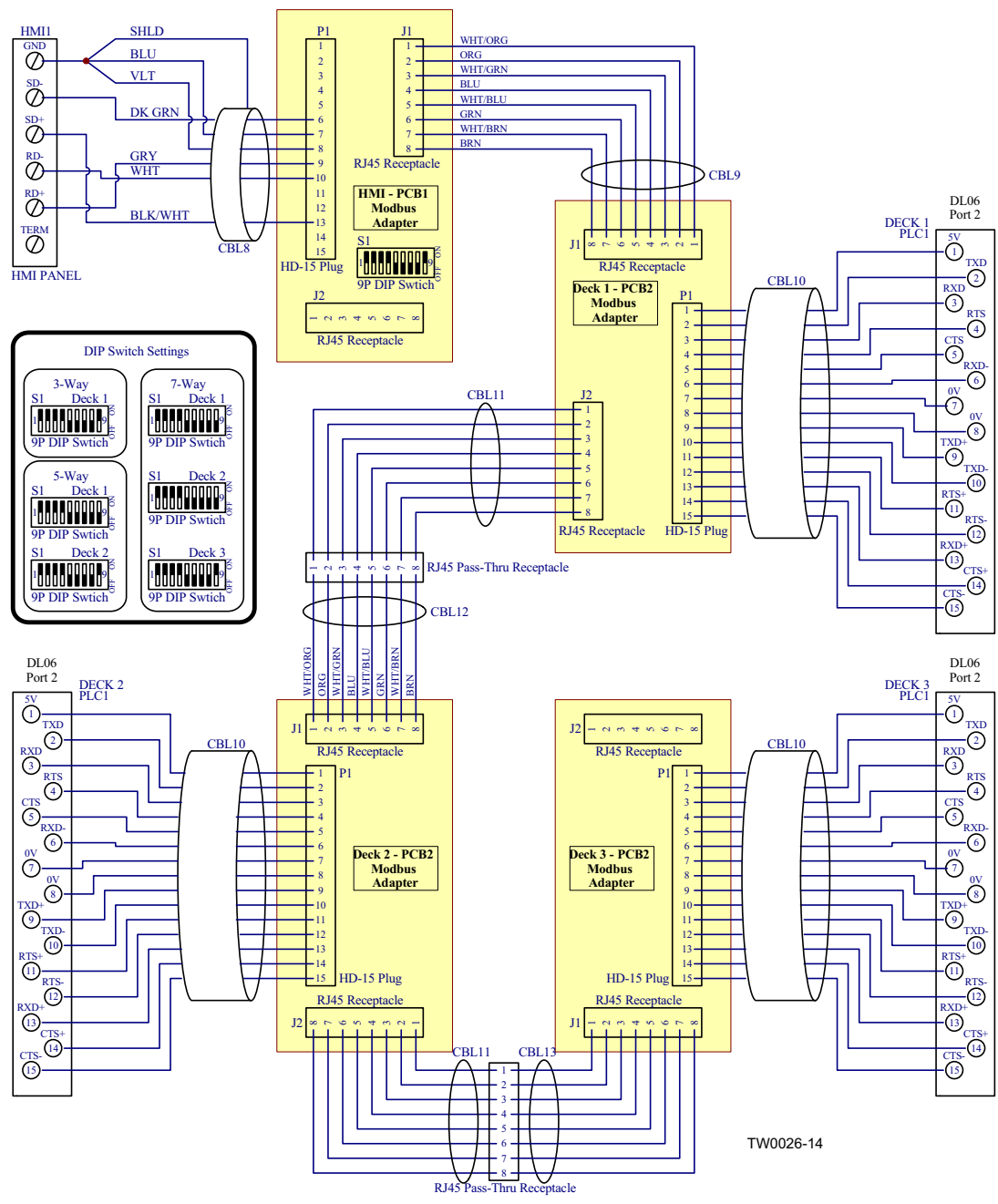


FIG. 4-88

# 4 Electrical Information

## Electrical Symbol Diagram (PCB Modbus)

### 4.8 Electrical Symbol Diagram (PCB Modbus)

TWC

Rev. A1.00 - A3.00

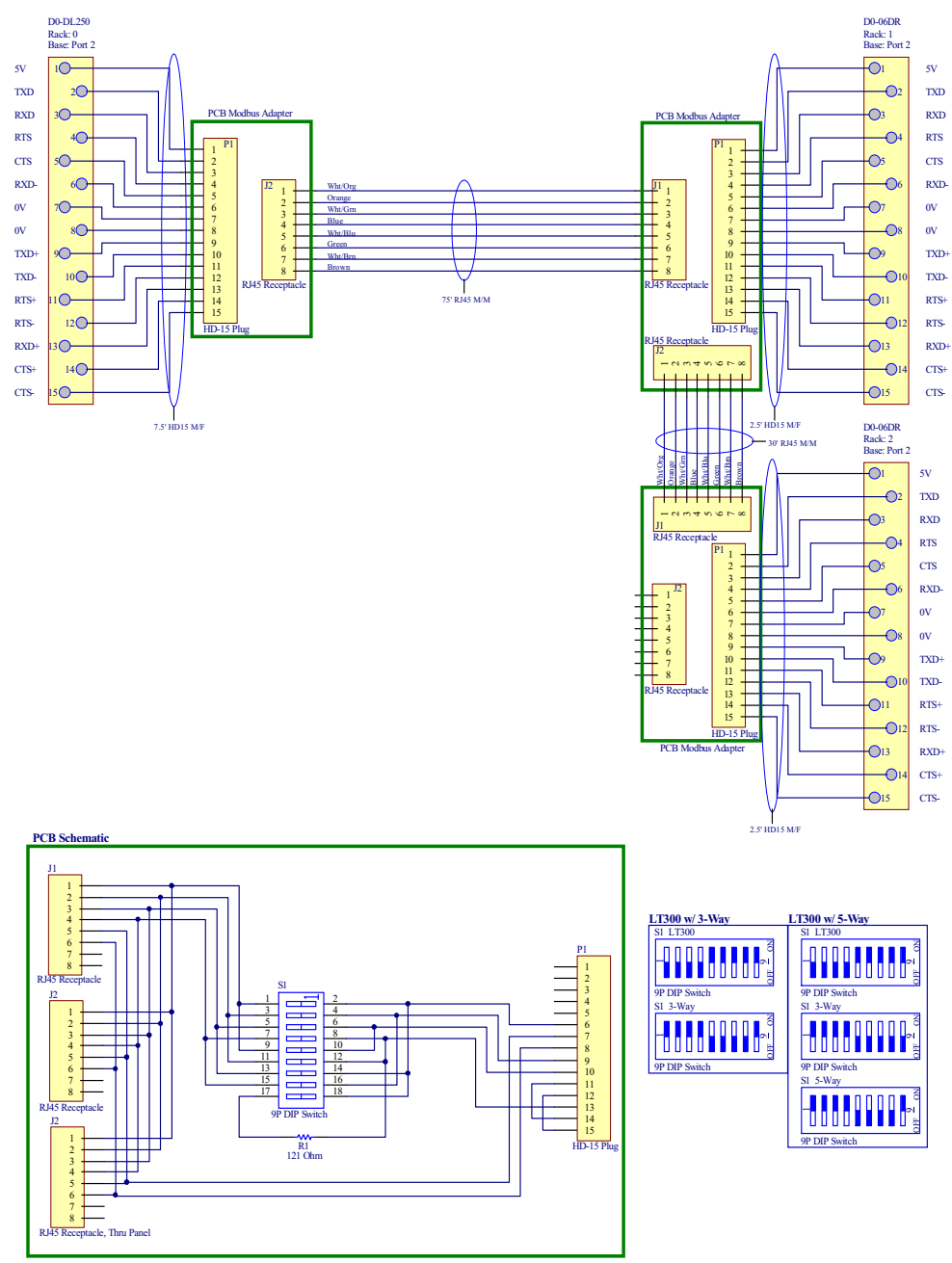


FIG. 4-49



# 4 Electrical Information

## Component Layout Diagram (Control Box)

### 4.9 Component Layout Diagram (Control Box)

TWC

Rev. A5.00+

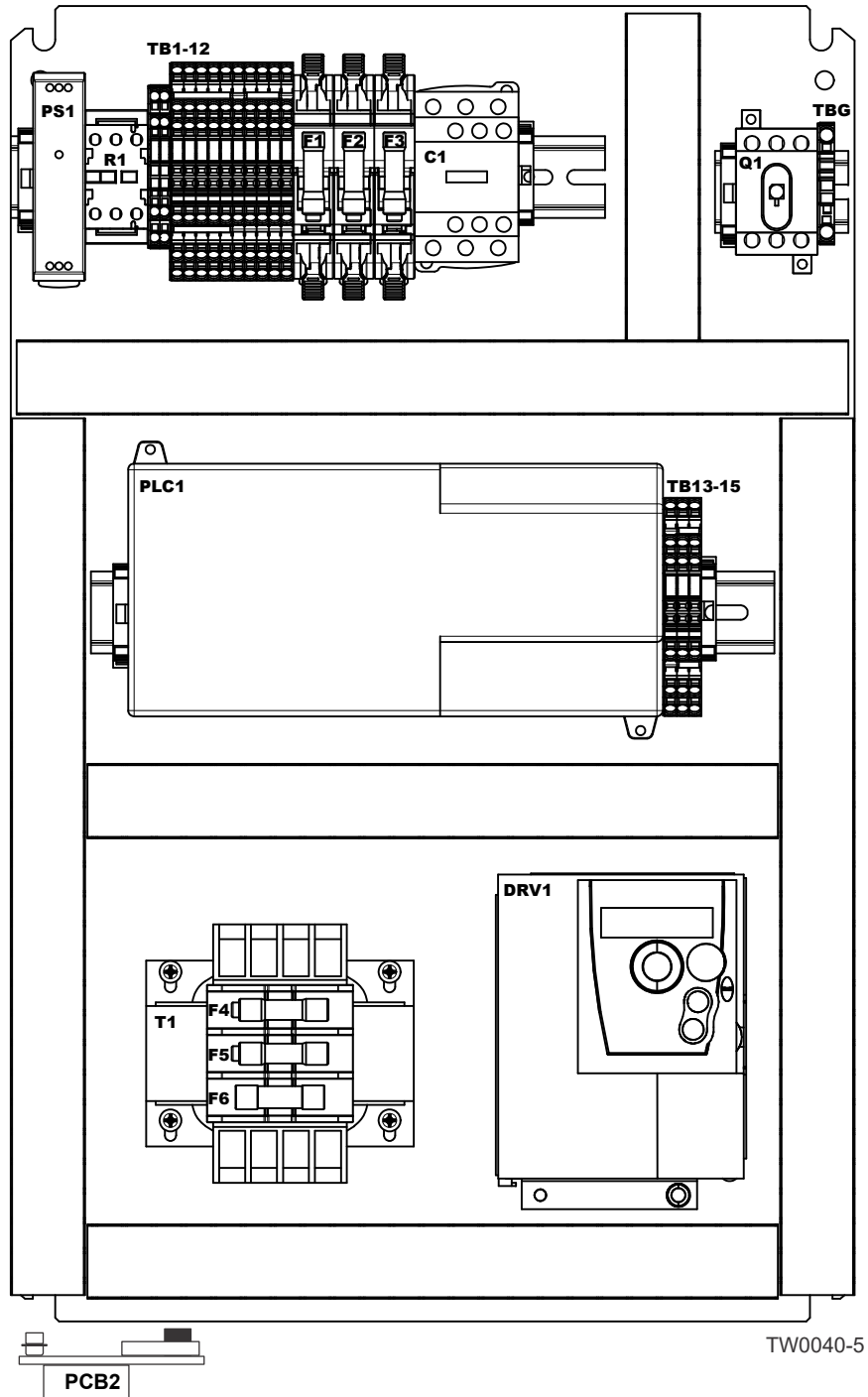


FIG. 4-50

4.10 Component Layout Diagram (Control Box)

TWC

Rev. A4.00 - A4.01

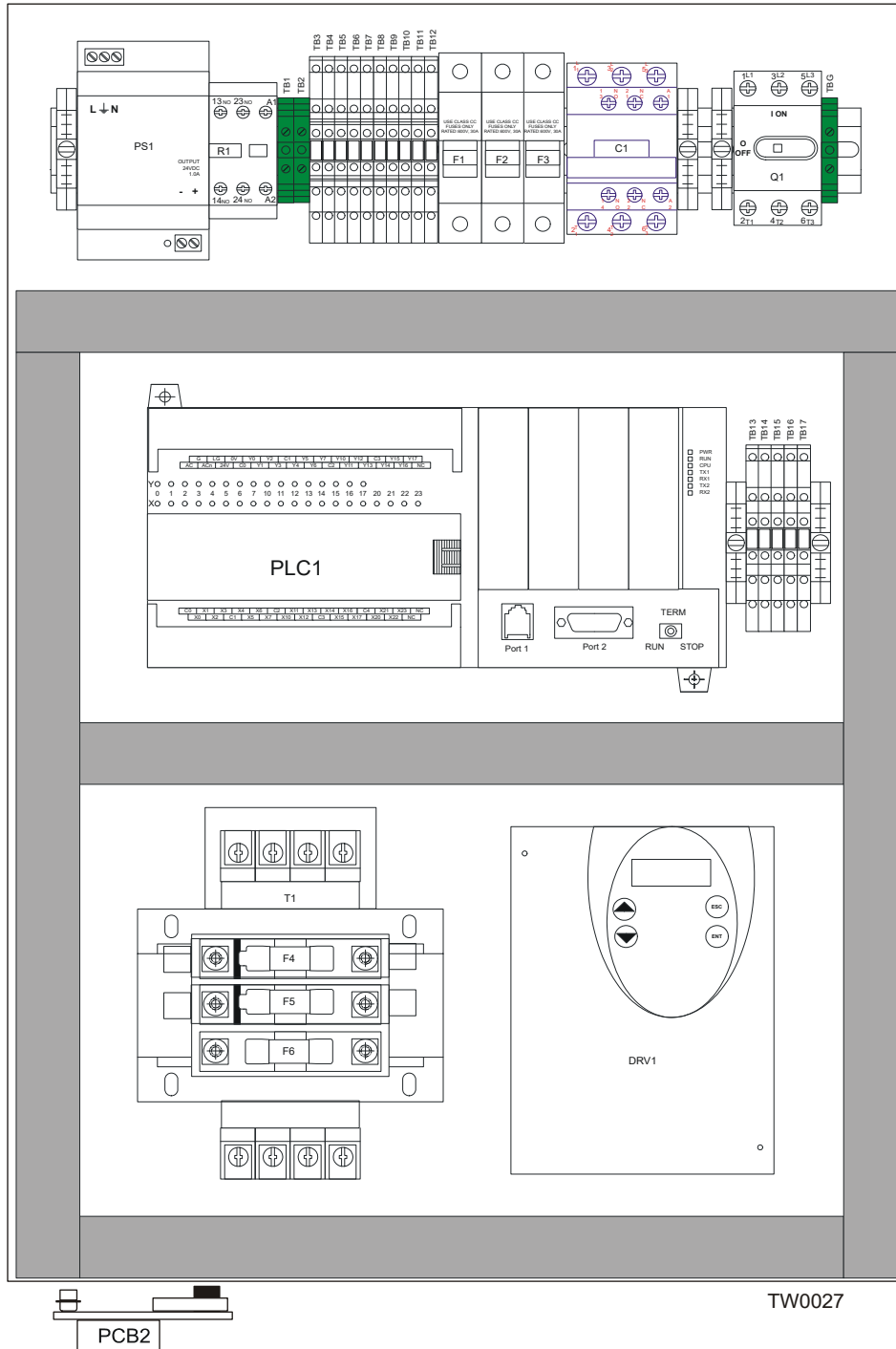


FIG. 4-51



# 4 Electrical Information

## Component Layout Diagram (Control Box)

### 4.11 Component Layout Diagram (Control Box)

TWC

Rev. A3.00

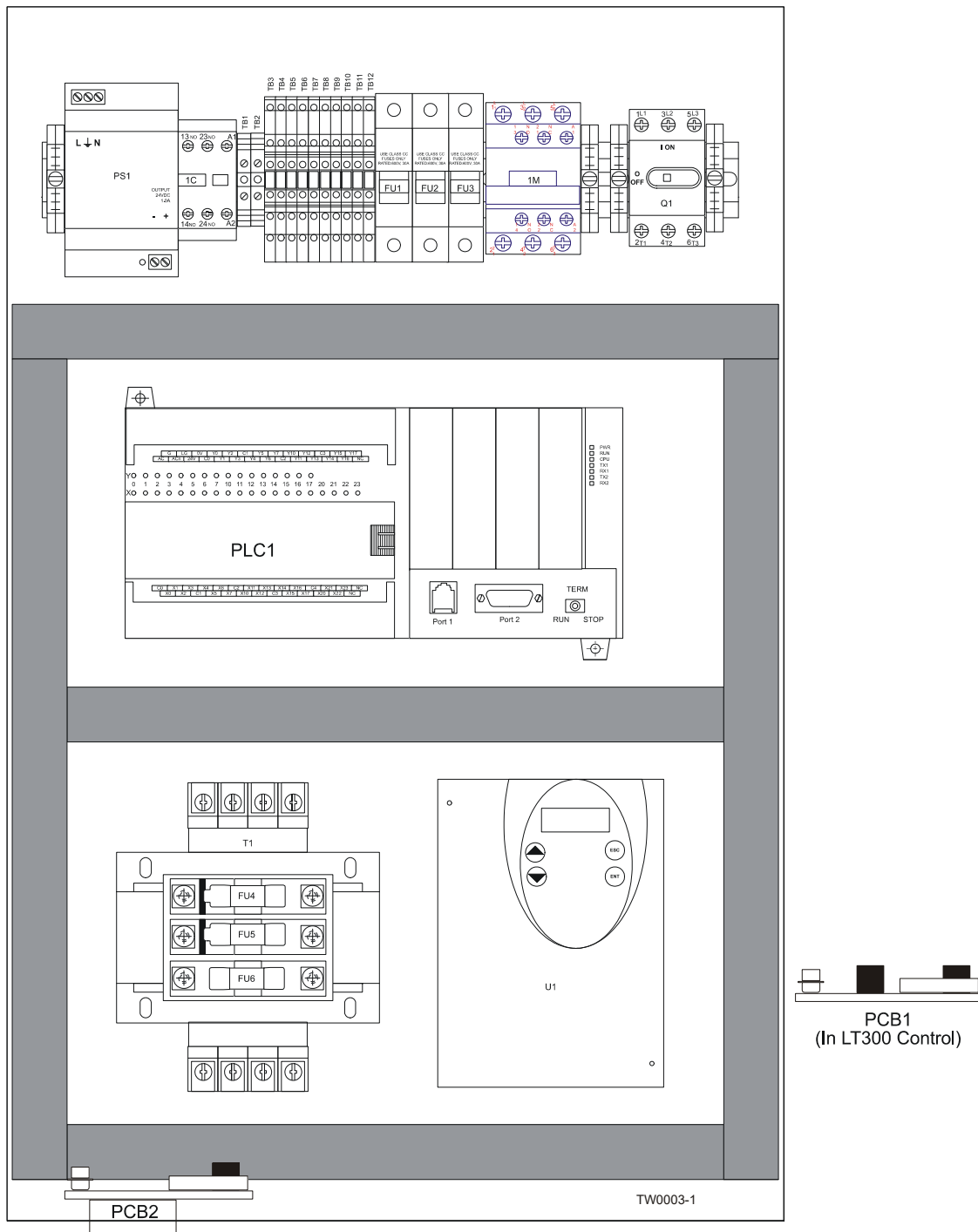


FIG. 4-52

4.12 Component Layout Diagram (Control Box)

TWC

Rev. A1.00 - A2.00

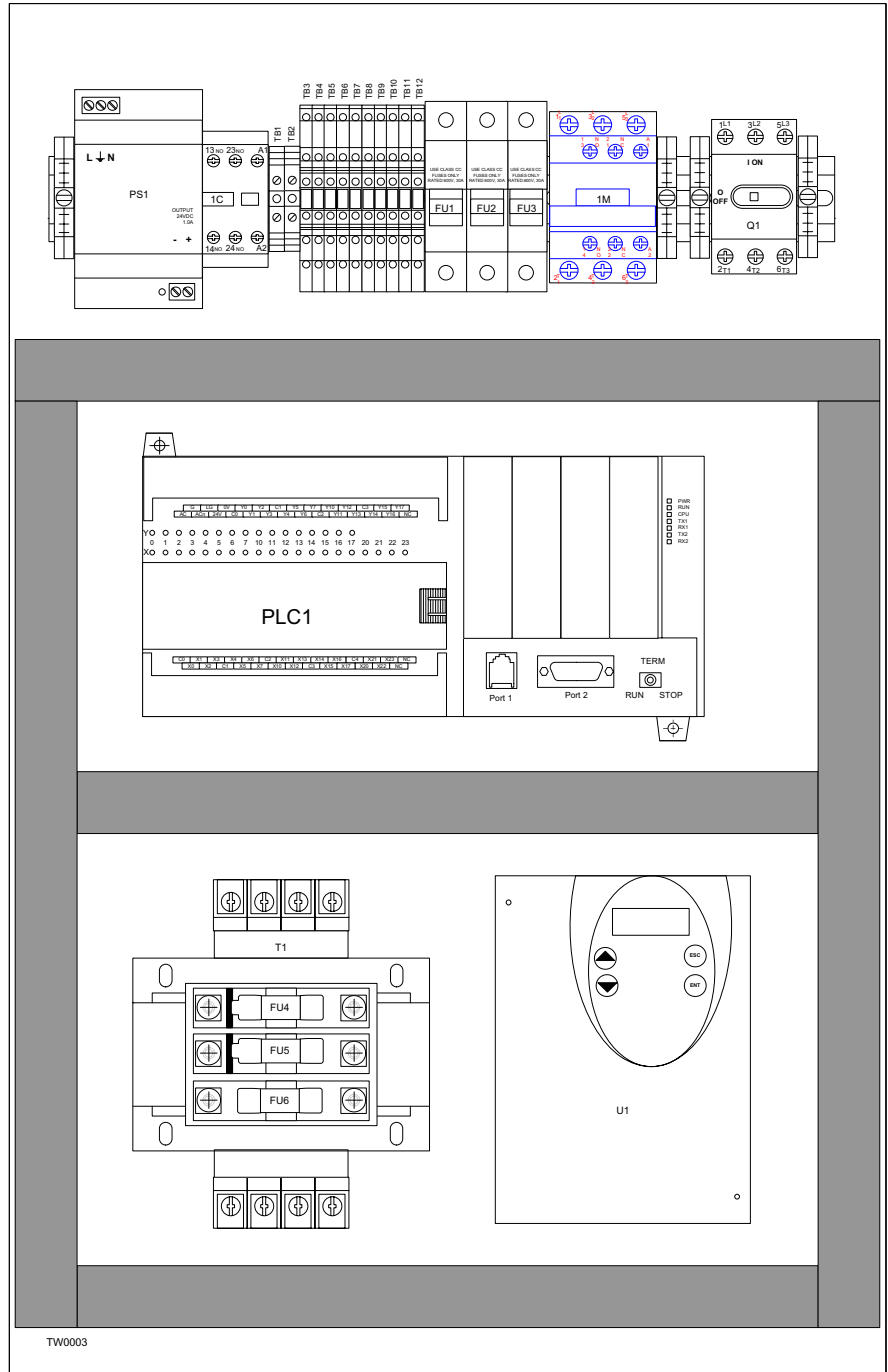
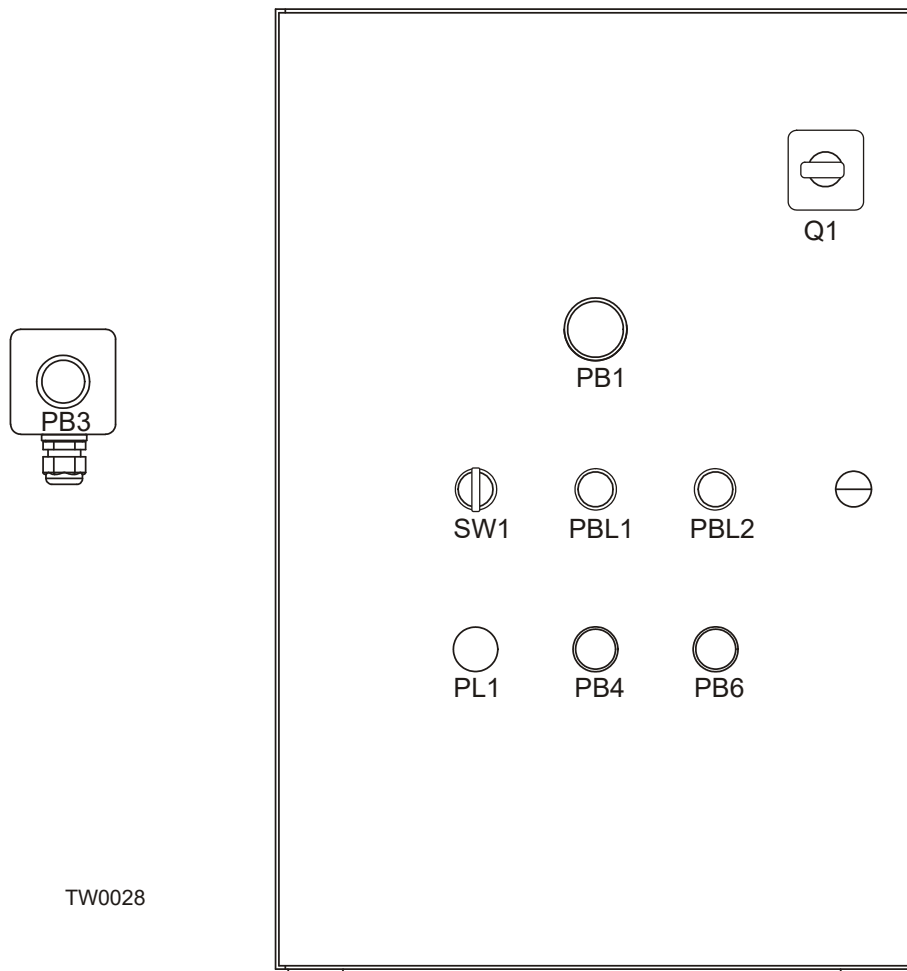


FIG. 4-53

### 4.13 Component Layout Diagram (Control Buttons)

TWC

Rev. A4.00+

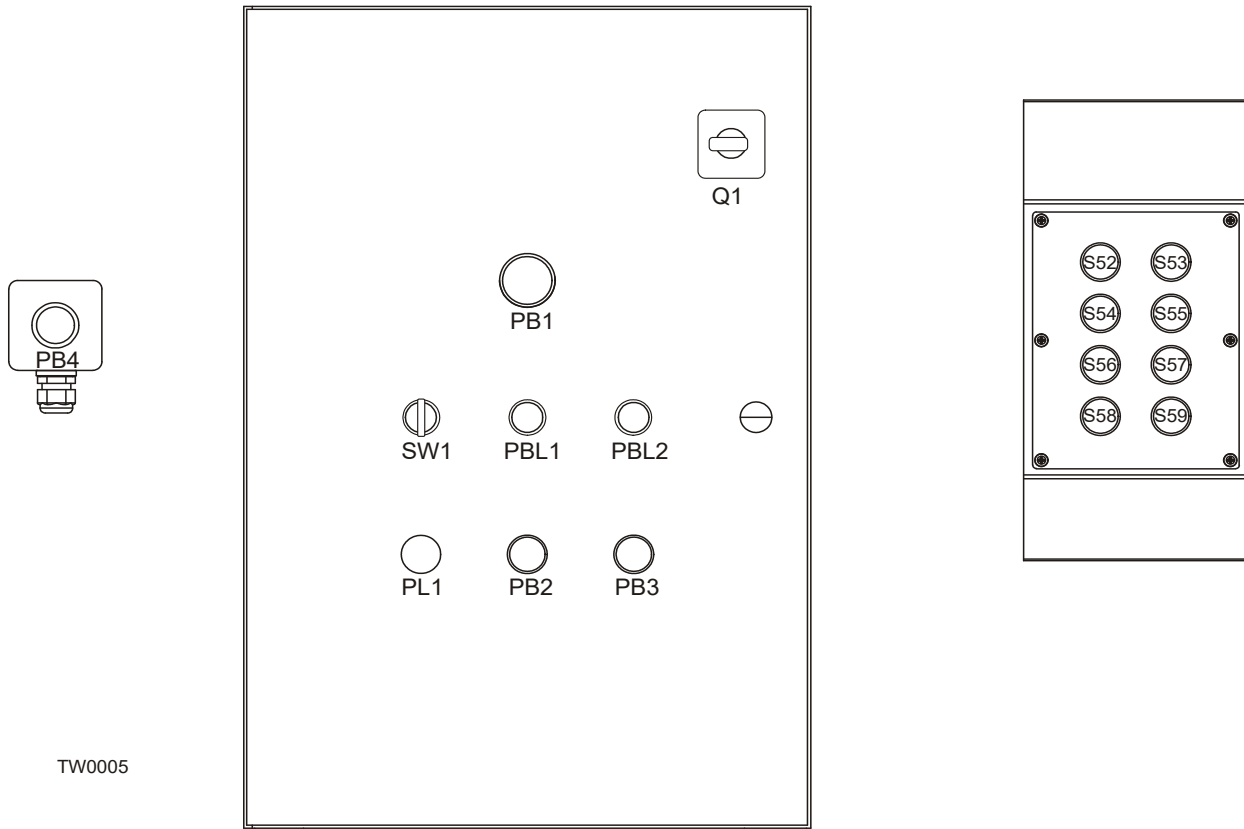


**FIG. 4-54**

### 4.14 Component Layout Diagram (Control Buttons)

TWC

Rev. A1.00 - A3.00



**FIG. 4-55**

### 4.15 DIP Switch Settings

TWC

Rev. A4.00+

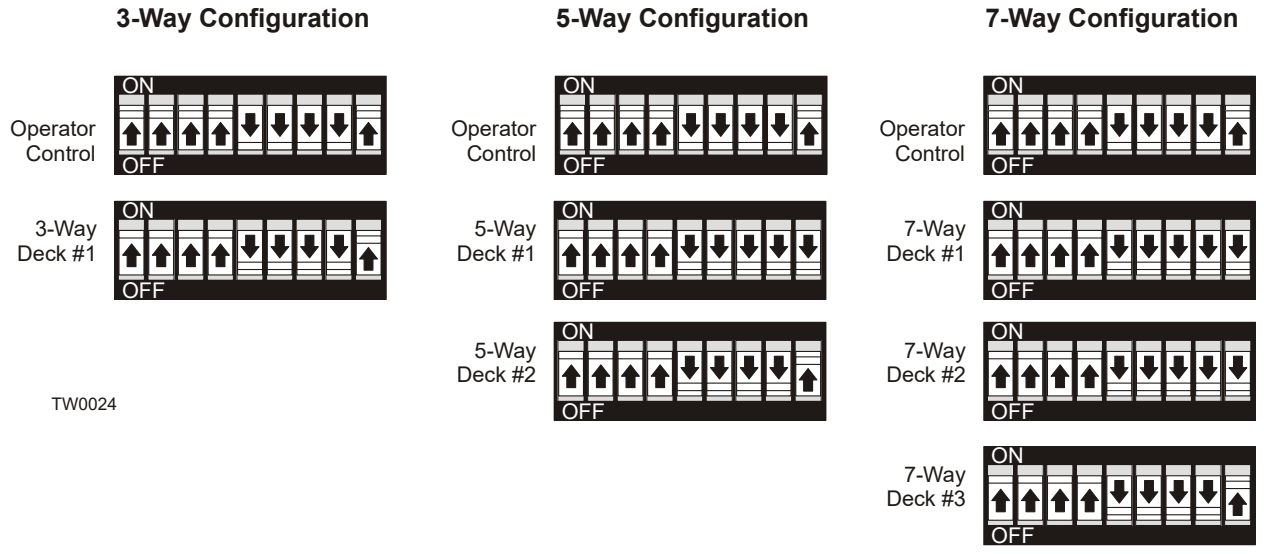


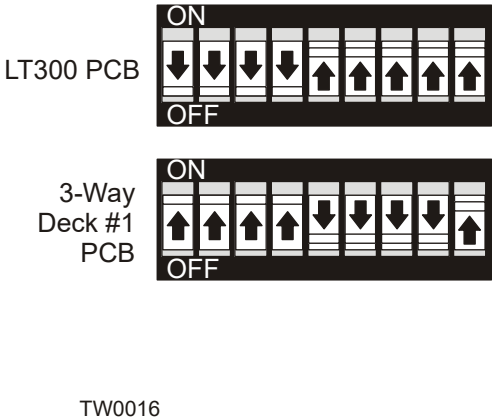
FIG. 4-56

### 4.16 DIP Switch Settings

TWC

Rev. A3.00

#### 3-Way Configuration



#### 5-Way Configuration

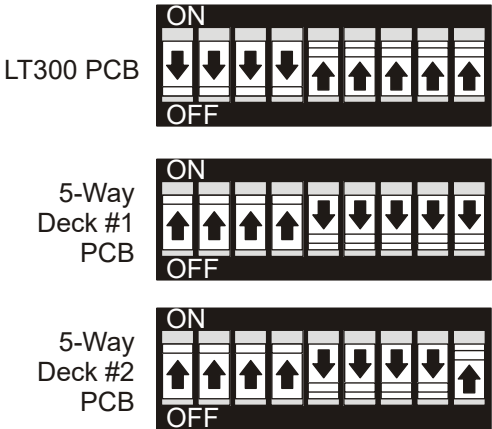


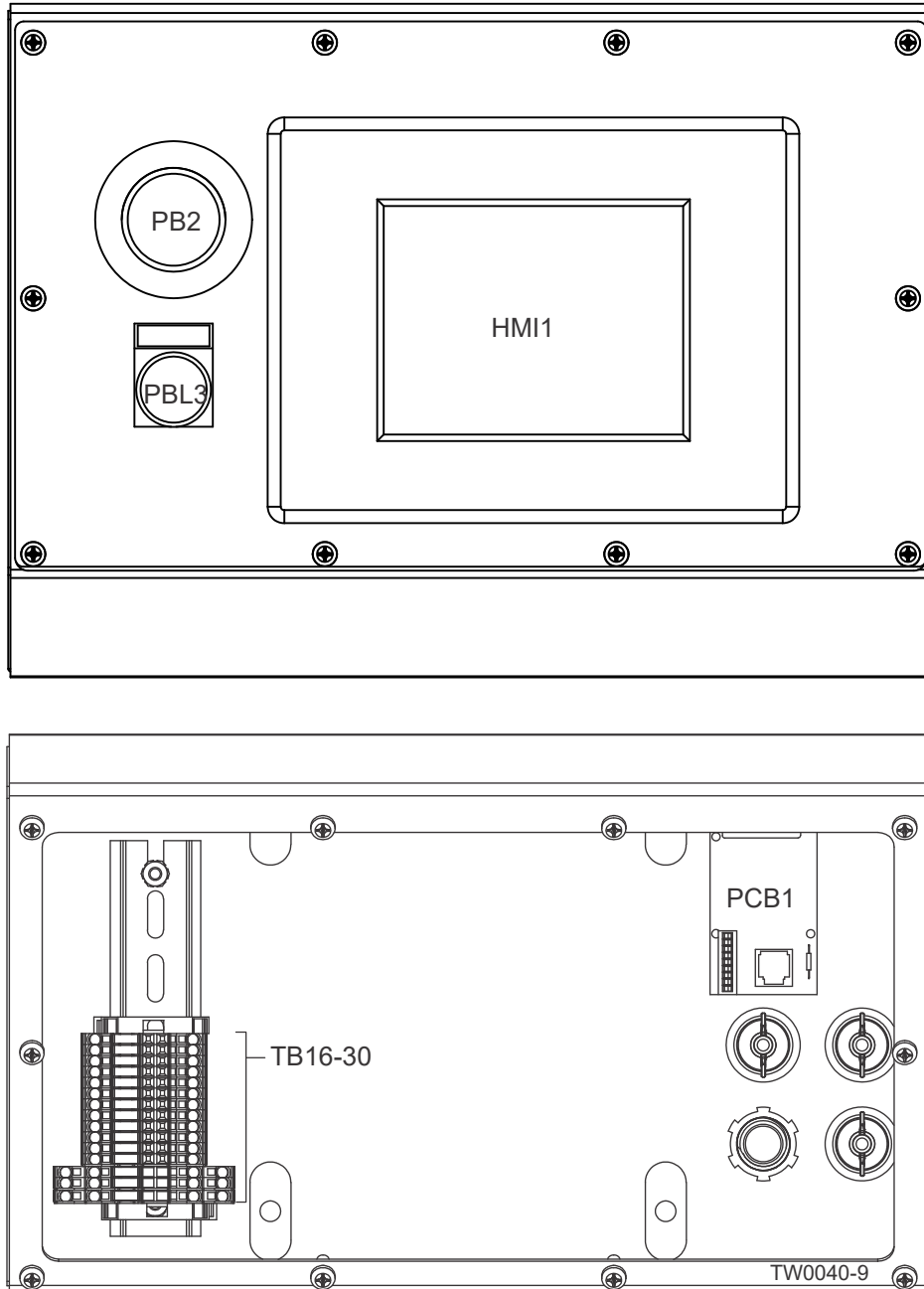
FIG. 4-57

**4** Electrical Information  
*Component Layout Diagram (Operator Control)*

**4.17 Component Layout Diagram (Operator Control)**

TWC

Rev. A5.00+



**FIG. 4-58**

### 4.18 Component Layout Diagram (Operator Control)

TWC

Rev. A4.00 - A4.01

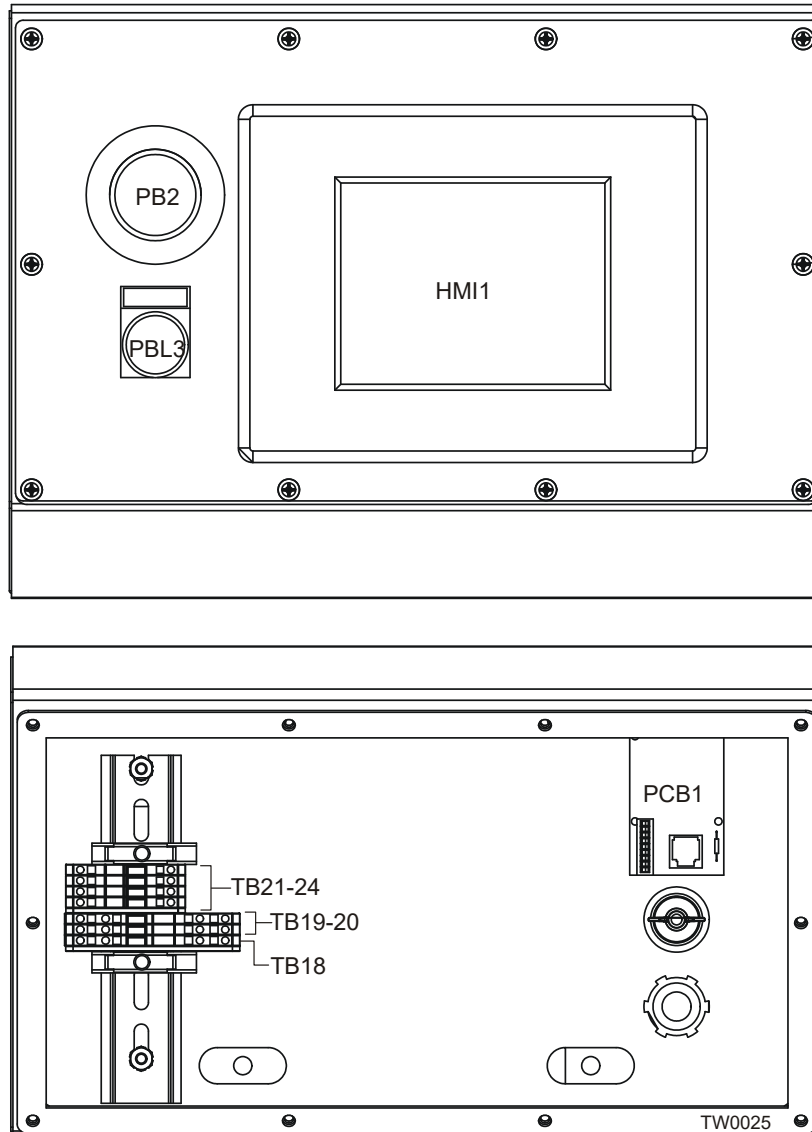


FIG. 4-59



## 4.19 Electrical Component List

TWC

Rev. A5.00+

| Component | Wood-Mizer Part No.   | Description  |
|-----------|-----------------------|--|
| C1        | 024890                | Contact, 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 <sup>1</sup> | 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        |

<sup>1</sup> Replaced 051676 AC Drive (Altivar 312) made obsolete by manufacturer (Rev. A6.00). Use 051676-FR Retrofit Kit to convert to 051676-1 AC Drive (Altivar 320).

## 4.20 Electrical Component List

TWC

Rev. A4.00 - A4.01

| Component    | Wood-Mizer Part No. | Description   |
|--------------|---------------------|---|
| C1           | 024890              | Contactora, 3 Pole 9A 24VDC Coil LP4D09                                   |
| CBL1         | N/A                 | Harness Assembly, TWC Deck Motor (part of Control Assembly)               |
| CBL2         | N/A                 | Harness Assembly, Remote E-Stop (part of Switch Assembly PB3 - see below) |
| CBL3         | 052218              | Cable Assembly, TWC Latch Solenoid  |
| CBL4         | 052217              | Cable Assembly, TWC Table Solenoid  |
| CBL5         | 052219              | Cable Assembly, TWC Board Prox  |
| CBL6         | 052220              | Cable Assembly, TWC Table Prox  |
| CBL7         | 053383              | Harness Assembly, Operator Control To Deck 1                              |
| CBL8, CBL10  | 052992              | Cable, 2.5' HD15 Male/Female  |
| CBL9         | 052988              | Cable Assembly, 100' RJ45 Ethernet  |
| CBL11        | 052994              | Cable Assembly, 1' RJ45 Ethernet  |
| CBL12, CBL13 | 052989              | Cable Assembly, 30' RJ45 Ethernet   |
| CBL15        | 053393              | Parts Kit, 5-Way Comm (Includes CBL 11 & 12)                              |
| CBL16        | 053394              | Parts Kit, 7-Way Comm (Includes CBL 11 & 13)                              |
| CBL17        | 053395              | Harness Assembly, LT300 E-Stop (Optional)                                 |
| D1           | 053364              | Display, 3-Way Operator Control w/Software                                |
| DRV1         | 051676              | AC Drive Assembly, 3-Way Deck w/Software                                  |
| 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 - PB2    | 024945              | Switch, Red 22mm XB4 Maintained E-Stop                                    |
|              | 050992              | Label, E-Stop   |
|              | 025161              | Switch Body, 1NC 22mm XB4   |
|              | 050540              | Contact, 10A NC AENL Series   |
| PB3          | 053366              | Box Assy, Three-Way Deck Remote E-Stop                                    |
| PB4          | 050151              | Switch Operator, Red Extended   |
|              | 025161              | Switch Body, 1NC 22mm XB4   |
| PB6          | 050151              | Switch Operator, Red Extended   |
|              | 025242              | Switch Body, 22mm 1NO XB4   |
| PCB1 - PCB2  | 052937              | PCB Assembly, 3/5-Way Modbus Adaptor                                      |
| PBL1 - PBL3  | 024974-3            | Switch, Green 22mm 1NO/1NC LED 24V XB4                                    |
| PE1          | 051831              | Sensor, Photo RA 18MM PNP w/Reflector                                     |
| PL1          | 024970-4            | Light, Red 24V 22mm LED XB4 Pilot   |
| PLC1         | 053361              | PLC Assembly, 3-Way Deck w/Software (TWC)                                 |
| PRX1         | 051439              | Sensor, Proximity M12 PNP NS Ex   |
| PS1          | 050365              | Power Supply, 24VDC 1.0A Switcher   |

|                       |                       |  |
|-----------------------|-----------------------|--|
| <b>Q1</b>             | 050903-1 <sup>1</sup> | Switch, 40A 3P Non-Fused Disconnect 6mm      |
|                       | 051673-1 <sup>1</sup> | Shaft, Disconnect 180mm x 6mm                |
|                       | 050883-1 <sup>1</sup> | 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>            | 051744                | Switch Operator, 3-Position Momentary Select |
|                       | 025242                | Switch Body, 22mm 1NO XB4                    |
|                       | 050539                | Contact, NO ZB4BK101                         |
| <b>T1</b>             | 051682                | Transformer, 208/240/480 150VAC 115sec       |
| <b>TB1 - TB2, TBG</b> | 051344                | Terminal Block, Green/Yellow Grounding       |
| <b>TB3 - TB17</b>     | 024908                | Terminal Block, Three Tier                   |
| <b>TB18</b>           | 052135                | Terminal Block, Four Position Ground         |
| <b>TB19 - TB20</b>    | 052244                | Terminal Block, Four Position Common         |
| <b>TB21 - TB24</b>    | 052254                | Terminal Block, Two Position Common          |

<sup>1</sup> 5mm Disconnect Shaft OXS5X180 replaced by vendor with 6mm shaft OXS6X180 (2/10). Replacement of any disconnect component requires replacement of disconnect, shaft and operator handle (050903-1, 050883-1 & 051673-1).

## 4.21 Electrical Component List

*TWC*

*Rev. A1.00 - A3.00*

| <b>Component</b>   | <b>AWMV Part No.</b> | <b>Description</b>                       |
|--------------------|----------------------|--|
| <b>1C</b>          | 051684               | Relay, 24VDC 2 NO IEC Control            |
| <b>1M</b>          | 024890               | Contact, 3 Pole 9A 24VDC Coil LP4D09     |
| <b>B1</b>          | 051439               | Sensor, Proximity M12 PNP NS Ex          |
| <b>B2</b>          | 051831               | Sensor, Photo RA 18MM PNP w/Reflector    |
| <b>FU1 - FU3</b>   | 051957 <sup>1</sup>  | Fuse, 10A Class CC Time Delay Rejection  |
| <b>FU4 - FU5</b>   | 051686-1_5           | Fuse, 1.5A Class CC Time Delay Rejection |
| <b>FU6</b>         | 051761               | Fuse, 3A Midget Slo-Blow 250VAC          |
| <b>M1</b>          | 042390               | Motor, 2HP 230/460V 3P                   |
| <b>PB1</b>         | 024945               | Switch, Red 22mm XB4 Maintained E-Stop   |
|                    | 050992               | Label, E-Stop                            |
|                    | 025161               | Switch Body, 1NC 22mm XB4                |
| <b>PB2</b>         | 050151               | Switch Operator, Red Extended            |
|                    | 025161               | Switch Body, 1NC 22mm XB4                |
| <b>PB3</b>         | 050151               | Switch Operator, Red Extended            |
|                    | 025242               | Switch Body, 22mm 1NO XB4                |
| <b>PB4</b>         | 024570               | Box Assy, 40mm 10A NC Cont E-Stop        |
| <b>PCB1</b>        | 052951 <sup>2</sup>  | PCB Assembly, LT300 Modbus Adaptor       |
| <b>PCB2</b>        | 052937 <sup>2</sup>  | PCB Assembly, 3/5-Way Modbus Adaptor     |
| <b>PBL1 - PBL2</b> | 024974-3             | Switch, Green 22mm 1NO/1NC LED 24V XB4   |

## 4

**Electrical Information***Electrical Component List*

|                   |                       |  |
|-------------------|-----------------------|--|
| <b>PL1</b>        | 024970-4              | Light, Red 24V 22mm LED XB4 Pilot              |
| <b>PLC1</b>       | 051681                | PLC Assembly, 3-Way Deck w/Software (TWC-1)    |
|                   | 052824                | PLC Assembly, 3-Way Deck w/Software (TWC-2)    |
| <b>PS1</b>        | 050365                | Power Supply, 24VDC 1.0A Switcher              |
| <b>Q1</b>         | 050903-1 <sup>3</sup> | Switch, 40A 3P Non-Fused Disconnect 6mm        |
|                   | 051673-1 <sup>3</sup> | Shaft, Disconnect 180mm x 6mm                  |
|                   | 050883-1 <sup>3</sup> | Switch, Disconnect Red/Yellow 6mm              |
| <b>S52 - S59</b>  | 025237-13             | Switch Operator, White LED 22mm Momentary Ext. |
|                   | 025236-11             | Switch Body, 1NO 22mm 24V XB4 White LED        |
| <b>SW1</b>        | 051744                | Switch Operator, 3-Position Momentary Select   |
|                   | 025242                | Switch Body, 22mm 1NO XB4                      |
|                   | 050539                | Contact, NO ZB4BK101                           |
| <b>T1</b>         | 051682                | Transformer, 208/240/480 150VAC 115sec         |
| <b>TB1 - TB2</b>  | 051344                | Terminal Block, Green/Yellow Grounding         |
| <b>TB3 - TB12</b> | 024908                | Terminal Block, Three Tier                     |
| <b>U1</b>         | 051676                | AC Drive Assembly, 3-Way Deck w/Software       |

<sup>1</sup> Replaces 051686-10 3/06 (duplicate parts).

<sup>2</sup> Modbus Adaptor PCBs added Rev. A3.00. Use Retrofit 052997 for 3-Way configurations or 052998 for 5-Way configurations to replace cabling and improve reliability.

<sup>3</sup> 5mm Disconnect Shaft OXS5X180 replaced by vendor with 6mm shaft OXS6X180 (2/10). Replacement of any disconnect component requires replacement of disconnect, shaft and operator handle (050903-1, 050883-1 & 051673-1).

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