

INDUSTRIAL PRODUCTS

Safety, Operation, Maintenance & Parts Manual

TWC

rev. A3.00



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

Form #1207

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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.

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 AWMV products. All AWMV 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.

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.

See Figure 2-1. A single deck (TWC-1) can be used to route material up to 9 feet (2,75m) long in three directions. [See Section 2.2](#) for installation instructions for this configuration.

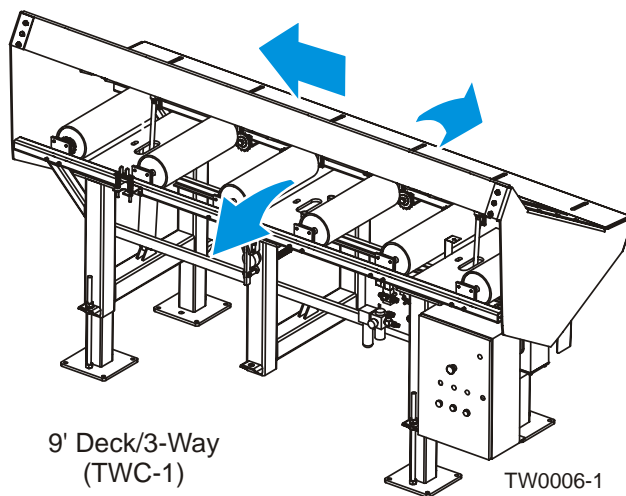


FIG. 2-1

2 Setup & Operation

Overview

See **Figure 2-2**. A second deck (TWC-2) can be added to route material up to 9 feet (2,75m) long in five directions. See XXX for installation instructions for this configuration.

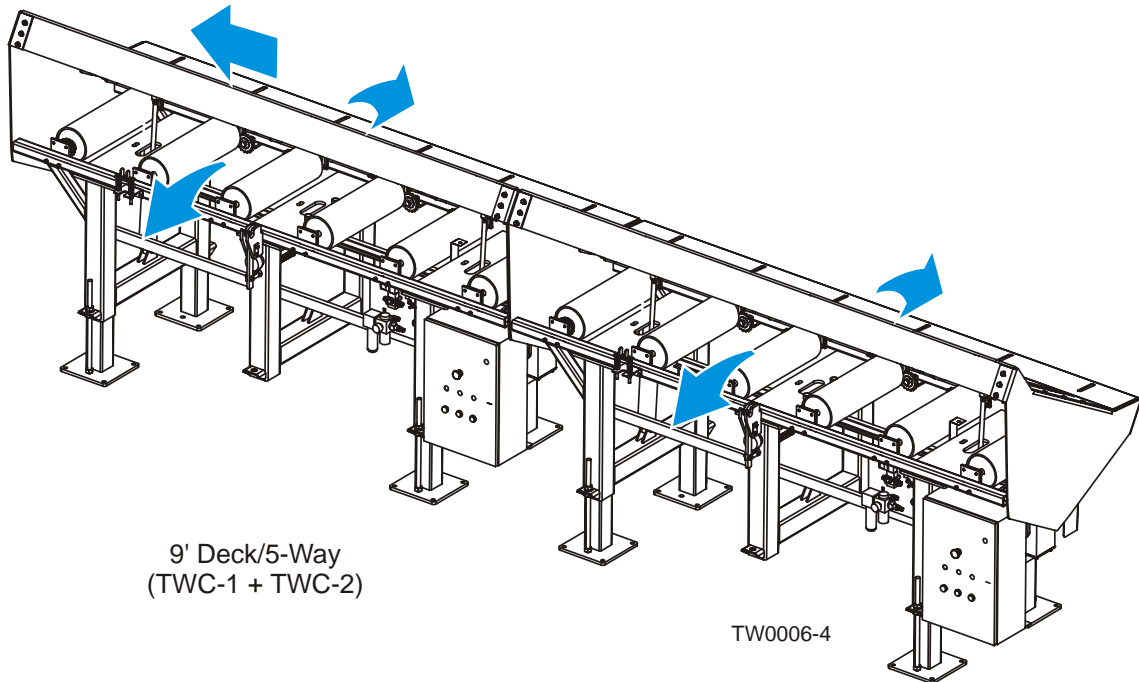


FIG. 2-2

See Figure 2-3. A deck extension (TWC-EXT) can be added to a single deck to route material up to 18 feet (5,5m) long in three directions. See Section 2.3 for installation instructions for this configuration.

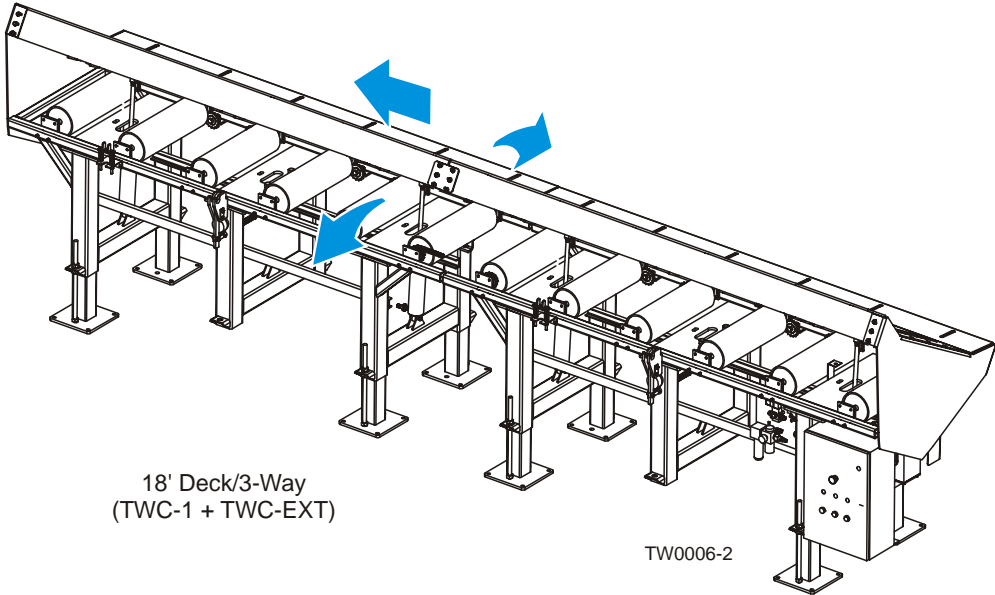


FIG. 2-3

See Figure 2-4. A deck extension (TWC-EXT) can be added to two decks to route material up to 18 feet (5,5m) long in five directions. See xxx for installation instructions for this configuration.

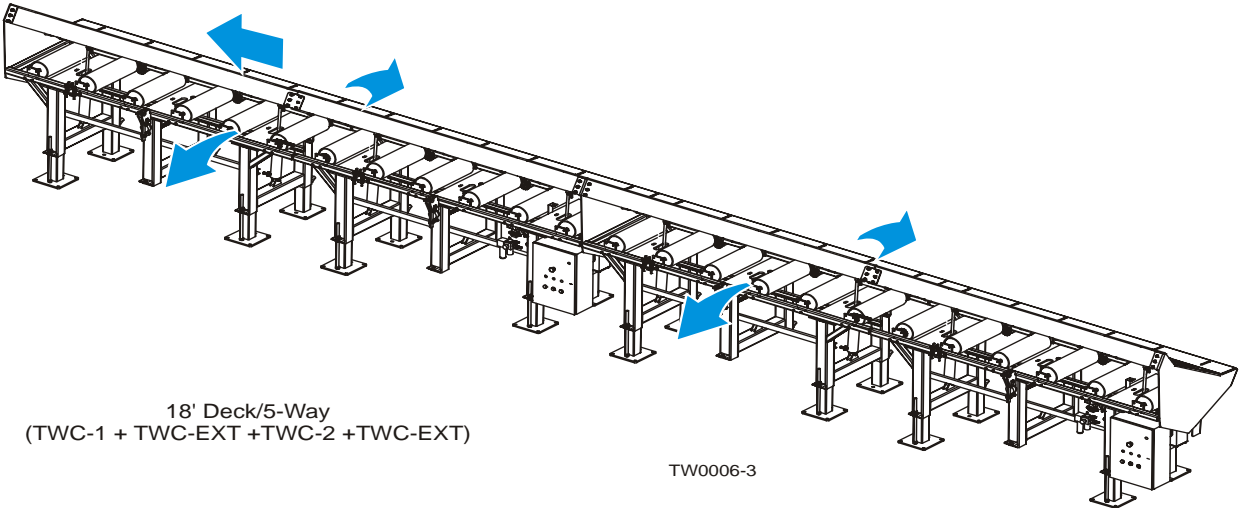


FIG. 2-4


2 Setup & Operation

Installation (Single 9' Deck)

2.2 Installation (Single 9' Deck)

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 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 2-5.

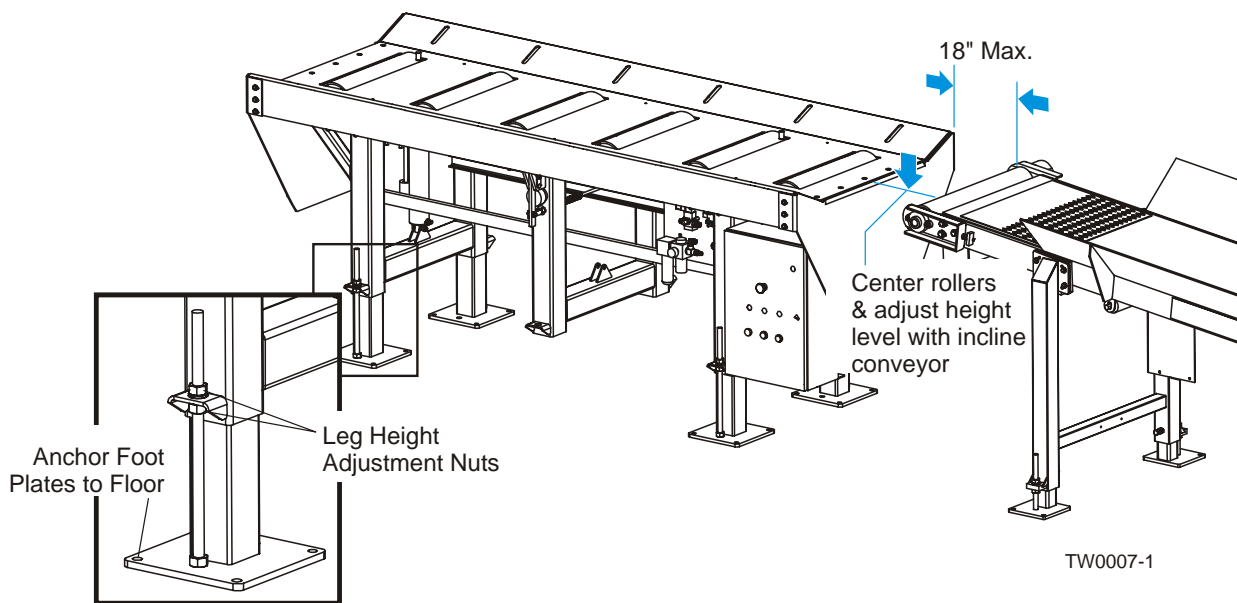


FIG. 2-5

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.

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 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

2 Setup & Operation

Installation (Single 9' Deck)

See Figure 2-1. 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.

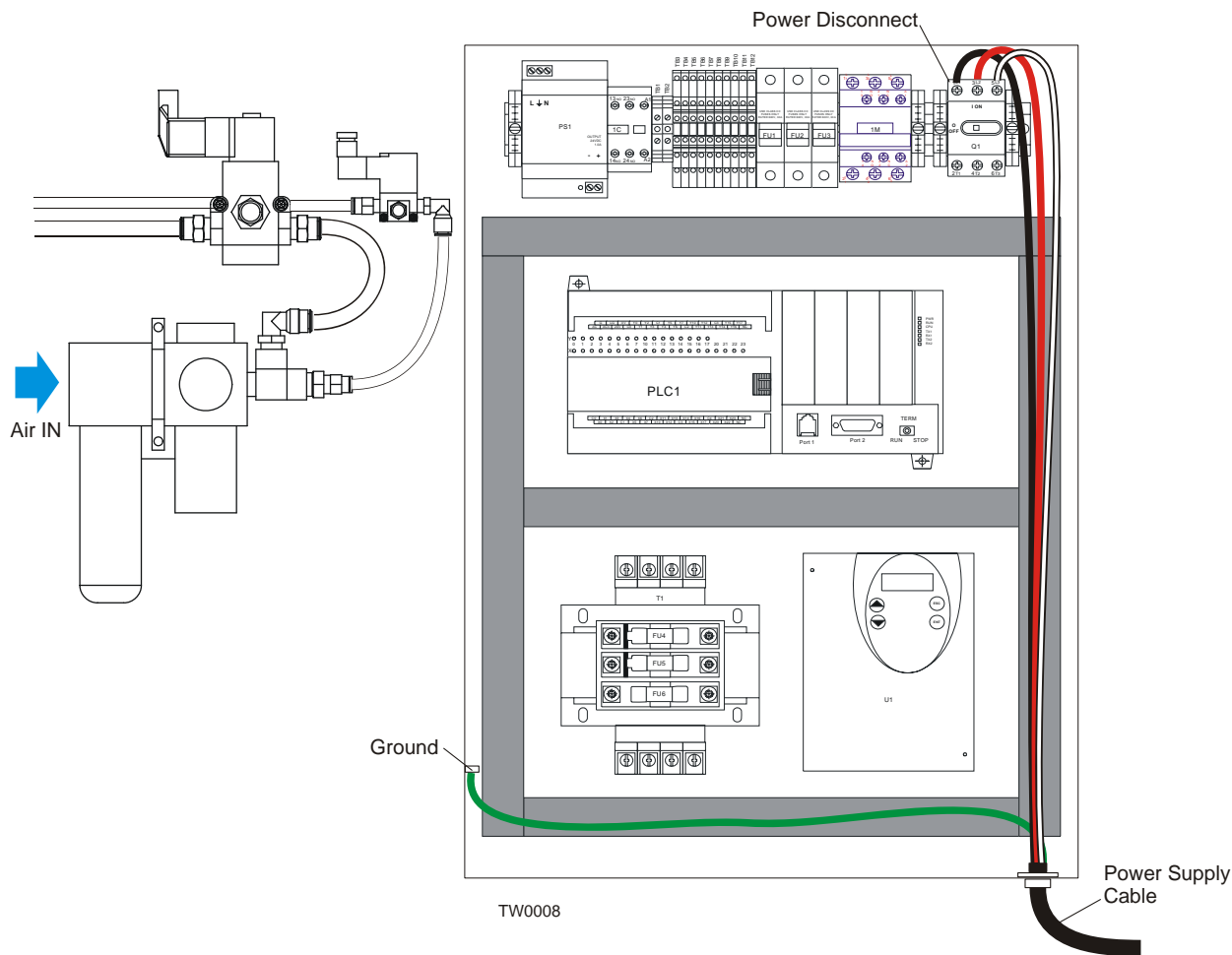


FIG. 2-1

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 Installation (One 9' Deck w/9' Extension)

Position the primary deck (TWC-1) and install the electrical and air supply as described in [Section 2.2](#).

Remove the table end plate from the primary deck (TWC-1) and install it to the rear of the extension deck (TWC-EXT). 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.

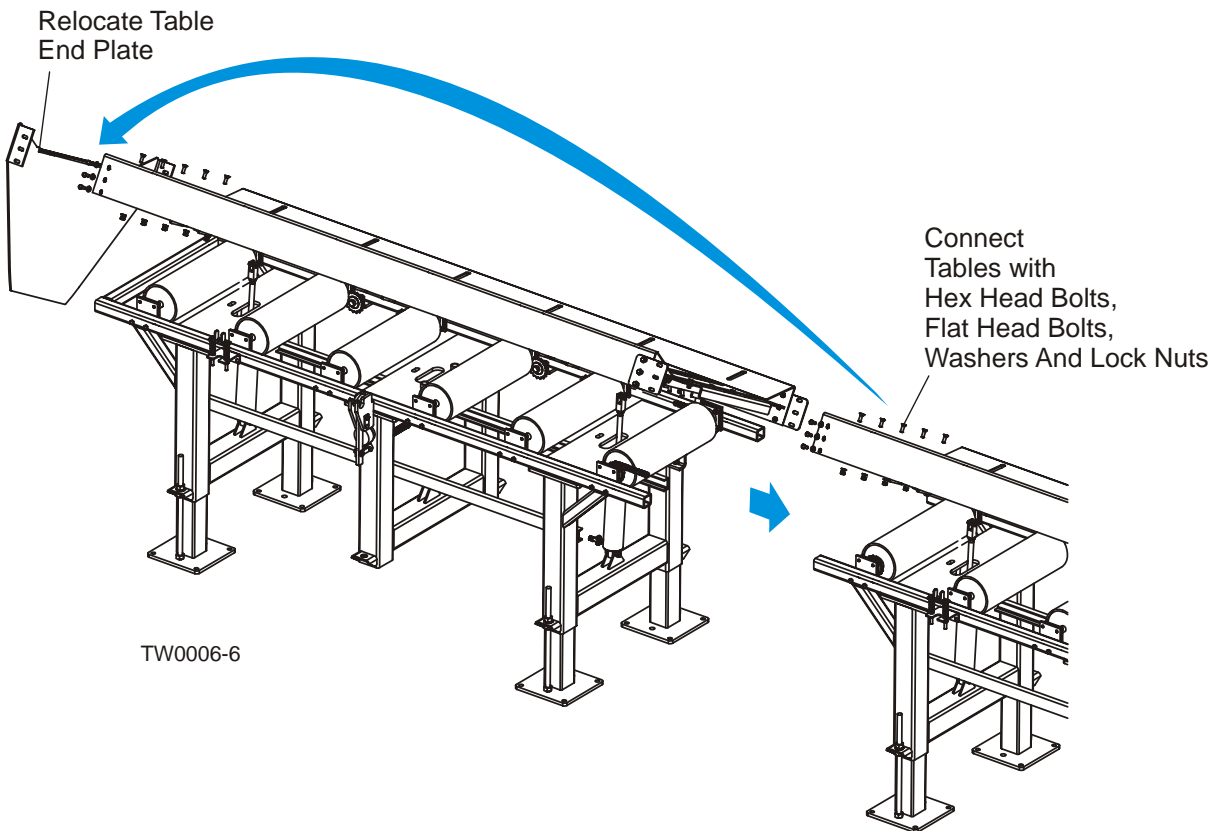


FIG. 2-5

2

Setup & Operation

Installation (One 9' Deck w/9' Extension)

See Figure 2-6. 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.

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.

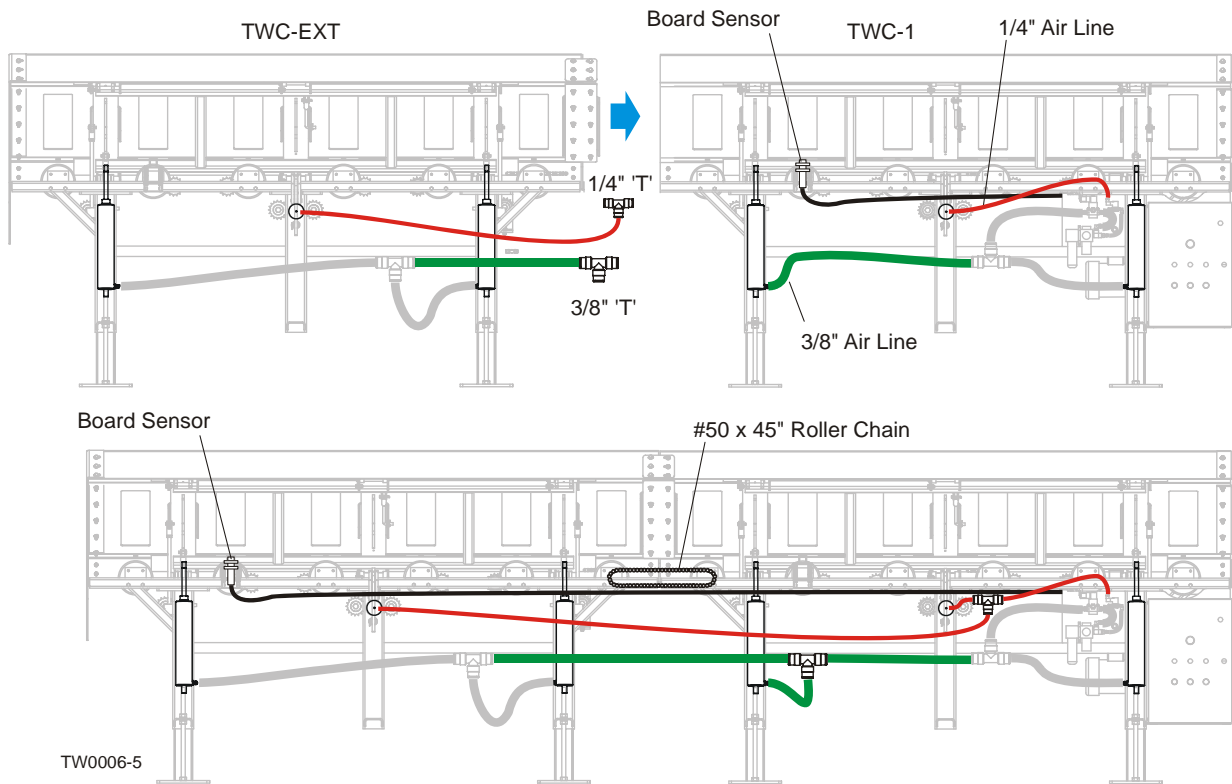


FIG. 2-6

2.4 Control Installation

See **Figure 2-7**. 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.

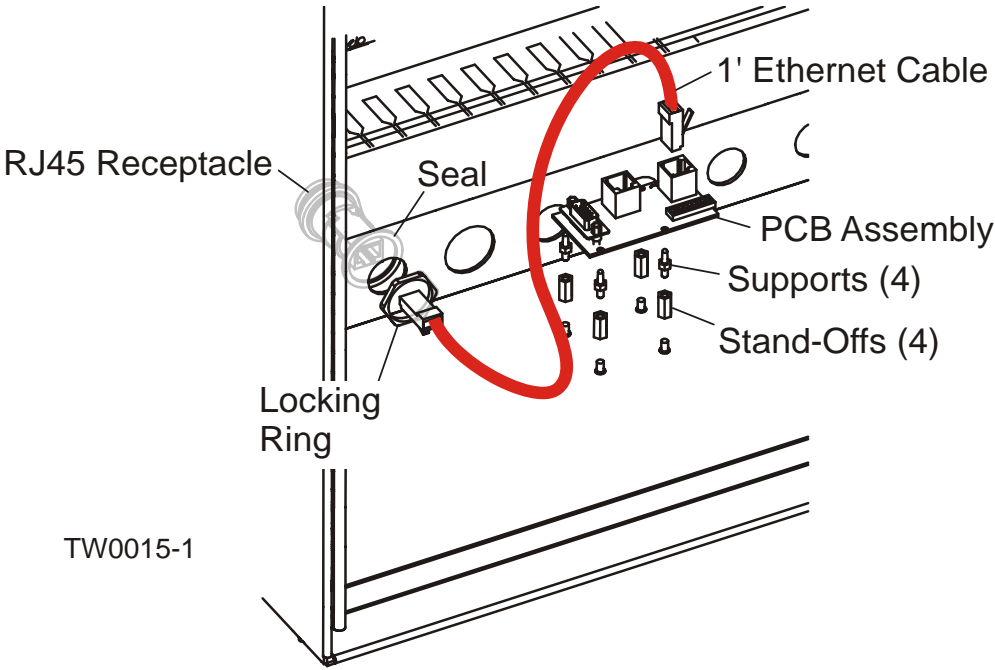


FIG. 2-7

2 Setup & Operation

Control Installation

See Figure 2-8. 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.

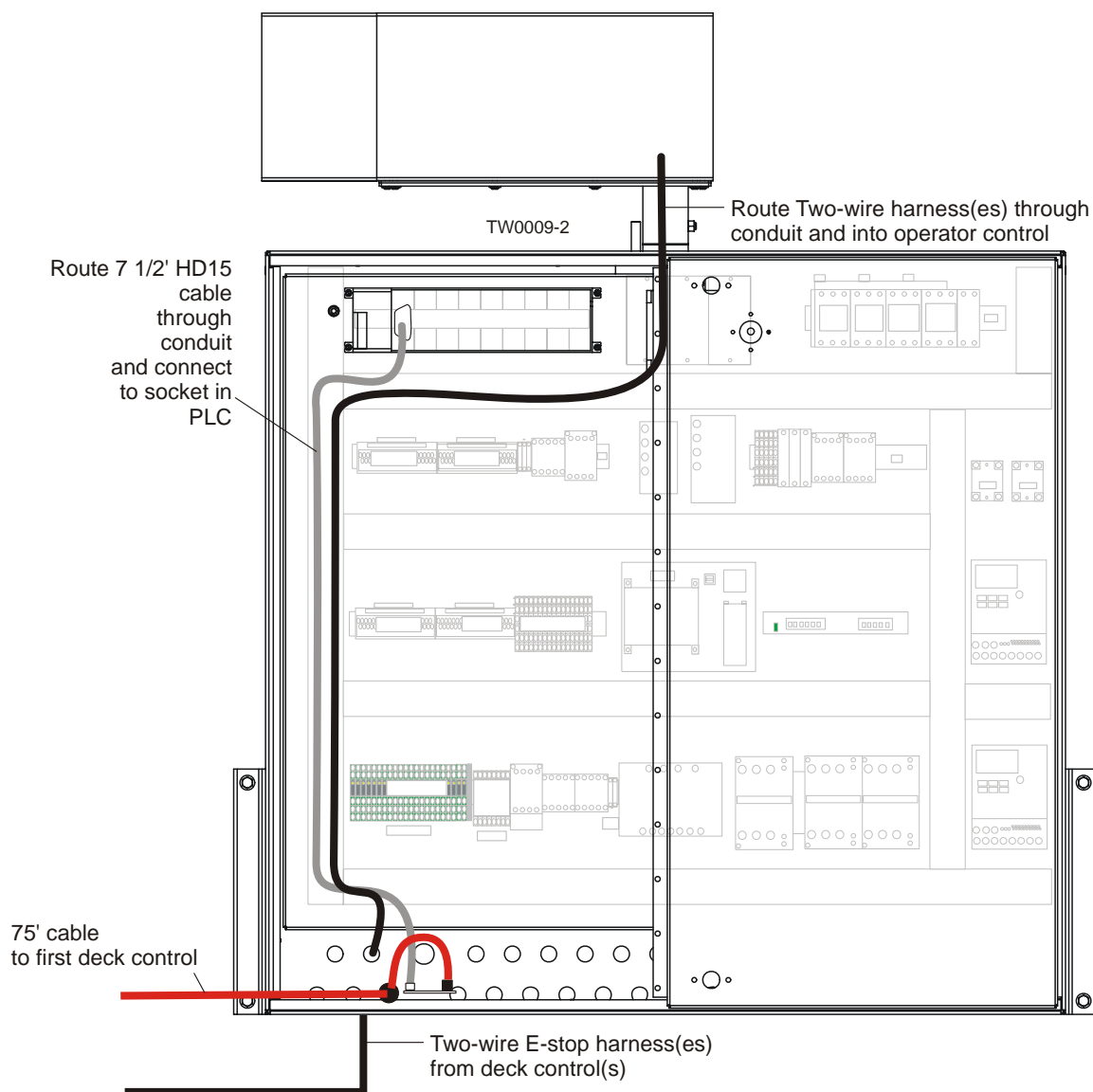


FIG. 2-8

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 2-9. 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.

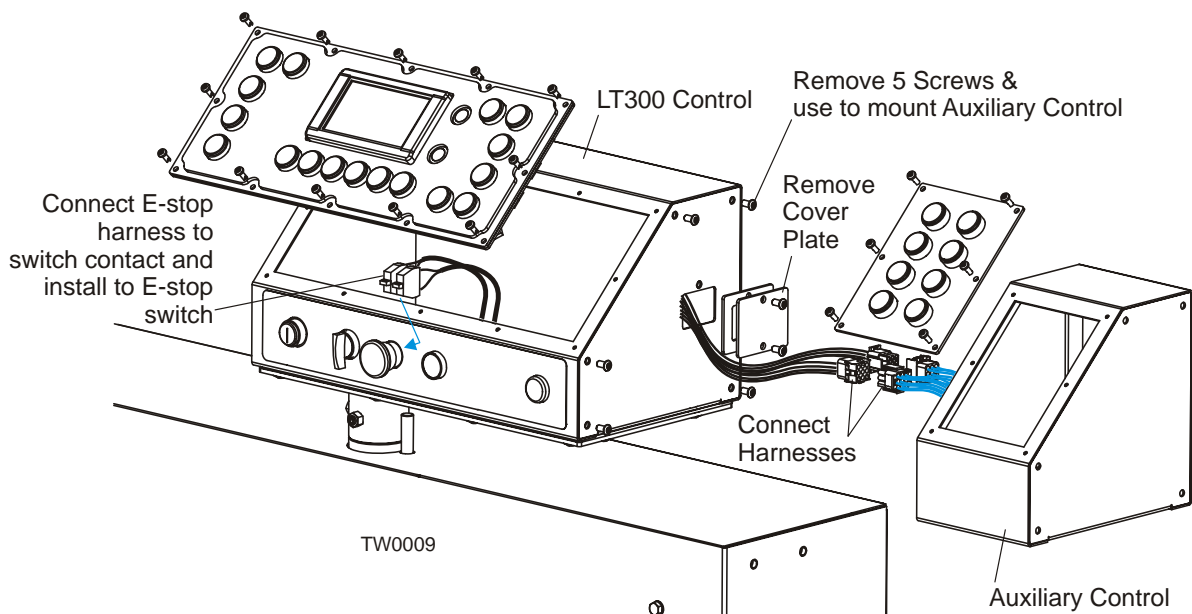


FIG. 2-9



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.

2.5 Operation

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 2-10. The deck control box switches are shown below.

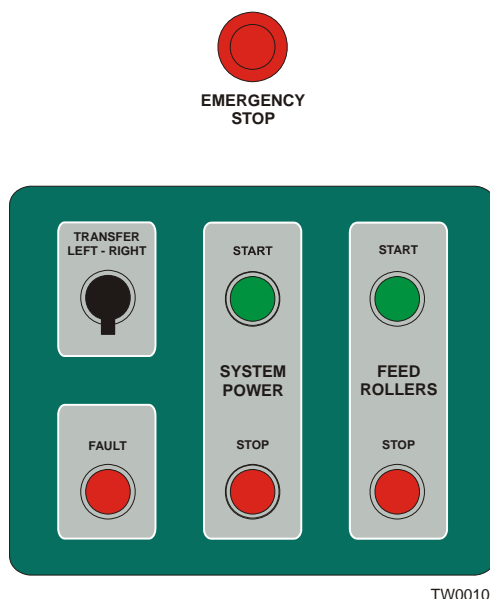


FIG. 2-10

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 counterclockwise to release stop.

See Figure 2-11. The buttons on the auxiliary control are shown below.

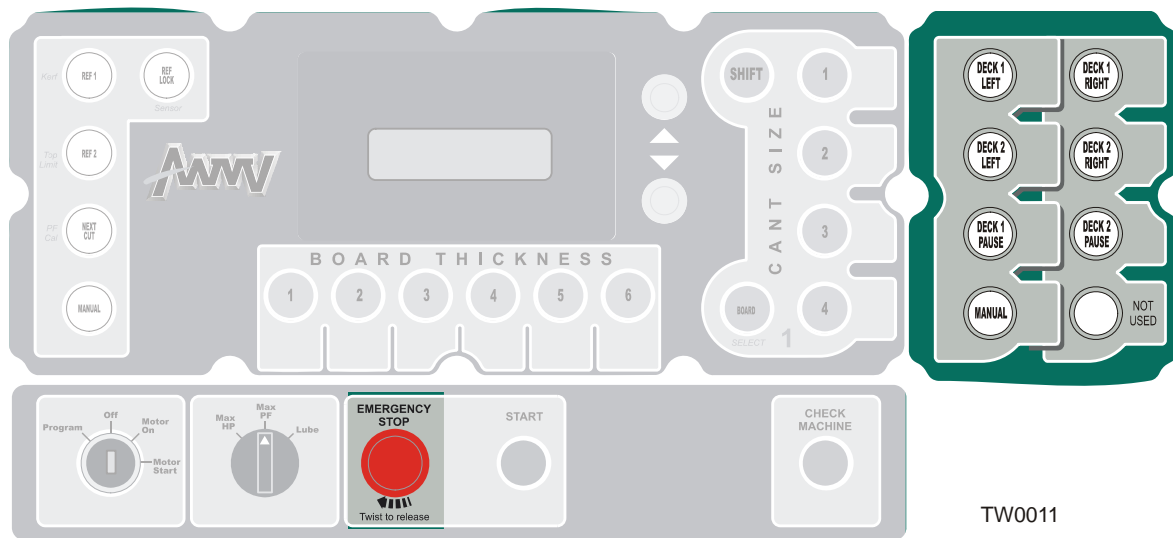


FIG. 2-11

EMERGENCY STOP (LT300) - Stops all LT300 functions including three-way deck(s). Turn counterclockwise to release 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.

2 Setup & Operation

Operation

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 2-12](#) 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.

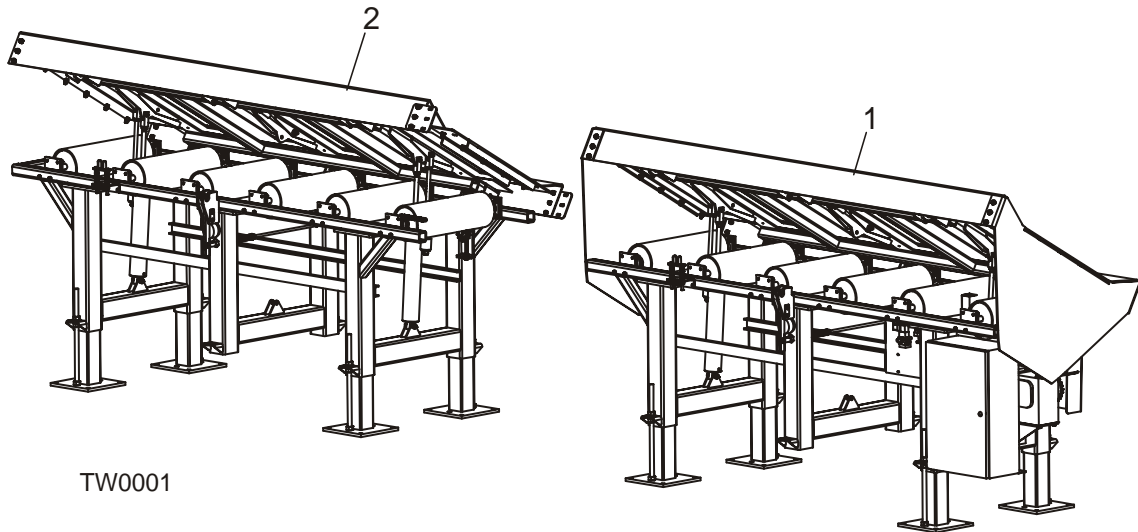
DECK 2 LEFT - When depressed in AUTO mode, this button will stay illuminated and the second deck (if equipped) will dump to the right when the board sensor at the end of the deck is activated. In MANUAL mode, pushing this button will immediately dump the second deck to the right.

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 2-12](#) 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.

SECTION 3 REPLACEMENT PARTS

3.1 Three-Way Deck



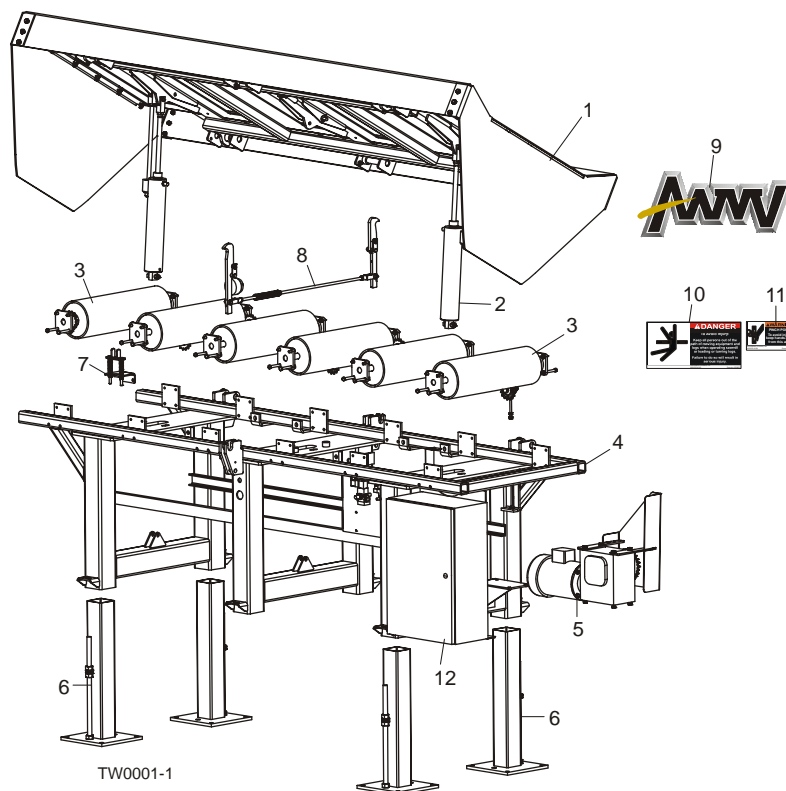
TW0001

REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	DRIVE TABLE PARTS (See Section 3.2)		
2	EXTENSION TABLE PARTS (See Section 3.3)		

3 Replacement Parts

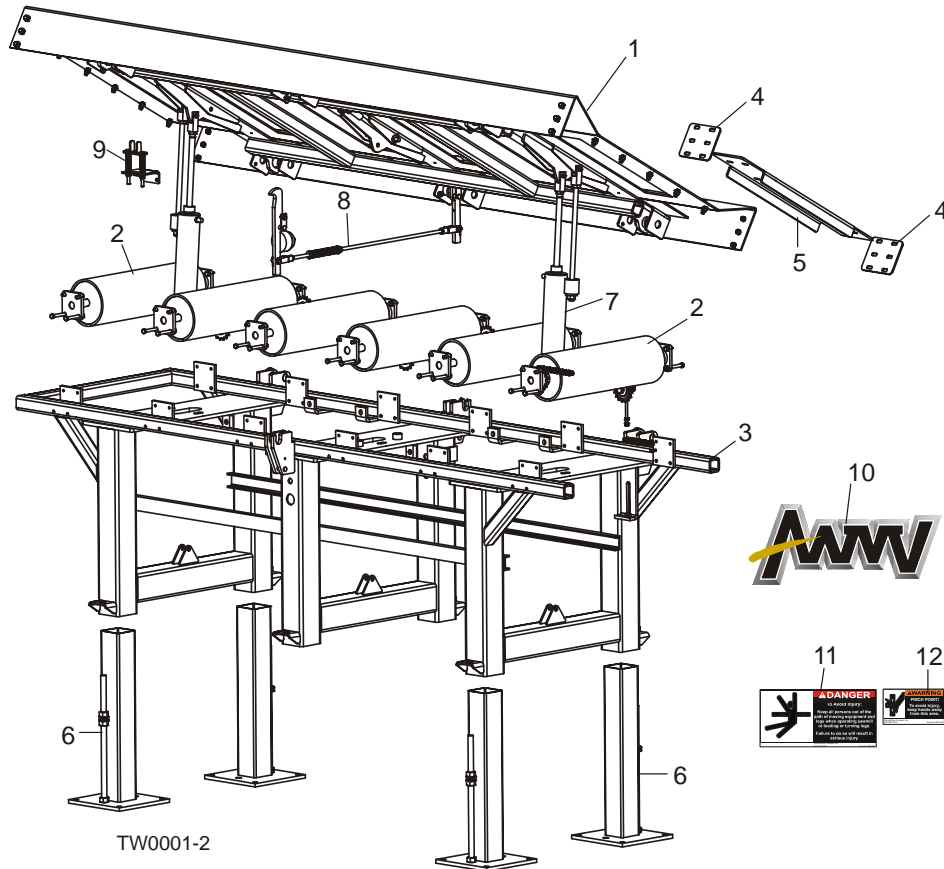
Drive Table

3.2 Drive Table



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	TABLE ASSEMBLY, PRIMARY THREE-WAY DRIVE	TWC-1	1	
	TABLE ASSEMBLY, SECONDARY THREE-WAY DRIVE	TWC-2	1	
	Installation Kit Parts (See Section 3.13)			
	Table Assembly, Three-Way Drive	047374	1	
1	Pivoting Table Top Parts (See Section 3.4)			
2	Air Cylinder/Prop Parts (See Section 3.5)			
3	Table Roller/Sprocket Parts (See Section 3.7)			
4	Frame Weldment, Three-Way Drive Table	047375	1	
5	Drive Parts (See Section 3.10)			
6	Table Leg Parts (See Section 3.8)			
7	Table Sensor Bracket Parts (See Section 3.9)			
	Sensor & Cable Parts (See Section 3.12)			
8	Pivot Latch Parts (See Section 3.6)			
9	Decal, 10" AWMV Logo	052287	2	
10	Decal, Keep Away Danger	S09851	2	
11	Decal, Hand Pinch Point Warning	S12641	4	
	Line, 1/4" Air	R01869	5.33	
	Line, 3/8" Air	005453	8.69	
12	Control Parts (See Section 3.11)			

3.3 Extension Table

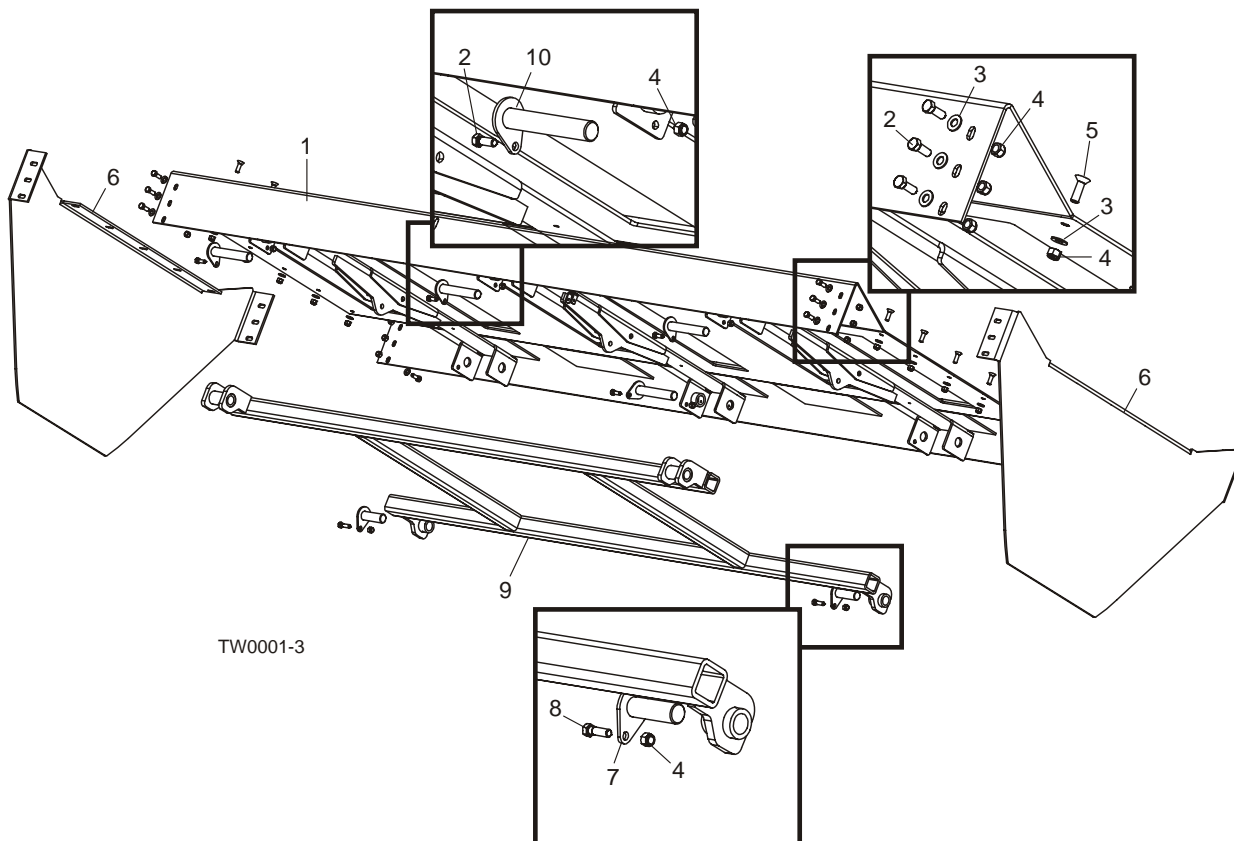


REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	TABLE ASSEMBLY, THREE-WAY EXTENSION	TWC-EXT	1
	Table Assembly, Three-Way Extension	047341	1
1	Pivoting Table Top Parts (See Section 3.4)		
2	Table Roller/Sprocket Parts (See Section 3.7)		
3	Frame Weldment, Three-Way Extension Table	047342	1
4	Plate, Table End Splice	054139	2
5	Plate, Table Bottom Splice	054149	1
6	Table Leg Parts (See Section 3.8)		
7	Air Cylinder/Prop Parts (See Section 3.5)		
8	Pivot Latch Parts (See Section 3.6)		
9	Table Sensor Bracket Parts (See Section 3.9)		
	Sensor & Cable Parts (See Section 3.12)		
	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

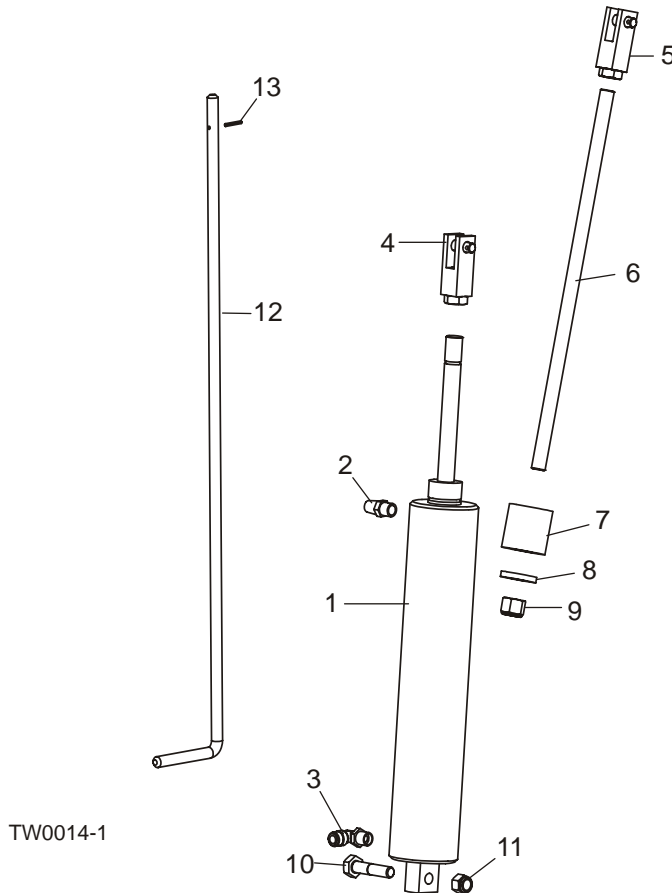
3.4 Pivot Table Top



TW0001-3

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	

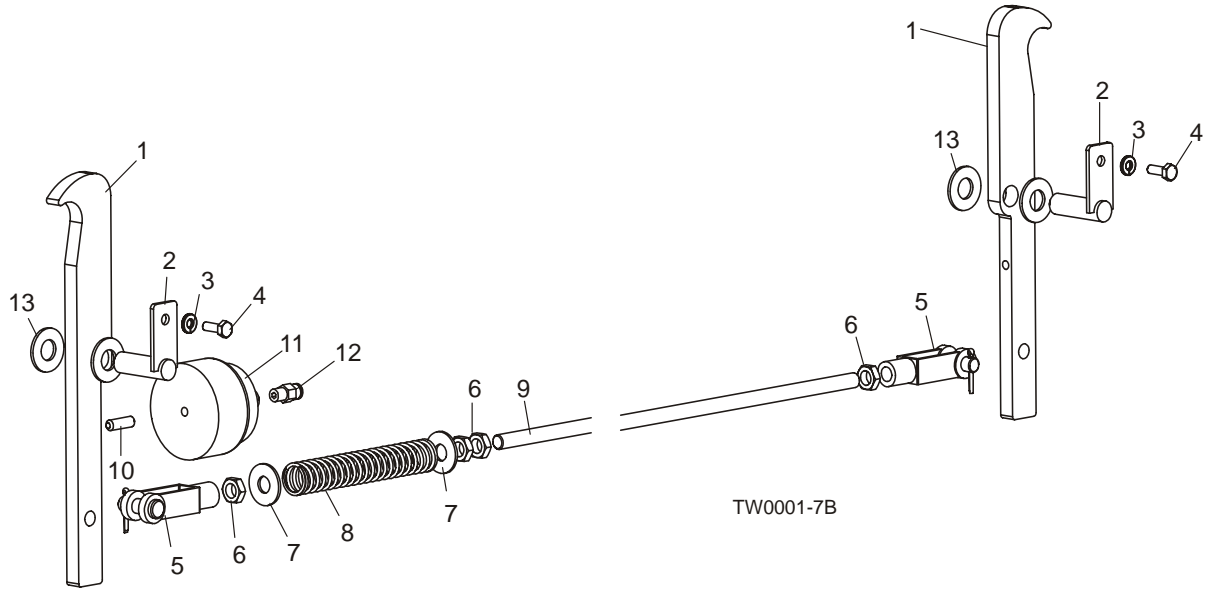
3.5 Air Cylinder/Prop



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, TABLE TOP PROP	054679	1
13	PIN, 1/8" X 1" ROLL	F05012-34	1

3 **Replacement Parts**
Air Cylinder/Prop

3.6 Pivot Latch

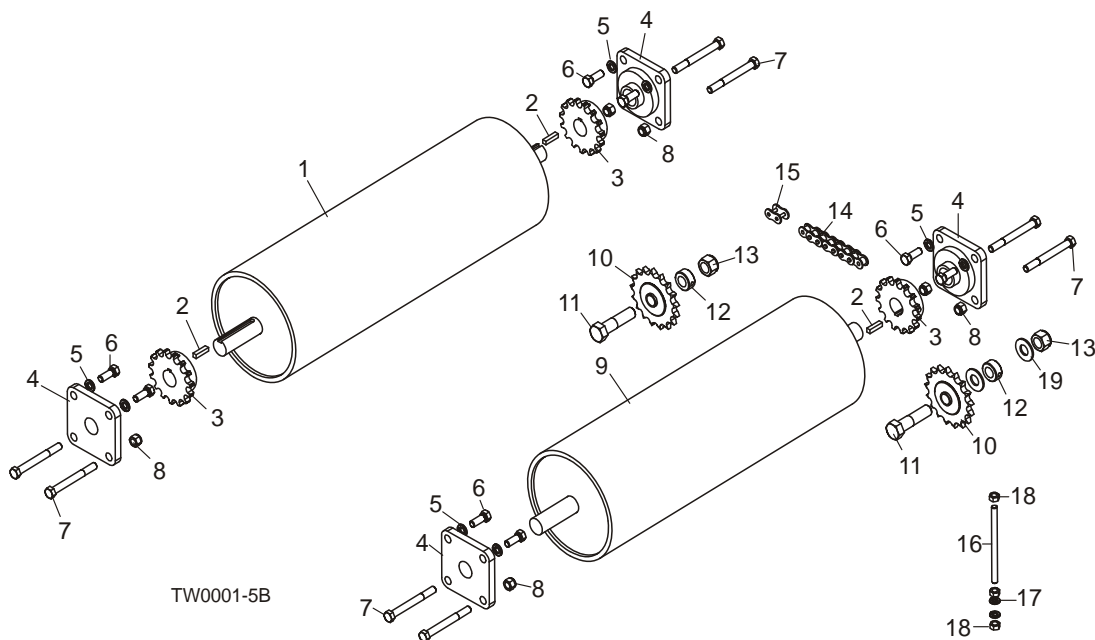


REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	PLATE, PIVOT LATCH	051454	2
2	PIN WELDMENT, LOCK	051458	2
3	WASHER, 1/4" SPLIT LOCK	F05011-14	2
4	BOLT, 1/4-20 X 3/4" HEX HEAD FULL THREAD	F05005-1	2
5	CLEVIS, 7/16-20 X 2 7/8"	054176	2
6	NUT, 7/16-20 HEX JAM	F05010-38	4
7	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

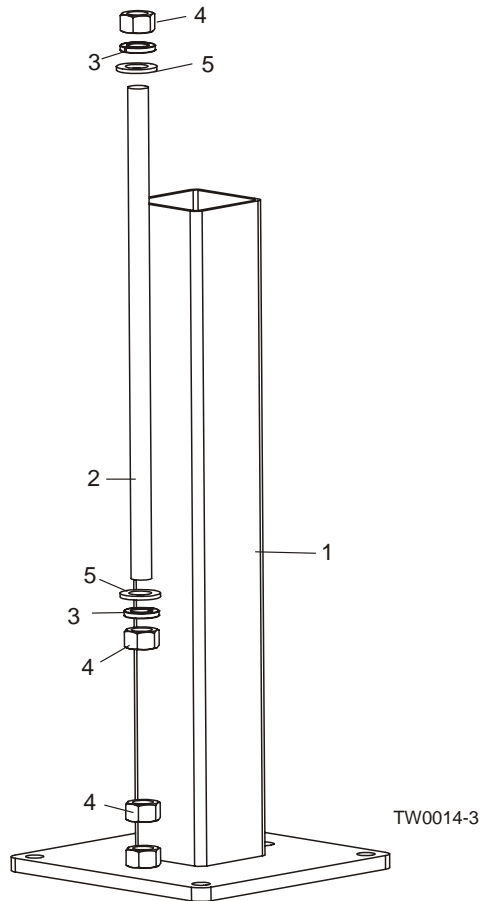
Rollers, Sprockets & Chain

3.7 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, SINGLE KEY TABLE	047370	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	1
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	2

3.8 Table Legs

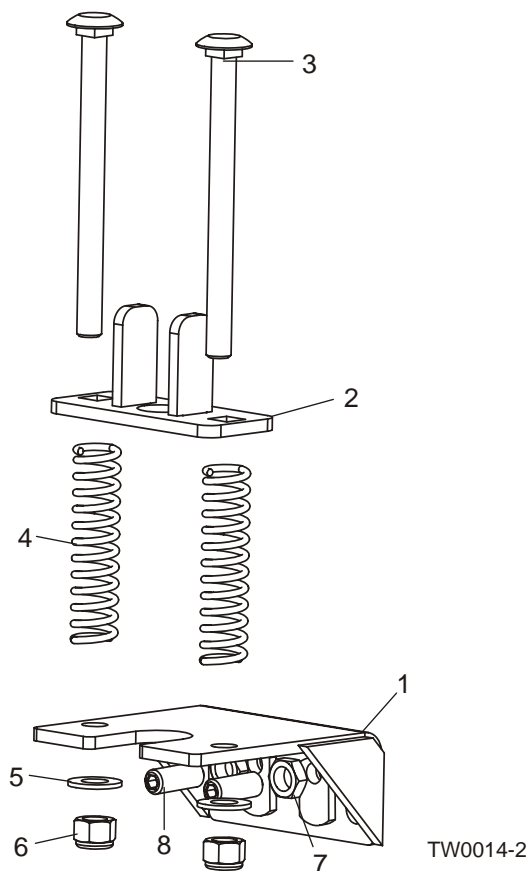


REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
1	LEG WELDMENT, THREE-WAY DECK TABLE	051478	4	
2	ROD, THREADED LEG ADJUSTMENT	054147	4	
3	WASHER, 3/4" SPLIT LOCK	F05011-6	8	
4	NUT, 3/4-16 HEX	F05010-92	12	
5	WASHER, 3/4" SAE FLAT	F05011-62	8	

3 Replacement Parts

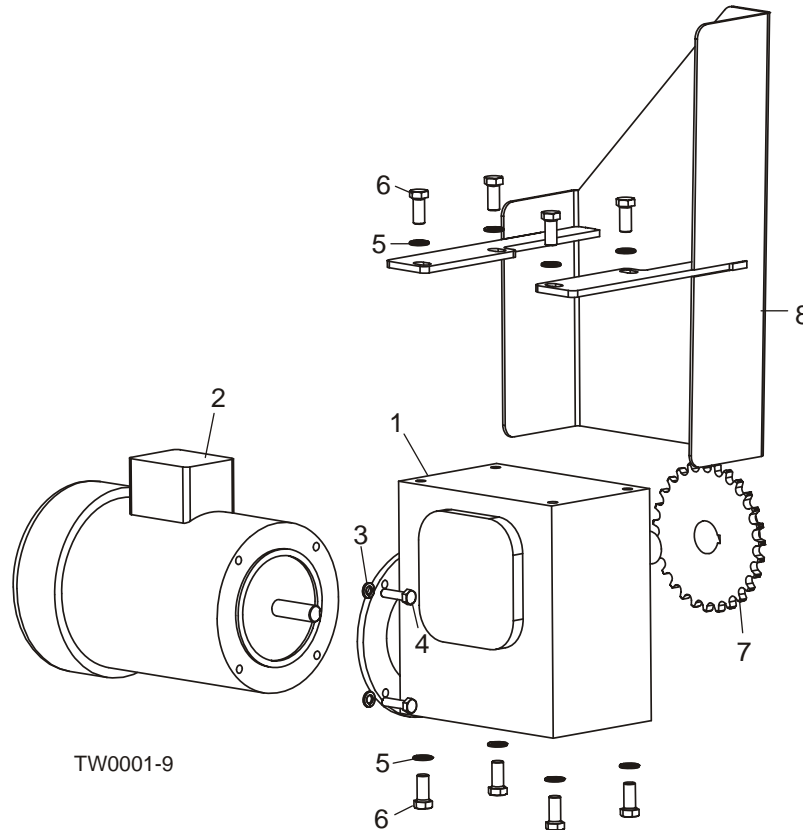
Sensor Bracket

3.9 Sensor Bracket



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	BRACKET ASSEMBLY, SENSOR MOUNT	054165	1
1	Plate Weldment, Lower Sensor Mount	054676	1
2	Plate Weldment, Upper Sensor Mount	054167	1
3	Bolt, 3/8-16 x 4 3/4" Carriage Head	F05007-114	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	2
8	Screw, 3/8-16 x 1" Cup Point Socket Set	F05007-9	2

3.10 Drive

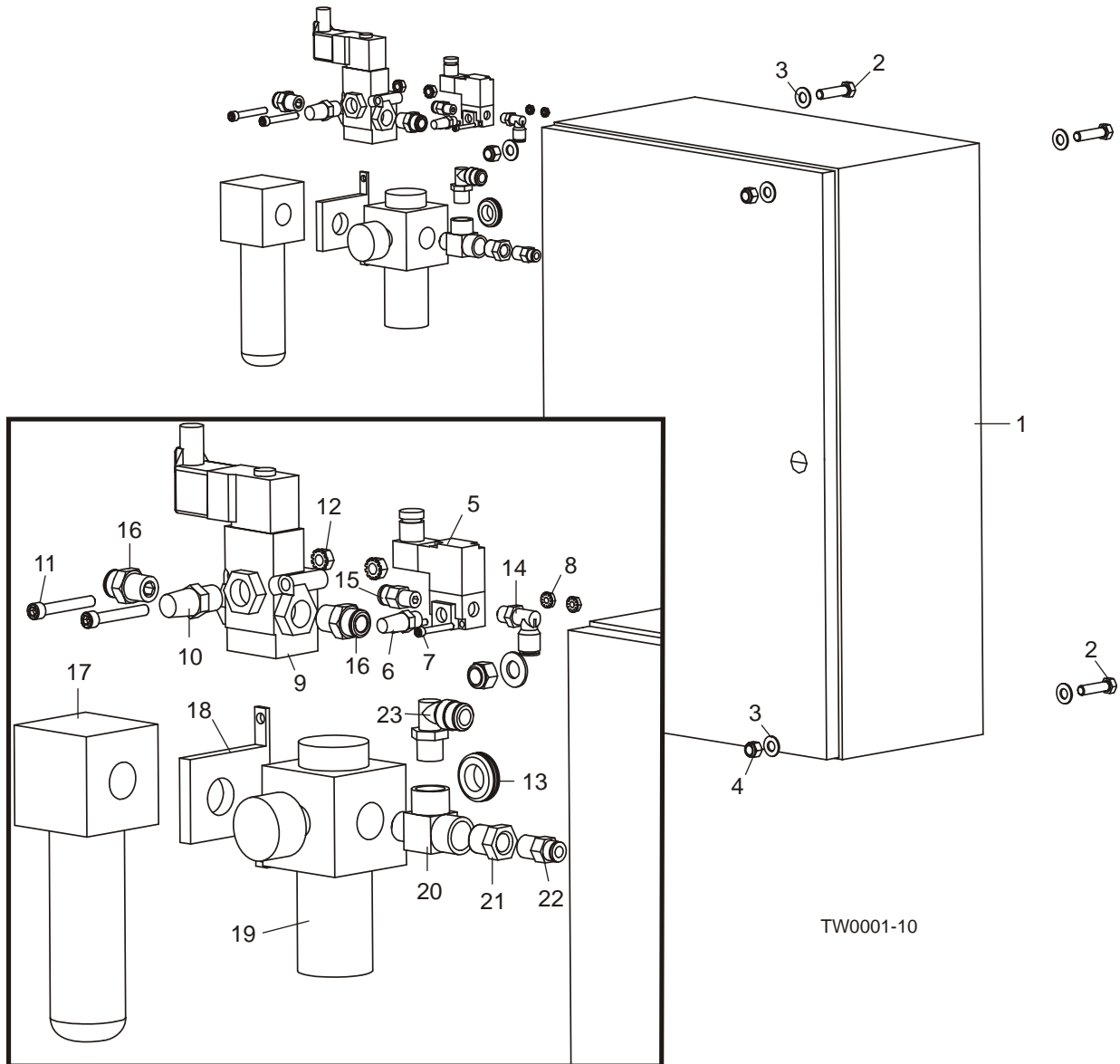


REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
1	GEARBOX, 90° RIGHT BMQ230	047417	1
2	MOTOR, 2HP 3PH 230/460V TEFC 56C NO BASE	042390	1
3	WASHER, 5/16" SPLIT LOCK	F05011-13	4
4	BOLT, 5/16-18 X 1 1/4" HEX HEAD GRADE 5 FULL THREAD	F05006-93	4
5	WASHER, 7/16" SPLIT LOCK	F05011-48	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

3 Replacement Parts

Air System

3.11 Air System



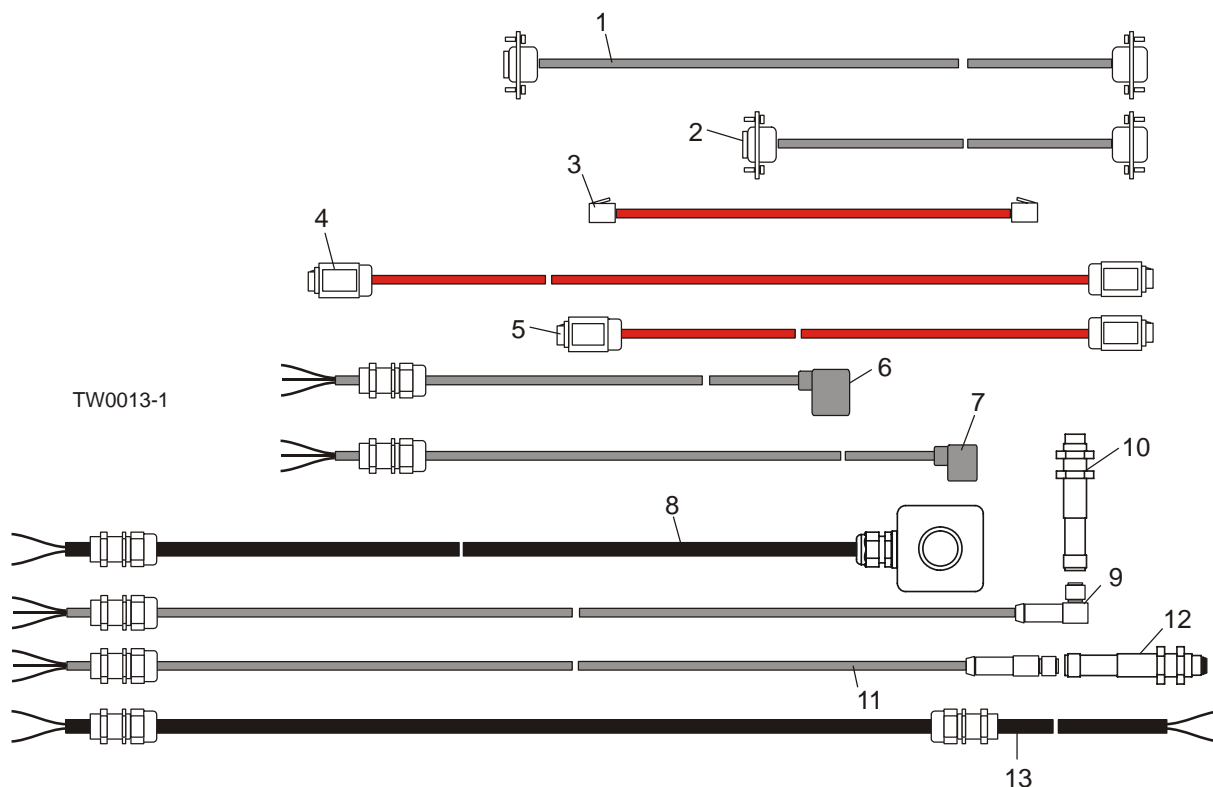
REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	CONTROL ASSEMBLY, PRIMARY THREE-WAY DRIVE	051670	1
	CONTROL ASSEMBLY, SECONDARY THREE-WAY DRIVE	051821	1
1	Box, 24" x 16" x 6" Wall Mount Enclosure See Section 4.6 for Electrical Components See Section 3.12 for Electrical Cable Assemblies	051502	1
2	BOLT, 3/8-16 X 1 1/2" HEX HEAD FULL THREAD	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	

3 Replacement Parts

Electrical Cables

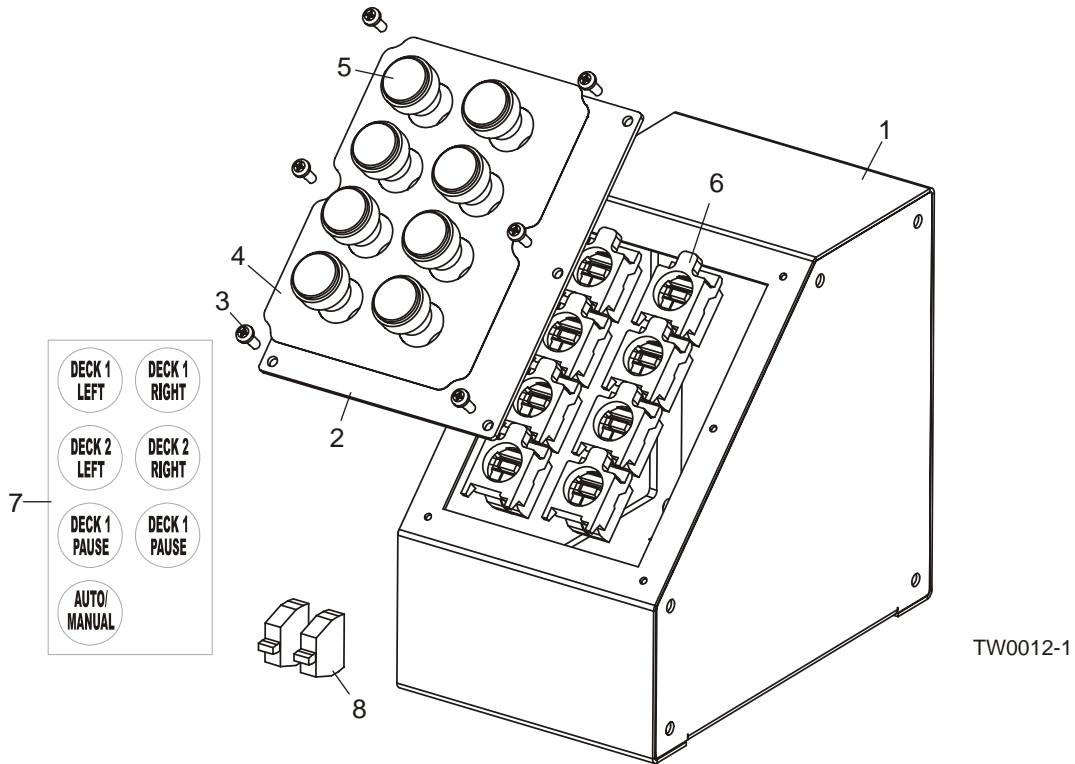
3.12 Electrical Cables



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 ¹
3	CABLE, RJ45 ETHERNET 1'	052994	1/2 ¹
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 18MM PNP RIGHT OPTIC Q/D	051831	1
13	CABLE ASSEMBLY, LT300 E-STOP 100'	052221	1

¹ One required for 3-Way configurations; Two required for 5-Way configurations.

3.13 Installation Kit



REF	DESCRIPTION (◆ Indicates Parts Available In Assemblies Only)	PART #	QTY.
	INSTALLATION KIT, THREE-WAY CONTROL	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

SECTION 4 ELECTRICAL INFORMATION

4.1 Electrical Symbol Diagram (TWC-1)

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

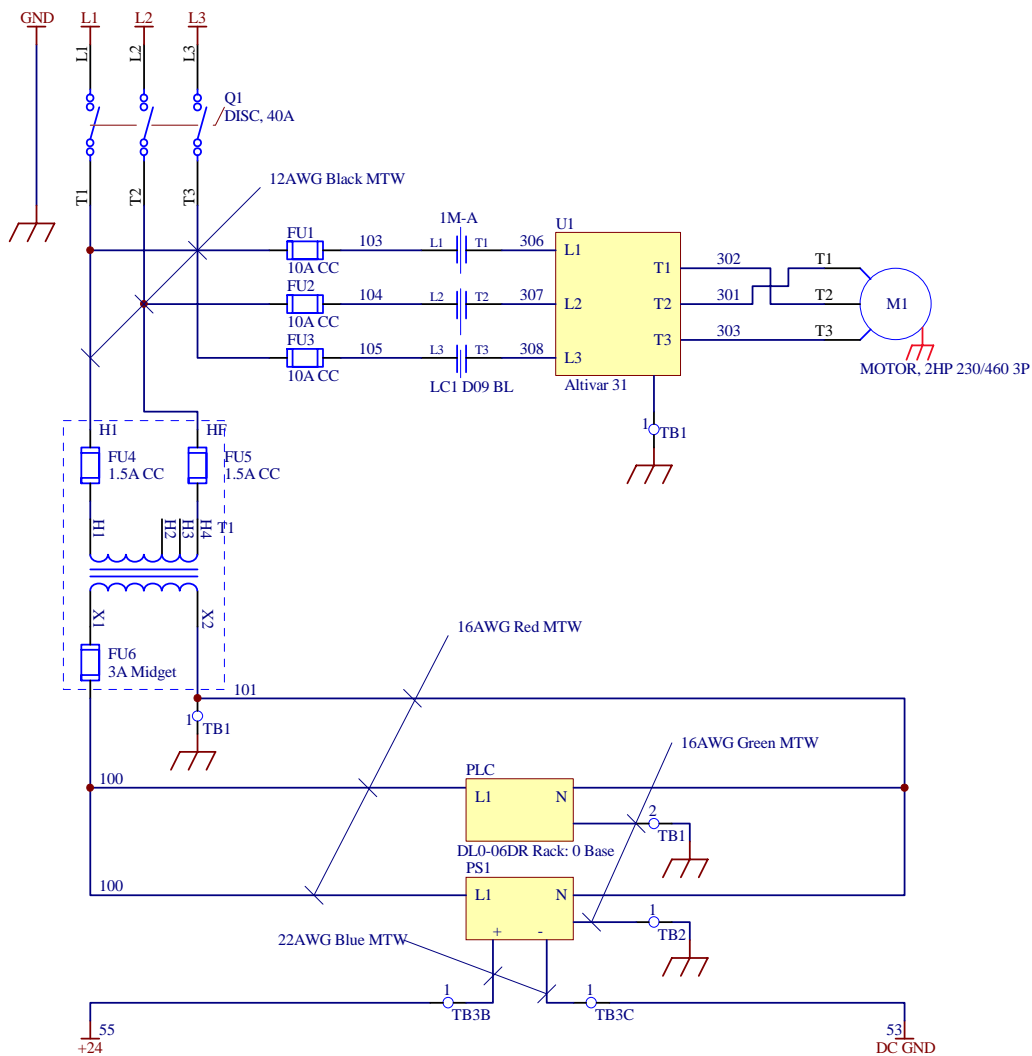
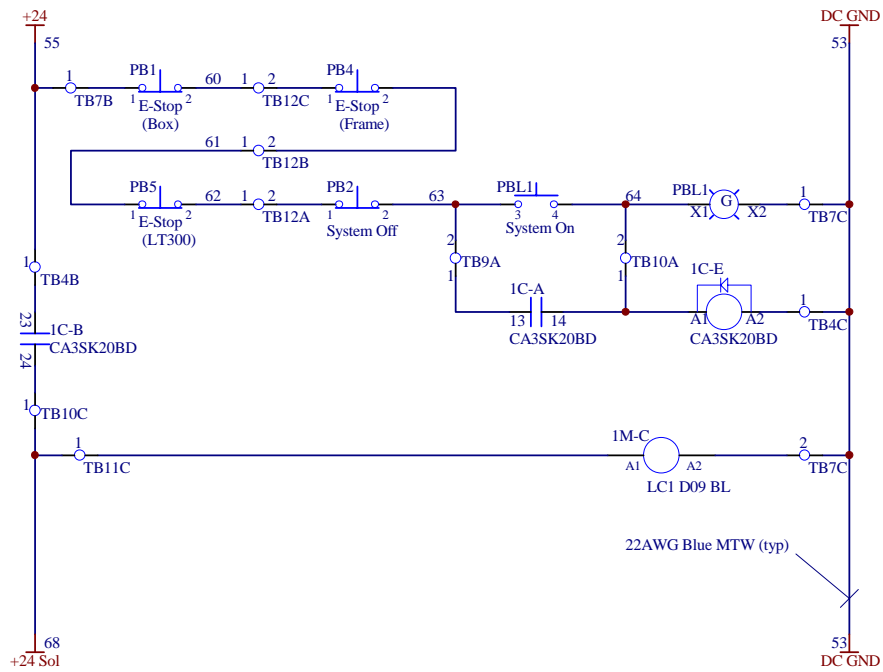


FIG. 4-1 (PAGE 1 OF 6)



TW0004-2B

FIG. 4-2 (PAGE 2 OF 6)

4 Electrical Information

Electrical Symbol Diagram (TWC-1)

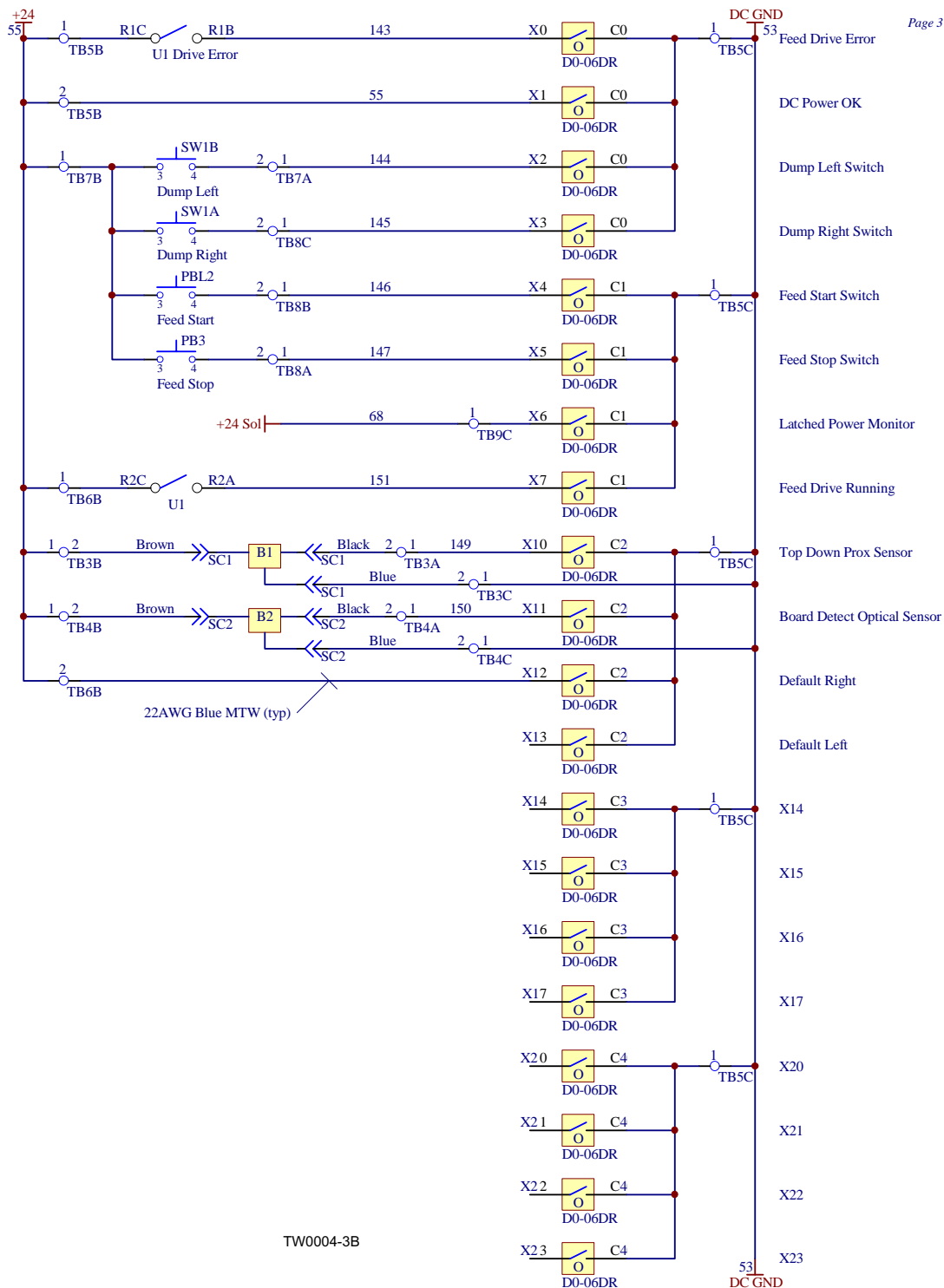


FIG. 4-3 (PAGE 3 OF 6)

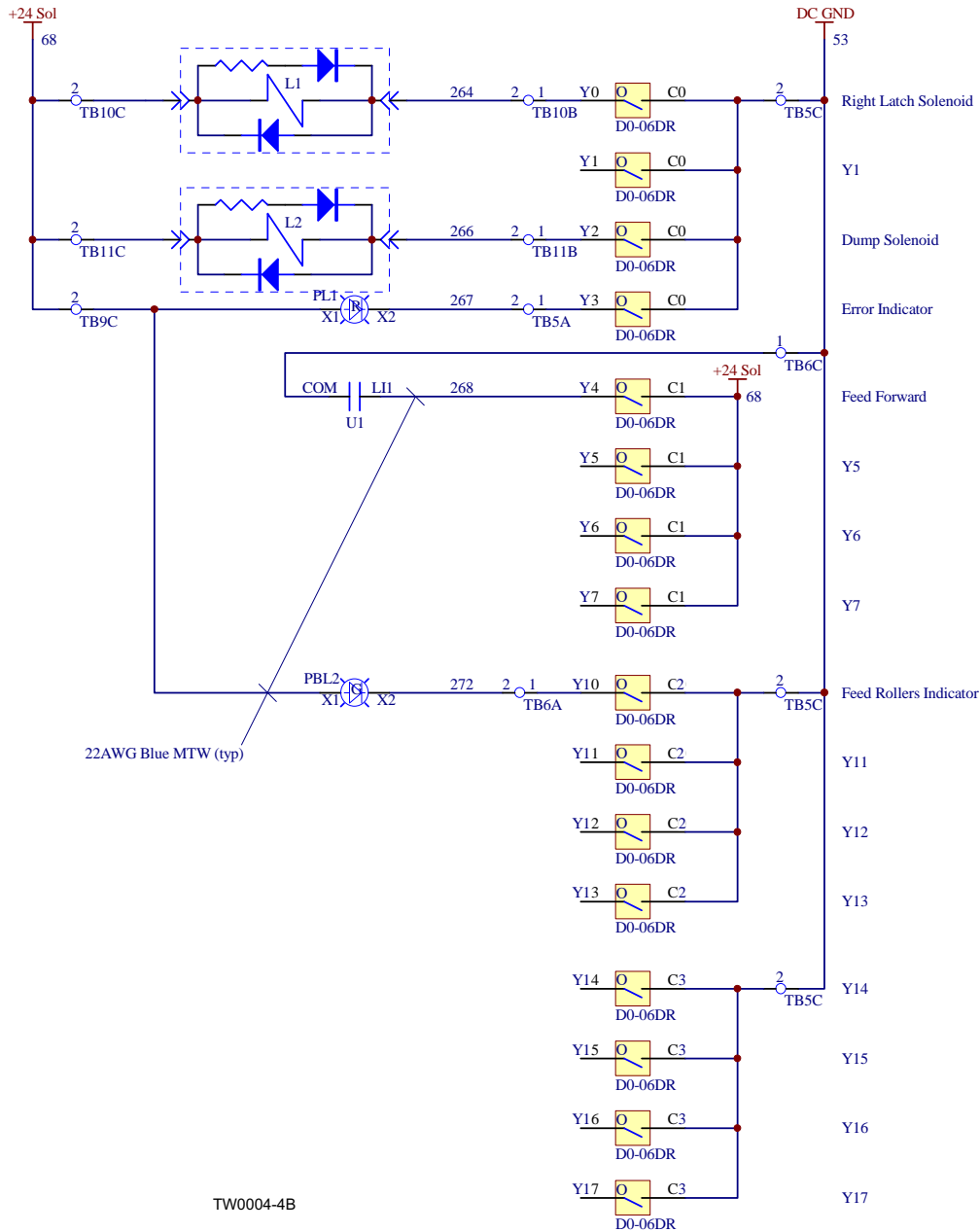
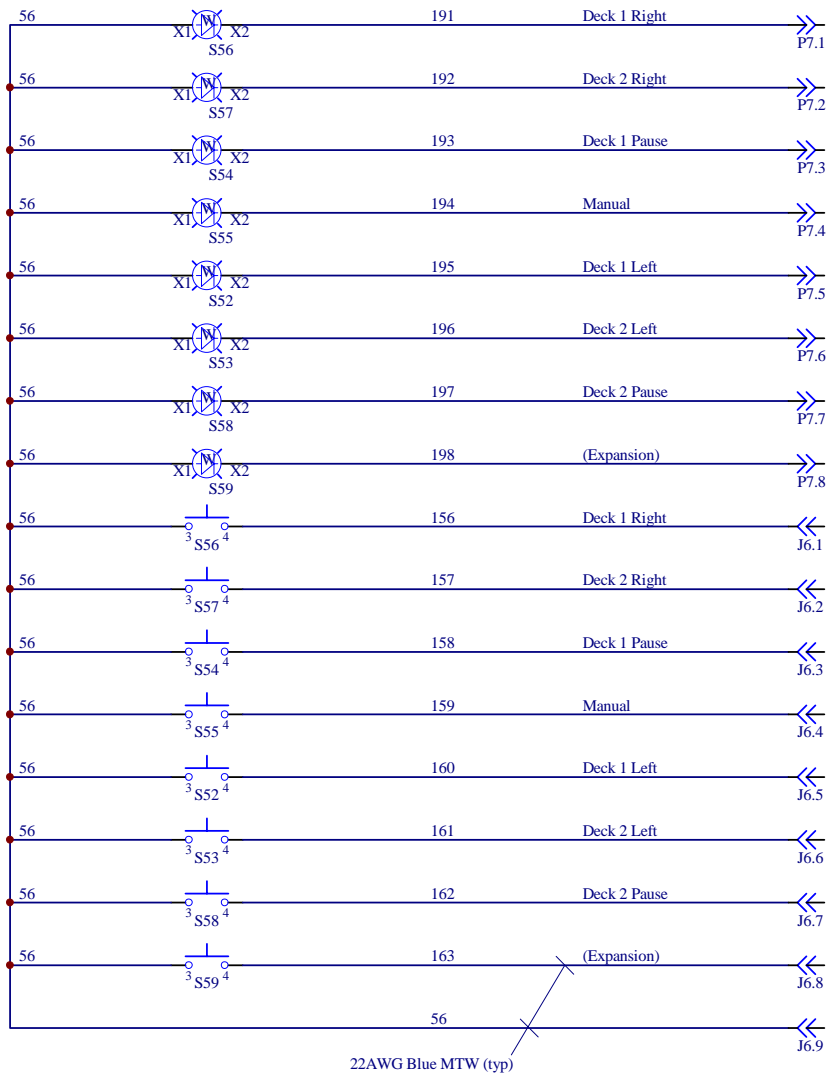


FIG. 4-4 (PAGE 4 OF 6)

4 Electrical Information

Electrical Symbol Diagram (TWC-1)



TW0004-5B

FIG. 4-5 (PAGE 5 OF 6)

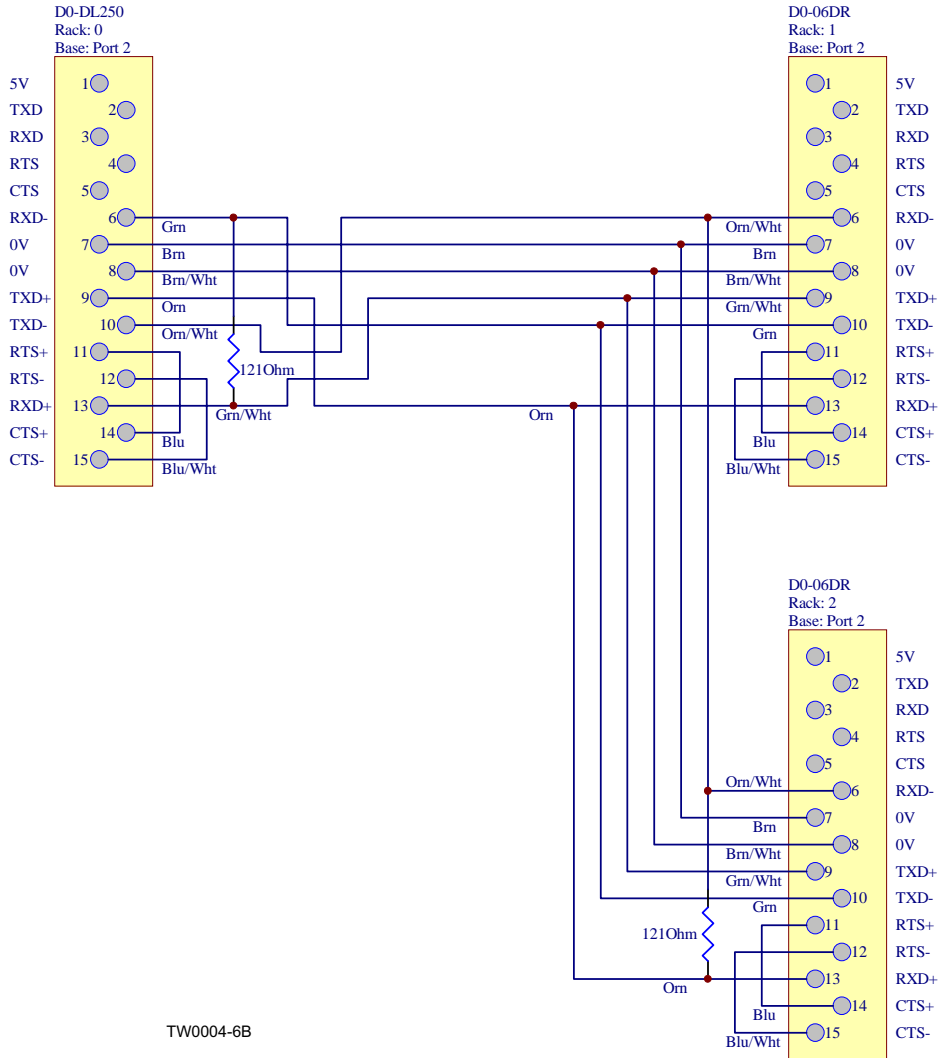


FIG. 4-6 (PAGE 6 OF 6)

4.2 Electrical Symbol Diagram (PCB Modbus)

TWC Rev. A3.00+

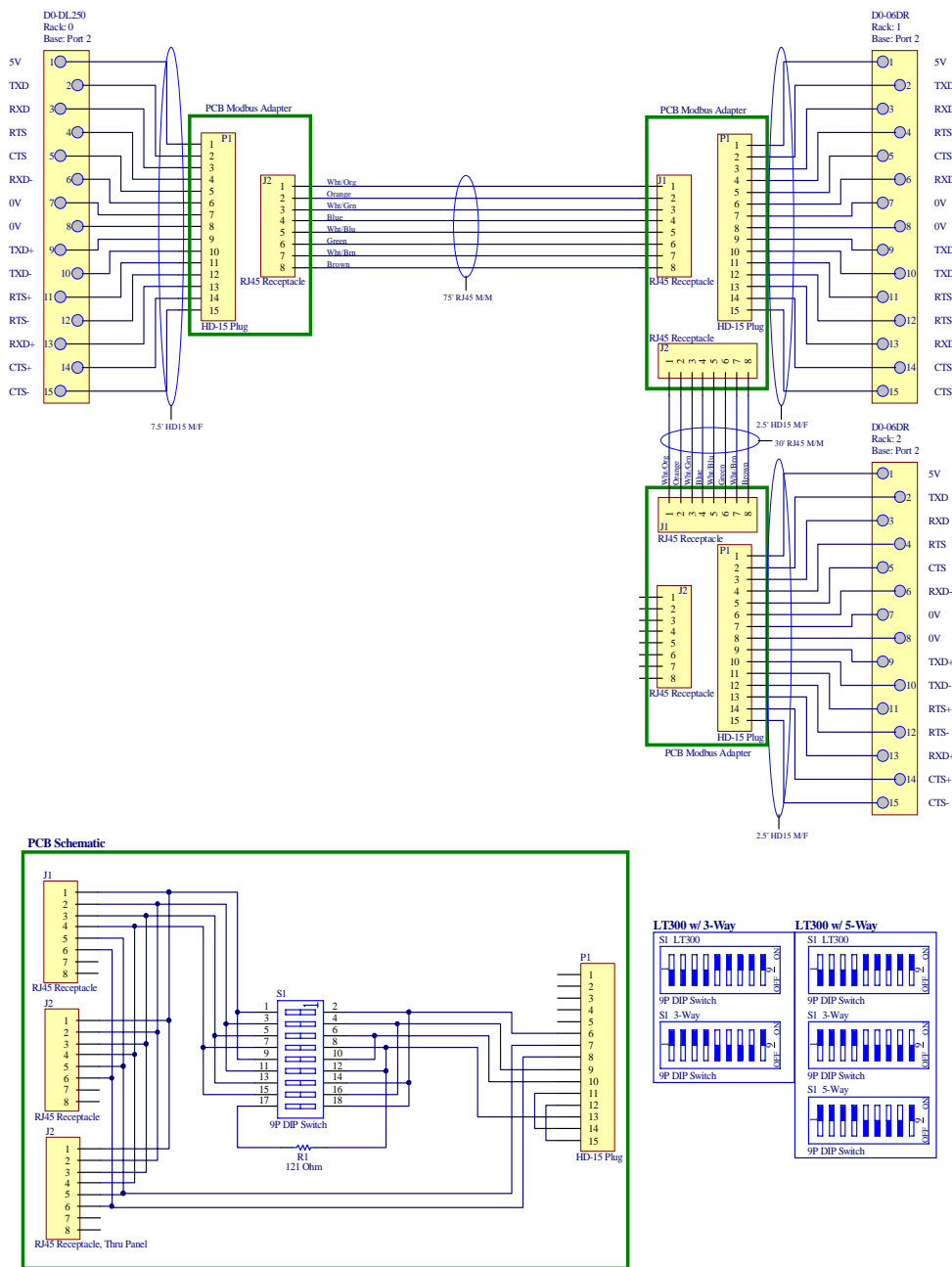


FIG. 4-7

4.3 Component Layout Diagram (Control Box)

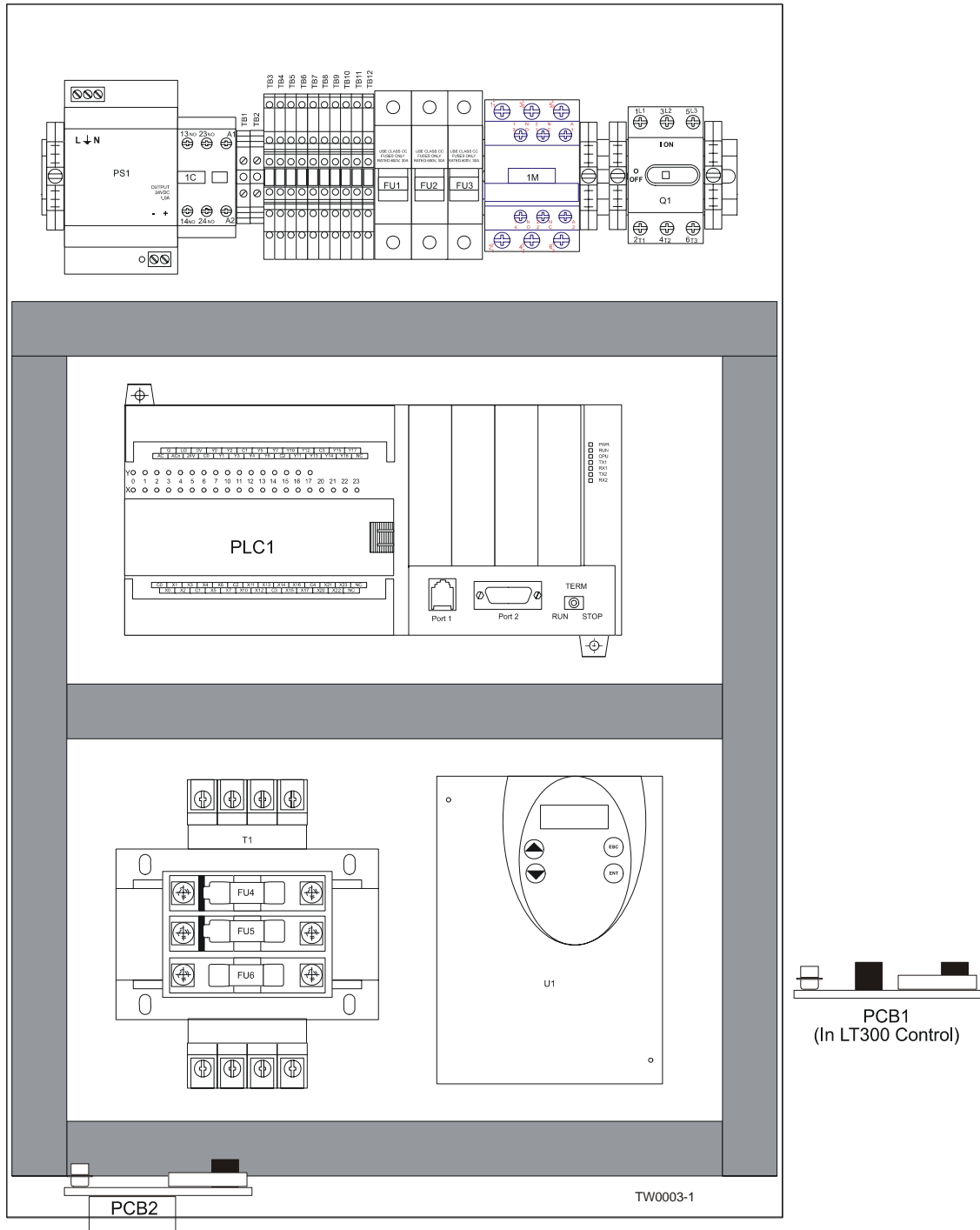


FIG. 4-8

4 Electrical Information

Component Layout Diagram (Control Buttons)

4.4 Component Layout Diagram (Control Buttons)

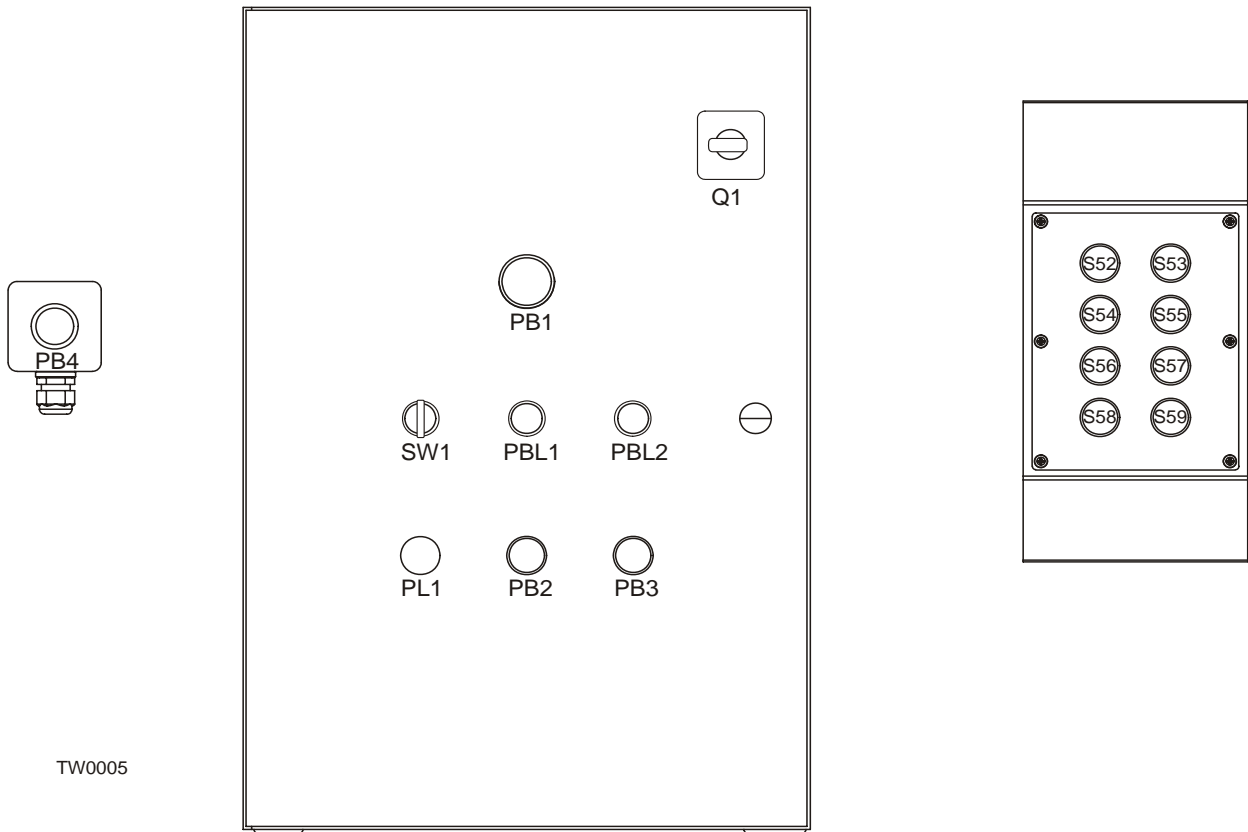


FIG. 4-9

4.5 DIP Switch Settings

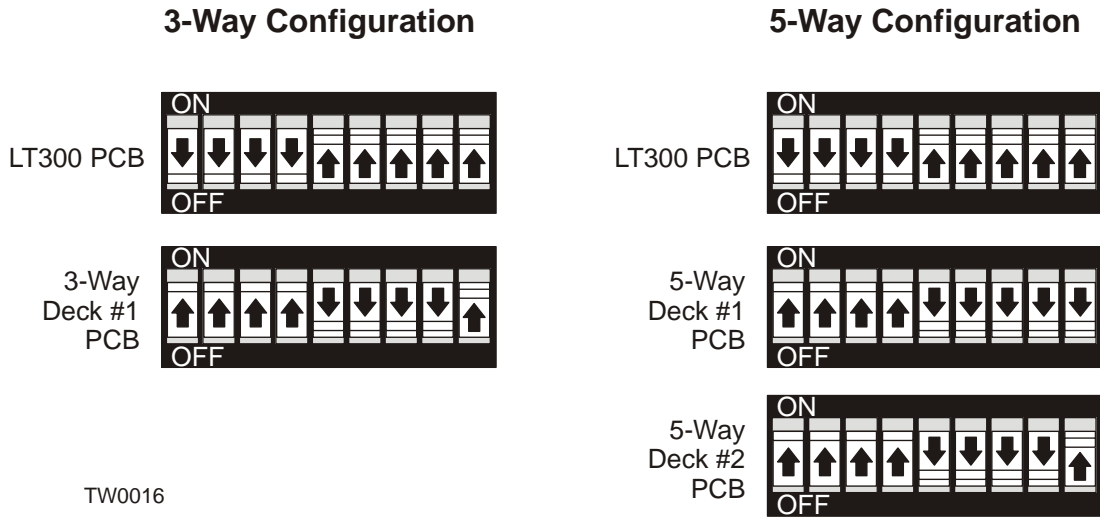


FIG. 4-10

4.6 Electrical Component List

Component	Manufacturer Part No.	Manufacturer	AWMV Part No.	Description
1C	CA3SK20BD	Square D	051684	Relay, 24VDC 2 NO IEC Control
1M	LC1D09BL	Square D	024890	Contact, 3 Pole 9A 24VDC Coil LP4D09
B1	AM1-AP-4H	Automation Direct	051439	Sensor, Proximity M12 PNP NS Ex
B2	C18P-AP-2E	Automation Direct	051831	Sensor, PHOTO 18MM PNP Right Optic Q/D
FU1 - FU3	CCMR010	Littlefuse	051957	Fuse, 10A Class CC Time Delay Rejection
FU4 - FU5	3HZ64	Grainger	051686-1_5	Fuse, 1.5A Class CC Time Delay Rejection
FU6	4XC11	Grainger	051761	Fuse, 3A Midget Slo-Blow 250VAC
M1	110451.00	Deering	042390	Motor, 2HP 230/460V 3P
PB1	ZB4BS54	Square D	024945	Switch, Red 22mm XB4 Maintained E-Stop
	ZBY9330	Square D	050992	Label, E-Stop
	ZB4BZ102	Square D	025161	Switch Body, 1NC 22mm XB4
PB2	ZB4BL4	Square D	050151	Switch Operator, Red Extended
	ZB4BZ102	Square D	025161	Switch Body, 1NC 22mm XB4
PB3	ZB4BL4	Square D	050151	Switch Operator, Red Extended
	ZB4BZ101	Square D	025242	Switch Body, 22mm 1NO XB4
PB4	KALJ174	Square D	024570	Box Assy, 40mm 10A NC Cont E-Stop
PCB1	052951	Wood-Mizer	052951	PCB Assembly, LT300 Modbus Adaptor
PCB2	052937	Wood-Mizer	052937	PCB Assembly, 3/5-Way Modbus Adaptor
PBL1 - PBL2	XB4BW33B5	Square D	024974-3	Switch, Green 22mm 1NO/1NC LED 24V XB4
PL1	XB4BVB4	Square D	024970-4	Light, Red 24V 22mm LED XB4 Pilot
PLC1	051681	AWMV	051681	PLC Assembly, 3-Way Deck w/Software (TWC-1)
	052824	AWMV	052824	PLC Assembly, 3-Way Deck w/Software (TWC-2)
PS1	25C6551	Newark	050365	Power Supply, 24VDC 1.0A Switcher
Q1	OT32E3	Square D	050903	Switch, 40 Amp 3P Non-Fused Disconnect
	OXS5X180	RSA	051673	Shaft, 7.1" Selector
	OHY2AJ	RSA	050883	Switch, Disconnect Red/Yellow
S52 - S59	ZB4BW113	Square D	025237-13	Switch Operator, White LED 22mm Momentary Ext.
	ZB4BW0B11	Square D	025236-11	Switch Body, 1NO 22mm 24V XB4 White LED
SW1	ZB4BD5	Square D	051744	Switch Operator, 3-Position Momentary Select
	ZB4BZ101	Square D	025242	Switch Body, 22mm 1NO XB4
	ZBE101	Square D	050539	Contact, NO ZB4BK101
T1	9070TF250D20	Square D	051682	Transformer, 208/240/480 150VAC 115sec
TB1 - TB2	DN-G10	Automation Direct	051344	Terminal Block, Green/Yellow Grounding
TB3 - TB12	2715979	Phoenix	024908	Terminal Block, Three Tier
U1	051676	AWMV	051676	AC Drive Assembly, 3-Way Deck w/Software

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