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

CR9 Series Roller Conveyor rev. A1.00 - A2.00

Safety is our #1 concern!

Form #2039

Models Effected:

CR9-2.8C, Conveyor, Roller (Roll Case) CR9-EXT, Conveyor, Roller, Extension (Roll Case)



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

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SECTION 1 SAFETY

1.1 Safety Symbols

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



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



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



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



IMPORTANT! indicates vital information.

NOTE: gives helpful information.



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 conveyor. 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 conveyor. The conveyor 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 CONVEYOR AND AREA AROUND CONVEYOR 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 CONVEYOR SETUP



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

CHECK CONVEYOR BEFORE OPERATION



DANGER! Make sure all guards and covers are in place and secured before operating the conveyor. 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 conveyor. 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 2SETUP & OPERATION

2.1 Overview

The Roller Conveyor (CR9-2.8C) 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 Roller Conveyor.

See Figure 2-1.

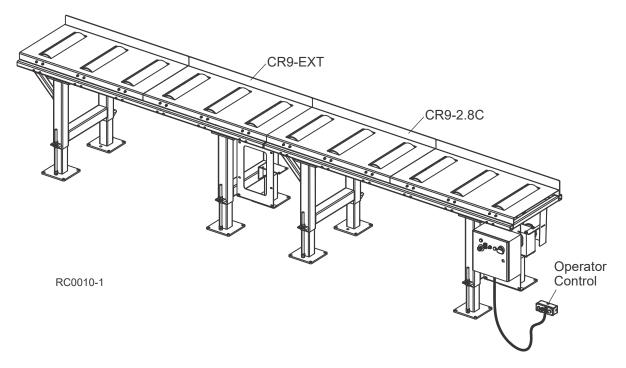


FIG. 2-1

2.1.1 Specifications

See Figure 2-2. The specifications of the Roller Conveyor (CR9) are shown below.

Model: CR9-2.8C, CR9-EXT Rev. A1.00+

Dimensions:		Metric
	Length (per table): 9'-3/4"	2761mm
	Width: 3'-1"	941mm
	Width (Table): 2'-7"	787mm
	Height: 35" min 50" max.	900mm - 1250mm
Weight:		
-	Basic Unit: Ibs.	kg
Drive Motor:	2HP 230/460V 3 Phase	

Electrical Requirements:

Electrical Service: 460V 30A 3 Phase

Fused Disconnect: 30A Time Delay Fuse: 5A Suggested Wire Size (50' max.): 16AWG

FIG. 2-1

2.1.2 Dimensions

See Figure 2-3. The overall dimensions of the Roller Conveyor (CR9) are shown below.

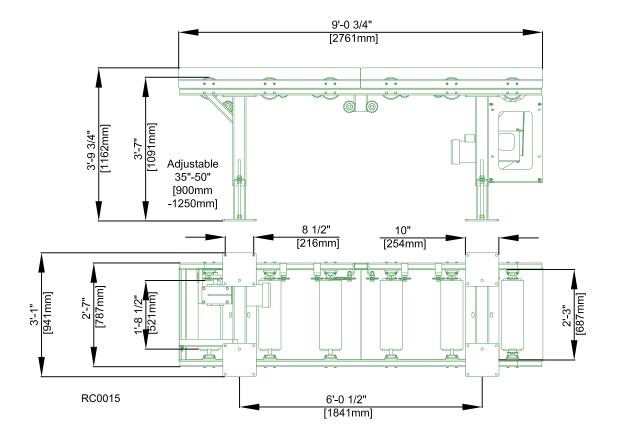


FIG. 2-2

2.2 Installation

Prepare a firm, level area where the roller conveyor 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 roller conveyor to the floor before operating the machine. Failure to do so may result in serious injury or death.

Position the first roller conveyor in line with the Incline Conveyor. The end of the roller conveyor should be no further than 18" from the outfeed roller on the Incline Conveyor. Position the roller conveyor so the rollers are centered with the Incline Conveyor roller.

See Figure 2-4.

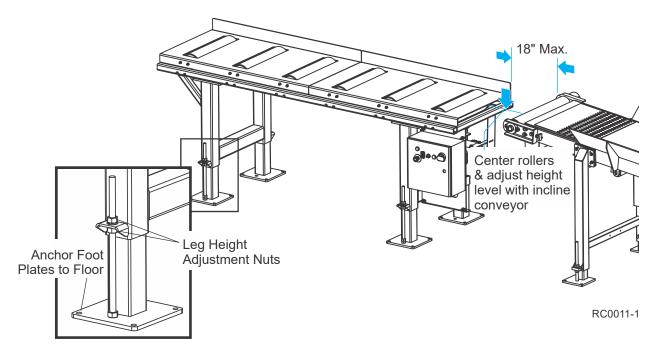


FIG. 2-4

Adjust the roller conveyor legs so the height of the roller conveyor 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 roller conveyor to the floor with 1/2" anchor bolts. Use at least two anchors in each foot plate.

2.2.1 Roller Conveyor Extension Installation (Optional)

See Figure 2-5. Position the extension roller conveyor behind the primary roller conveyor and align the conveyors. Adjust the extension roller conveyor legs if necessary to the same height as the primary roller conveyor. Secure the conveyors to the floor with 1/2" anchor bolts. Use at least two anchors in each foot plate.

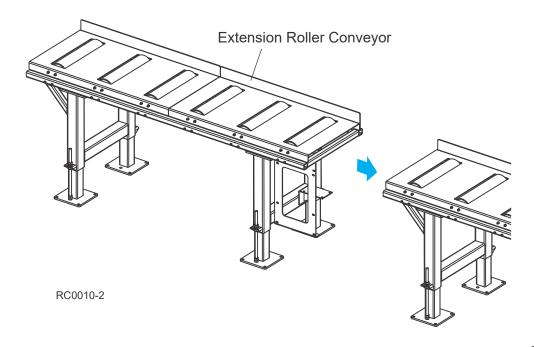


FIG. 2-5

2.2.2 Electrical Installation



DANGER! Make sure all electrical installation, service and/or maintenance work is performed by a qualified electrician and is in accordance with applicable electrical codes.

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 conveyor 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	Fuse	Time Delay	Suggested Wire
Volts	Disconnect	Fuse	Size
460 VAC	30 Amps	5 Amps	

TABLE 2-1

See Table 2-2. The Roller Conveyor electrical specifications are shown below.

Model	FLA of Largest Load	FLA	IR (AIC)	SCCR	Voltage	Hz	Phase
CR9	3.1A	3.1A	25kA	5kA	460V	60	3

TABLE 2-2

See Figure 2-6. Make a hole in the main control enclosure for the power supply cables. Route the incoming power supply from the disconnect switch to the main control box. Secure the power supply cable to the enclosure. Connect the ground wire to the ground stud in the main control box. Route the three power lines to the disconnect block at the top of the cabinet.

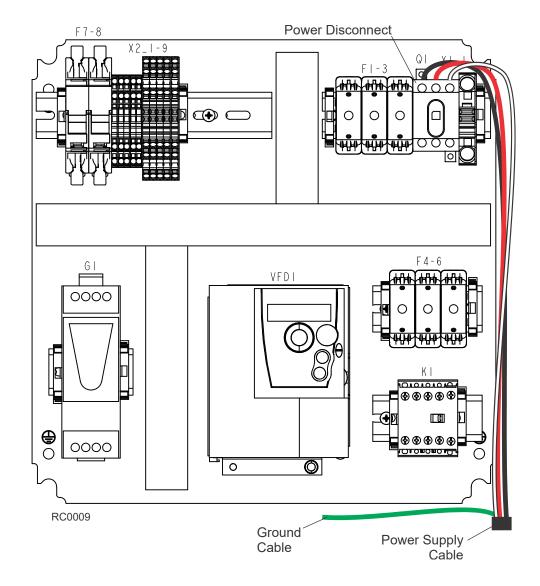


FIG. 2-6

2.3 Control Installation



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

See Figure 2-7. Place the operator control at the operation location and route the cable to the main control box. Connect the operator control cable to the connector at the bottom of the main control box.

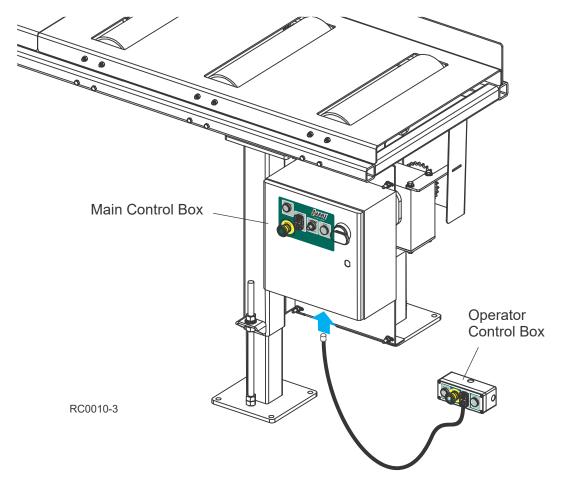


FIG. 2-7

2-8 RC13doc072519 Setup & Operation

2.4 Operation



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



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

The roller conveyor can be operated from the conveyor location with the switches on the conveyor main control box. The conveyor can also be controlled from the operator control box connected to the main control box.

See Figure 2-8. The roller conveyor main control and operator control box switches are shown below.

Main Control Box



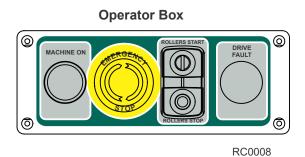


FIG. 2-8

MACHINE ON - Push the MACHINE ON button to turn the conveyor power on. This allows operation of the roller conveyor.

ROLLERS START/ROLLERS STOP - Push START to start rollers spinning. Push STOP to stop the rollers.

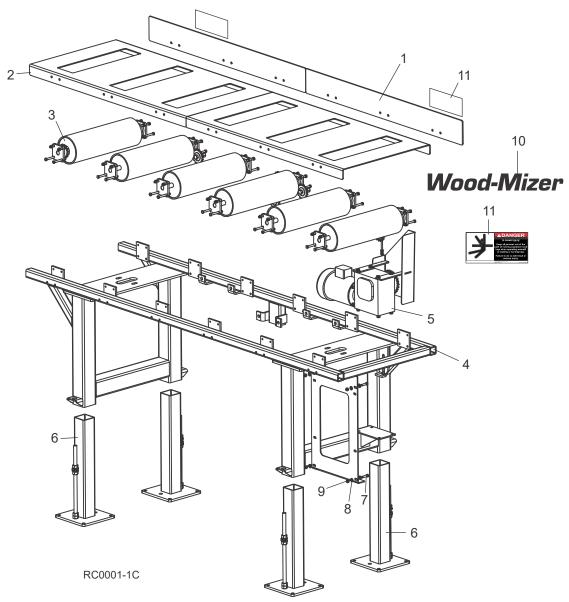
ROLLERS - Use the speed potentiometer to set the rollers feed speed.

DRIVE FAULT - Lights when an error has occurred.

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

SECTION 3 REPLACEMENT PARTS

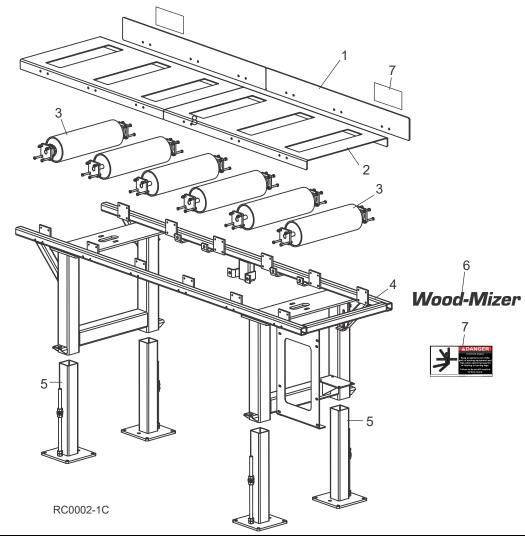
3.1 Roller Conveyor



REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	TABLE ASSEMBLY, ROLL CASE DRIVE	CR9-2.8C	1	
	Table Assembly, Three-Way Drive	065715	1	
1	Plate, Roll Case Fence	071063	2	
2	Top, Roll Case	071062	2	
3	Table Roller/Sprocket Parts (<u>See Section 3.3</u>)			

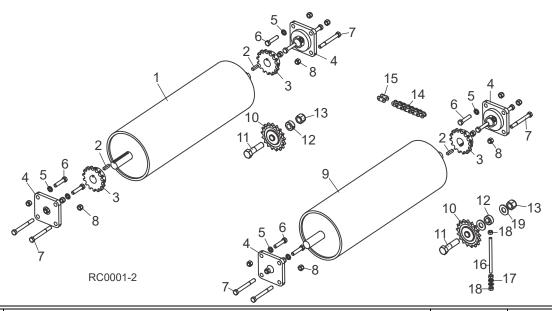
4	Frame Weldment, Roll Case Drive Table	065714	1		
5	Drive Parts (<u>See Section 3.5</u>)				
6	Table Leg Parts (<u>See Section 3.4</u>)				
7	Bolt, 3/8-16 x 1 1/2" Hex Head Full Thread	F05007-17	4		
8	Washer, 3/8" SAE Flat	F05011-3	8		
9	Nut, 3/8-16 Hex Nylon Lock	F05010-10	4		
10	Decal, 10" Wood-Mizer Logo	052287	1		
11	Decal, Keep Away Danger	S09851	2		
	Bolt, 1/2 x 5 1/2" Concrete Wedge Anchor	F05008-131	16		
	Electrical Control Parts (See Section 3.6)				

3.2 Extension Roller Conveyor



REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART #	QTY.	
	TABLE ASSEMBLY, ROLL CASE EXTENSION	CR9-EXT	1	
	Table Assembly, Three-Way Extension	065713	1	
1	Plate, Roll Case Fence	071063	2	
2	Top, Roll Case	071062	2	
3	Table Roller/Sprocket Parts (<u>See Section 3.3</u>)			
4	Frame Weldment, Roll Case Drive Table	065714	1	
5	Table Leg Parts (<u>See Section 3.4</u>)			
6	Decal, 10" Wood-Mizer Logo	052287	1	
7	Decal, Keep Away Danger	S09851	2	
	Bolt, 1/2 x 5 1/2" Concrete Wedge Anchor	F05008-131	16	

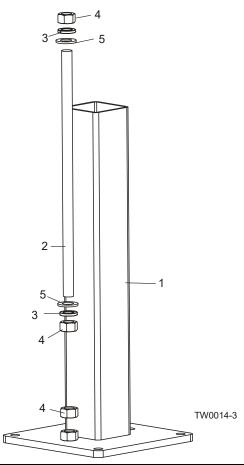
3.3 Rollers, Sprockets & Chain



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 3/4" HEX HEAD GRADE 5	F05007-129	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	48	
9	ROLLER WELDMENT, DUAL KEY TABLE	051464 ¹	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	2	

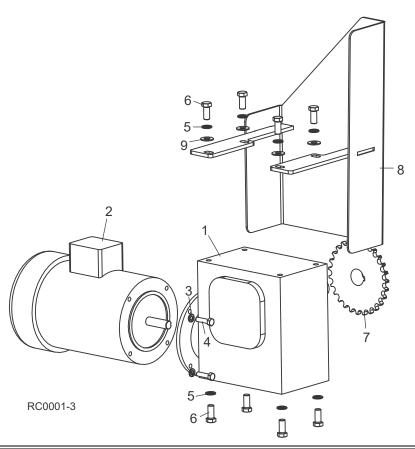
¹ Replaced 047370 Roller Weldment, 3-Way, Single Key (Rev. A1.01).

3.4 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, 3/4-10 HEX	F05010-7	12	
5	WASHER, 3/4" SAE FLAT	F05011-62	8	

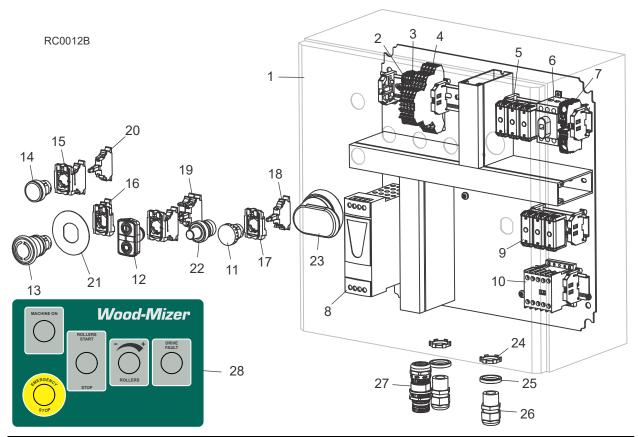
3.5 Drive



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 ¹	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	
9	WASHER, 7/16" SAE FLAT 15/16 OD	F05011-43	4	

¹ Replaced 042390 2HP 3PH 230/460 TEFC 56C No Base Motor (Rev. A1.01).

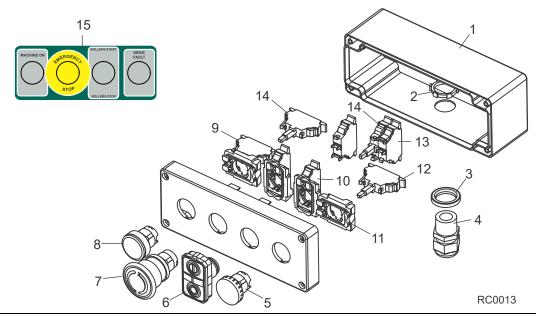
3.6 Electrical Controls



REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART#	QTY.	
	CONTROL ASSEMBLY, ROLL CASE	068080	1	
1	Box, Roll Case Control Enclosure	068063	1	
	Panel Assembly, Roll Case Control	068079	1	
2	Terminal Block, 4Pos 2.5mm GND Clamp	068104	1	
3	Terminal Block, 4Pos 2.5mm Com Clamp	068103	4	
4	Terminal Block, 3 Tier 4mm Clamp	068109	5	
5	Fuse, 15A Class J Cube	068064	3	
6	Disconnect, 40A 3Ph Non-Fused 6mm Shaft	050903-1	1	
7	Terminal Block, 2Pos 16mm Clamp	068111	1	
8	Power Supply, 24VDC 3A 100-120/200-500V	068068	1	
9	Fuse, 10A Class J Cube	069914	3	
10	Contactor, 6A 3P 24VDC Low Power Coil	050442	1	
	Drive Assembly, Roll Case (w/AC Drive & Software)	068082	1	
11	Pilot Light, Red ZB5	068930	1	
12	Push Button, Flush Marked ZB5	068909	1	
13	Push Button, Red ZB5	068940	1	

14	Switch Head, PB Green Flush ZB5	052503	1	
15	Collar, Mount 1NO ZB5	068952	2	
16	Switch Collar Assembly, Mount 1NC ZB5	068950	1	
17	Switch Collar, Mount ZB5	068951	1	
18	Light Module, Red ZB5	068911	1	
19	Switch Block, Contact NC ZB5	068921	1	
20	Light Module, Green ZB5	068910	2	
21	Legend, E-Stop Round Yellow	050992	1	
22	Switch, Potentiometer 22mm 5k	068077	1	
23	Operator, Red/Yellow Pistol Grip	050907-1	1	
	Shaft, 290mm Pistol Grip Disconnect	050908-1	1	
24	Nut, 1/2" NPT Connector Lock	E20461	2	
25	Ring, 1/2" Sealing	E20460	2	
26	Connector, 1/2" NPT .1747	051299	2	
27	Connector, M23 Panel Rear Mount Make Thread	068001	1	
28	Decal, Roll Case Main	069646	1	
	Cable Assembly, Roll Case Motor	068087	1	
	Roll Case Operator Control Parts (See Section 3.7)	<u>.</u>	•	

3.7 Operator Control



REF	DESCRIPTION (♦ Indicates Parts Available In Assemblies Only)	PART#	QTY.	
	OPERATOR ASSEMBLY, ROLL CASE	068081	1	
1	Enclosure, 22mm Buttons 4 Holes	068069	1	
2	Nut, 1/2" NPT Connector Lock	E20461	1	
3	Ring, 1/2" Sealing	E20460	1	
4	Connector, 1/2" NPT .1747	051299	1	
5	Pilot Light, Red ZB5	068930	1	
6	Push Button, Flush Marked ZB5	068909	1	
7	Push Button, Red ZB5	068940	1	
8	Switch Head, PB Green Flush ZB5	052503	1	
9	Collar, Mount 1NO ZB5	068952	1	
10	Switch Collar Assembly, Mount 1NC ZB5	068950	2	
11	Switch Collar, Mount ZB5	068951	1	
12	Light Module, Red ZB5	068911	1	
13	Switch Block, NO ZB5	068920	1	
14	Light Module, Green ZB5	068910	2	
15	Decal, Roll Case Operator	069647	1	
	Cable Assembly, Roll Case Operator	068083	1	

SECTION 4 ELECTRICAL INFORMATION

<u>See Form #2220 Electrical Information</u> for complete electrical information.

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