

Service Bulletin

Machinery Affected: *RailRider™* Floor Truss Roller
Document: SB172
Title: Installing a Beacon and Horn
Applies To: *RailRider* Floor Truss Rollers with frame numbers
211 or lower



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Purpose and Scope

This Service Bulletin procedure applies to customers using a *RailRider™* floor truss press with a frame number of 211 or lower. Customers can add a beacon and horn to the gantry head to improve the safety of gantry operation.

Overview

Table 1 lists the kits and the items included in each kit.

Table 1: SB172 Kits

Kit	Machine	Quantity	Part Number	Description
SB172KIT-A	<i>RailRider</i>	2	326945	3/8-16x2-1/2" full thread hex head cap screw
		2	361605	3/8-16" nut
		1	67737	Horn mounting bracket
		1	90537-501	Horn/light assembly, enclosure
		4	327161	1/4-20x1" hex head cap screw
		4	364034	1/4" lock washer, type M
		4	361601	1/4-20" hex nut
		1	511487	Cable connector, straight
		1	511502	Cable connector, 90 degrees
		20	508704	TY-WRAP, 1/4"
		1	508097	Cable, 20'
		1	SB172	Service Bulletin 172

Table 2 lists the supplies needed to complete this procedure.


Table 2: Tools and Supplies

Description
Screwdriver set
Wrench set
Multimeter
Drill
.875" drill bit
Phillips head screwdriver set

Procedure




Electrical Lockout/Tagout Procedures

WARNING	
	<p>ELECTROCUTION HAZARD!</p> <p>Verify that all power to the machine has been turned off and follow approved lockout/tagout safety procedures before performing any maintenance.</p> <p>All electrical work must performed by a qualified electrician.</p> <p>If it is absolutely necessary to troubleshoot an energized machine, follow NFPA 70E for proper procedures and personal protective equipment.</p>

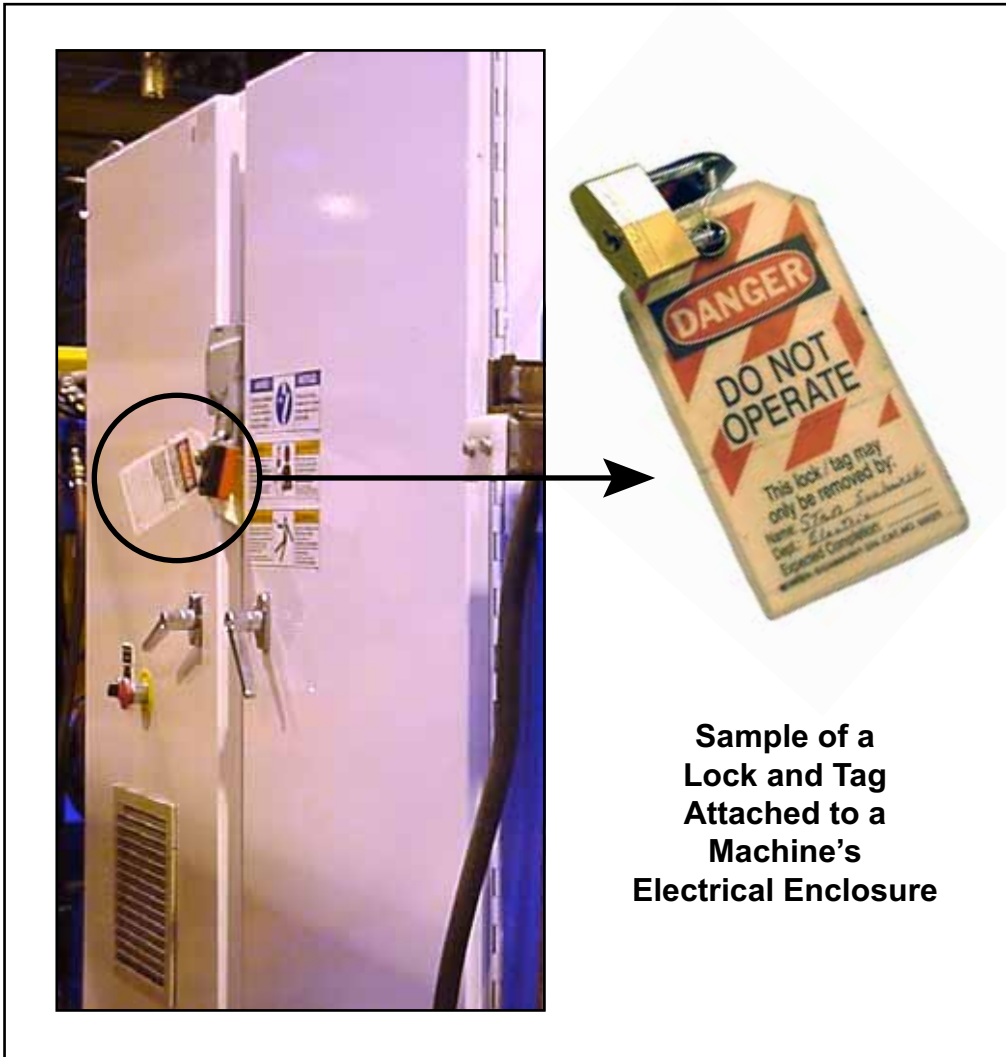
Before performing maintenance on any machine with electrical power, lockout/tagout the machine properly. When working on a machine outside of the machine’s main electrical enclosure, not including work on the electrical transmission line to the machine, follow your company’s approved lockout/tagout procedures which should include, but are not limited to the steps here.

1. Engage an E-stop on the machine.
2. Turn the disconnect switch handle on the machine’s main electrical enclosure to the “off” position. See Figure 1.

WARNING	
	<p>ELECTROCUTION HAZARD.</p> <p>When the disconnect switch is off, there is still live power within the disconnect switch’s enclosure. Always turn off power at the building’s power source to the equipment before opening this electrical enclosure!</p>

3. Attach a lock and tag that meets OSHA requirements for lockout/tagout. See Figure 1.

Figure 1: Lockout/Tagout on the Main Electrical Enclosure

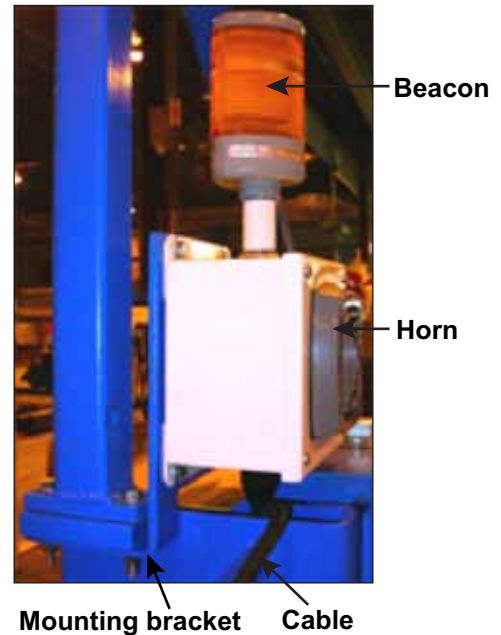


**Sample of a
Lock and Tag
Attached to a
Machine's
Electrical Enclosure**


Adding a Horn and Beacon to a *RailRider*

1. Using a multimeter, verify that the power is off.
2. Attach the horn mounting bracket (PN67737) to the mast side of the gantry head. See Figure 2.
 - a) Remove the two (2) 3/8-16x1-1/2-in. hex head cap screws holding the mast in place. Keep the lock washers.
 - b) Bolt the horn mounting bracket (PN67737) beneath the mast mounting bar using two (2) 3/8-16x2-1/2-in. hex head cap screws (PN326945), two (2) lock washers and two (2) 3/8-16-in. nuts (PN361605). Each lock washer should be in contact with the nut.

Figure 2: Beacon and Horn Assembly



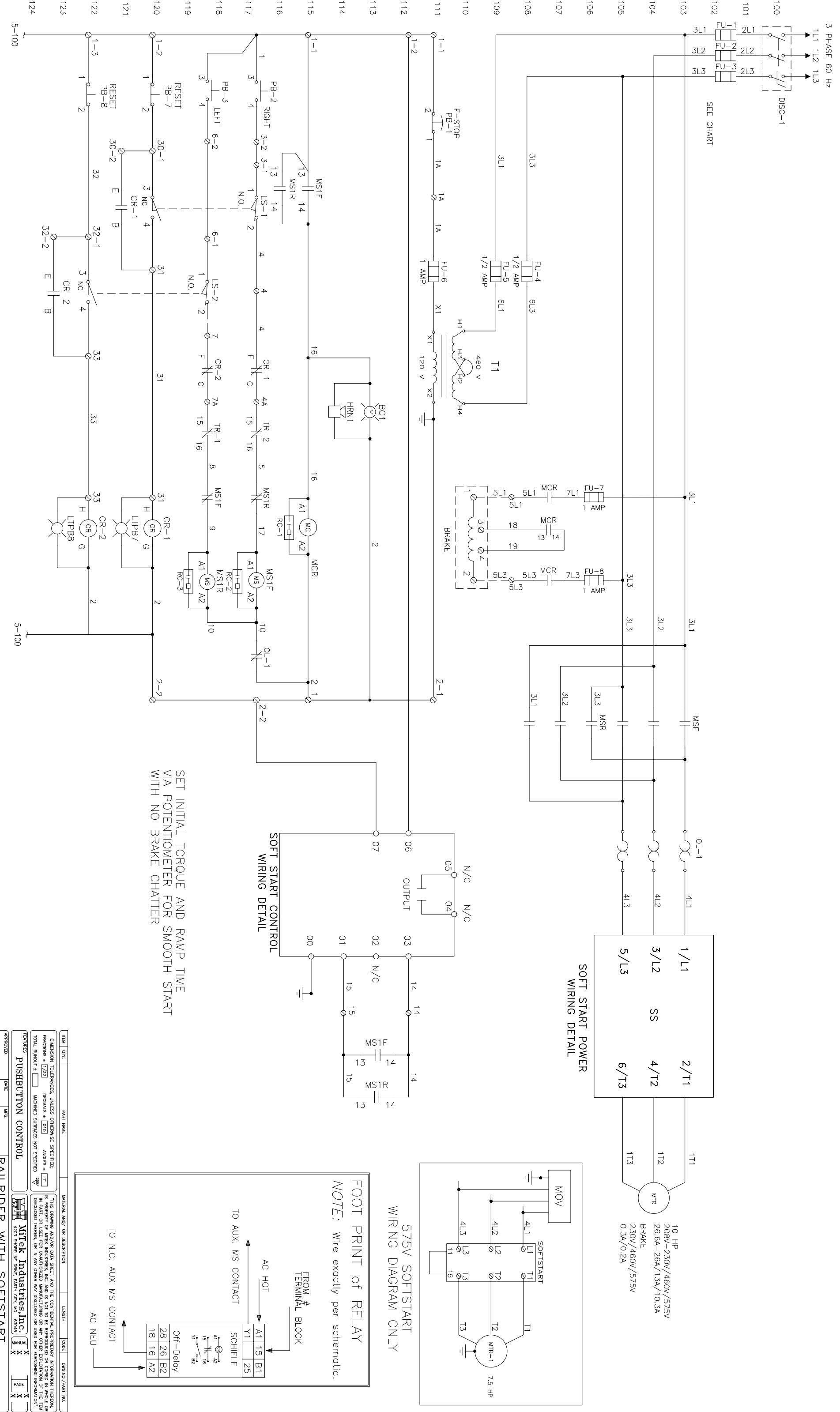
3. Attach the horn/light assembly and enclosure (PN90537-501) to the horn mounting bracket using four (4) 1/4-20x1-in. hex head cap screws (PN327161), four (4) 1/4-in. lock washers (PN364034), and four (4) 1/4-20-in. hex nuts (PN361601). Each lock washer should be in contact with the cap screw head. The horn/light assembly must be facing inward toward the table.
4. Insert the straight cable connector (PN511487) into the hole in the bottom of the horn/light assembly enclosure. See Drawing 90110-507.
5. Open the horn/light assembly enclosure.
6. Run the cable (PN508097) through the straight cable connector and into the horn/light assembly enclosure.

DANGER	
	<p>All electrical work must be performed by a qualified electrician and must conform to all national electrical codes.</p> <p>Do not turn on electrical power until you have completed the entire procedure.</p> <p>Follow approved lockout and tagout procedures (OSHA 29 CFR 1910.147).</p>

7. Wire-nut one wire each from the horn and beacon with the black cable wire.
8. Wire-nut one wire each from the horn and beacon with the white cable wire.

9. Wire-nut the ground wires.
10. Close the horn/light assembly enclosure.
11. Drill a .875-in. hole in the side of the control enclosure.
12. Insert the 90-degree cable connector (PN511502) into the hole. See Drawing 90110-507.
13. Open the control enclosure.
14. Run the cable through the 90-degree cable connector and into the enclosure.
15. Connect the black wire to any #16 terminal. See Drawing 90110.
16. Connect the white wire to any neutral. See Drawing 90110.
17. Connect the ground wire to any ground. See Drawing 90110.
18. Secure the cable to the gantry head with TY-WRAP (PN508704).
19. Remove the lockout/tagout device and restore power to the machine.
20. Verify that the horn and beacon are operating correctly before using the machine.

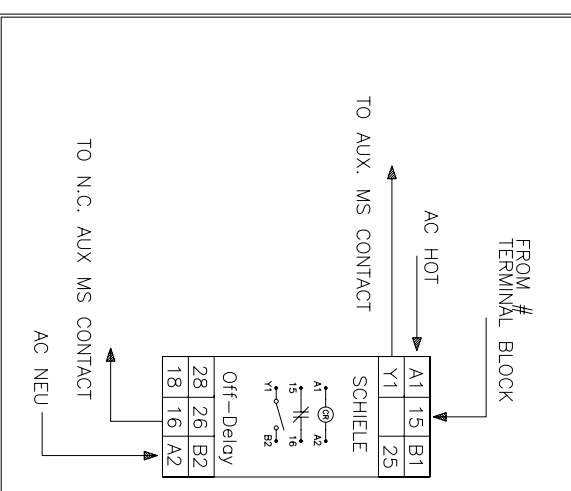
END OF SERVICE BULLETIN



SET INITIAL TORQUE AND RAMP TIME
VIA POTENTIOMETER FOR SMOOTH START
WITH NO BRAKE CHATTER

575V SOFTSTART
WIRING DIAGRAM ONLY

FOOT PRINT of RELAY
NOTE: Wire exactly per schematic.



ITEM	QTY.	PART NAME	MATERIAL AND/OR DESCRIPTION	LENGTH	CODE	DWG NO./PART NO.
<p>DIMENSION TOLERANCES, UNLESS OTHERWISE SPECIFIED: FRACTIONS ± []/32 DECIMALS ± []/100 ANGLES ± []°</p> <p>TOTAL ROUND OFF ± [] MACHINED SURFACES NOT SPECIFIED ± []</p> <p>FEATURES: PUSHBUTTON CONTROL</p> <p>APPROVED: Mitek Industries, Inc. 4203 SHORELINE DRIVE, EDINBURGH, OHIO, 43045</p> <p>RAILRIDER WITH SOFTSTART</p>						
CHECKED	DATE	DRAWN	DATE	SCALE	PAGE	DASH NO. REV.
	3/10/97	STREISEL		NONE	2 of 5	90110 AC

REV.	DATE	DESCRIPTION	BY	CHK'D	APP'D	DATE
A	11/7/95	REVISUAL DRAWING 90110 REV 2 SEE ESR 5033	LN	CK'D	APP'D	DATE
B	5/27/98	ADDED 90110-517 ASSY/ITEM SEE ESD 8049/5071	LN			

ASSEMBLY	ITEM #3
90110-507-208V	90110-517-208V
90110-507-230V	90110-517-230V
90110-507-460V	90110-517-460V
90110-507-575V	90110-517-575V

ITEM	QTY.	PART NAME	MATERIAL AND/OR DESCRIPTION	LENGTH	CODE	DWG NO./PART NO.
35	1	ELECTRICAL SCHEMATIC			D	90110
34	20	TY-WRP 7/1/4 BLACK	TY-25MM		P	508704
33	1	HORN MOUNTING BRACKET			M	6737
32	4	C'SCW,HXHD,1/4-20X1.6R.5			P	327161
31	1	RESET P.B. BOX	SEE DWG		P	90110-504
30	1	LABEL-WARNING	HCS #BSM5025-742MHBT		P	691509
29	1	LABEL-NOTICE	HCS #BSMH6058-746NHBS		P	691701
28	1	LABEL-WARNING	HCS #BSM6000-B39MHBS		P	691518
27	2	WSHR	1X3/4		P	511319
26	28	WSHR,LOCK,TYP M	1/4		P	364034
25	22	WSHR,FLT,SLE,TYP AN	1/4X3/8X.049		P	365115
24	22	SCW,RHDD,SL	1/4-20X3/4		P	341157
23	1	HORN/BEACON, ASSY	STRBAGHT, CONFIG.		M	90537-501PH
22	4	NUT,HEX,1/4-20,FINISHED			P	361601
21	20	CABLE,16/3,SCW			P	508097
20	4	SCR,RHDD,SL	#10-32X1-1/4		P	341109
19	1	GASKET	KILLARK #OLK1-R6		P	621029
18	1	COVER,1/2"	KILLARK #OL-10		P	517102
17	1	TEE,CONDUIT,1/2	KILLARK #OT-1		P	517011
16	6	WSHR,LOCK,TYP M	#10		P	364026
15	6	SCREW,RHDD,MACH	#10-32X3/8		P	341103
14	4	CLAMP(1)HOLE,3/4"EMT	JIFFY #145		P	511271
13	1	CONN,FLEX,45,1/2	TAB #5242		X	511102
12	1	CONN,CABLE,STR,1/2,250/400	TAB #2673		P	511487
11	5	CONN,FLEX,90,1/2	TAB #5252		X	511112
10	12	CONDUIT,1/2,EXTRA-FLEX	LIQUANTE #FF11		X	510032
9	6	CLAMP(1)HOLE,1"EMT	JIFFY #155		X	511273
8	1	HORN/BEACON, ASSY	90537 DWG		D	90537
7	1	CONN,FLEX,STR,3/4	TAB #5233		X	511093
6	3	CONN,FLEX,90,3/4	TAB #5253		X	511113
5	17	CONDUIT,3/4,EXTRA-FLEX	LIQUANTE #FF12		X	510033
4	1	CONN,CABLE,90DEG,1/2 CRD,250/400	TAB #2681		P	511502
3	1	RAILRIDER, 7FT, ELEC, ENCL, ASSY	SEE ASSEMBLY		X	SEE TABLE
2	2	LIMIT SWITCH	CUTLER-HAMMER #E30A13		X	515076
1	1	BOX-ELECTRIC 4X4	HOFFMAN #A-404-SC		M	519236

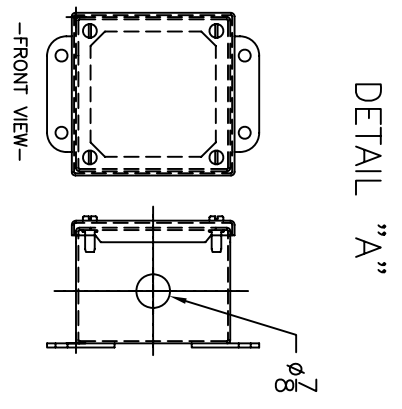
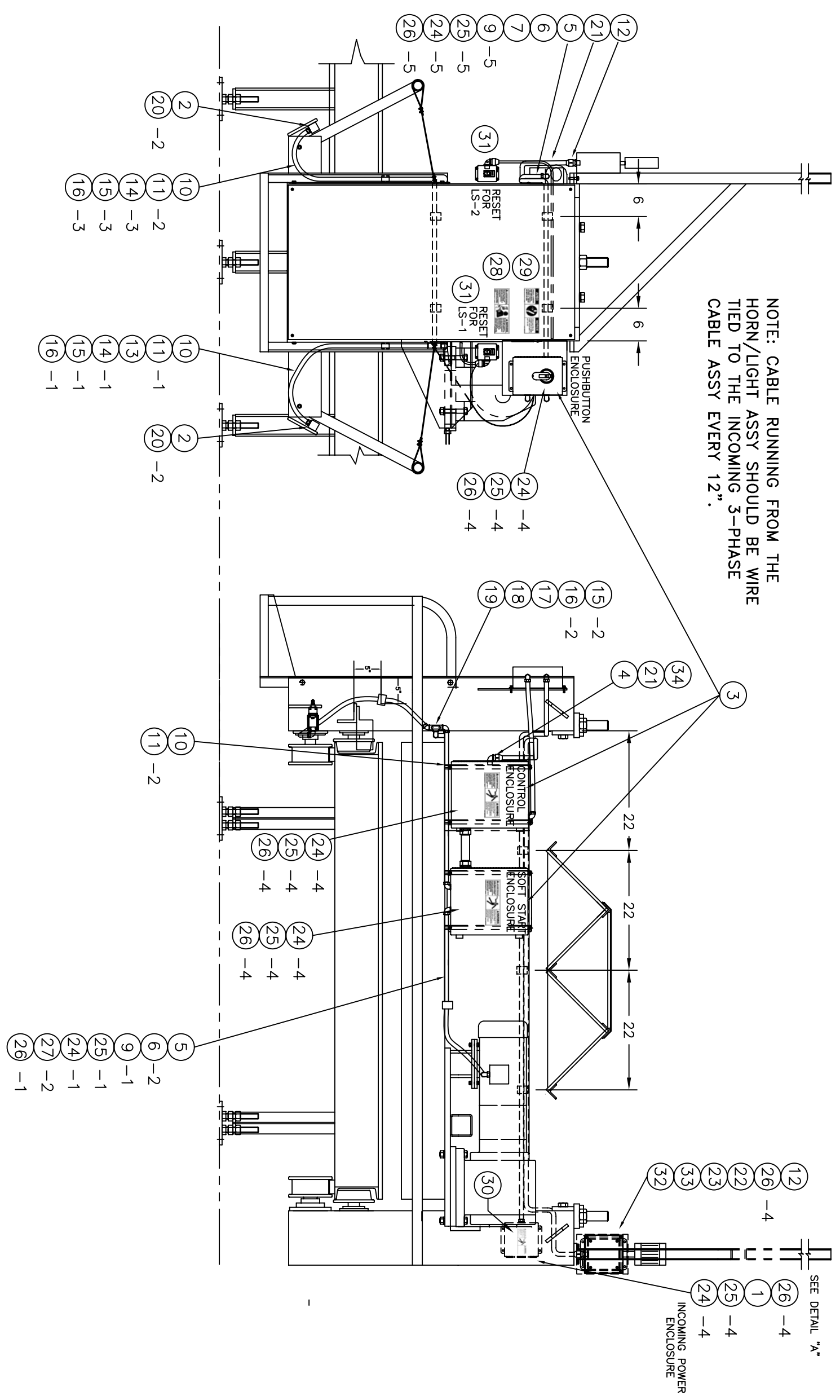
DIMENSION TOLERANCES, UNLESS OTHERWISE SPECIFIED:
 FINISHES: X
 DIMENSION ± [] UNLESS OTHERWISE SPECIFIED: ANGLES ± []
 DIMENSION ± [] UNLESS OTHERWISE SPECIFIED: ANGLES ± []
 TOTAL HATCH 2 [] HATCHED SURFACES NOT SPECIFIED []
 THIS DRAWING AND/OR DATA SHEET, AND THE COMPENSATIONAL PROPRIETARY INFORMATION THEREON, IS PROPERTY OF MITEK INDUSTRIES, INC. AND IS NOT TO BE REPRODUCED OR COPIED IN WHOLE OR IN PART, OR USED FOR UNAUTHORIZED MANUFACTURING OR ANY OTHER EXPLOITATION OF THE IDEA DISCLOSED THEREIN, OR IN ANY OTHER MANNER DISCLOSED OR USED FOR FURTHER INFORMATION.

APPROVED: [] DATE: []
 CHECKED: [] DATE: []
 DATE: 6/16/97
 SCALE: NONE
 PRICE: 1 of 3
 90110-507
 DASH NO.: []
 REV.: B

KEY	NO. OF HOLES	DM	DEPTH	DM	DEPTH	TAP	REMARKS
A	X	X	X	X	X		

Mitek Industries, Inc.
 4220 SPOKANE DRIVE, EARTH CITY, MO, 63045

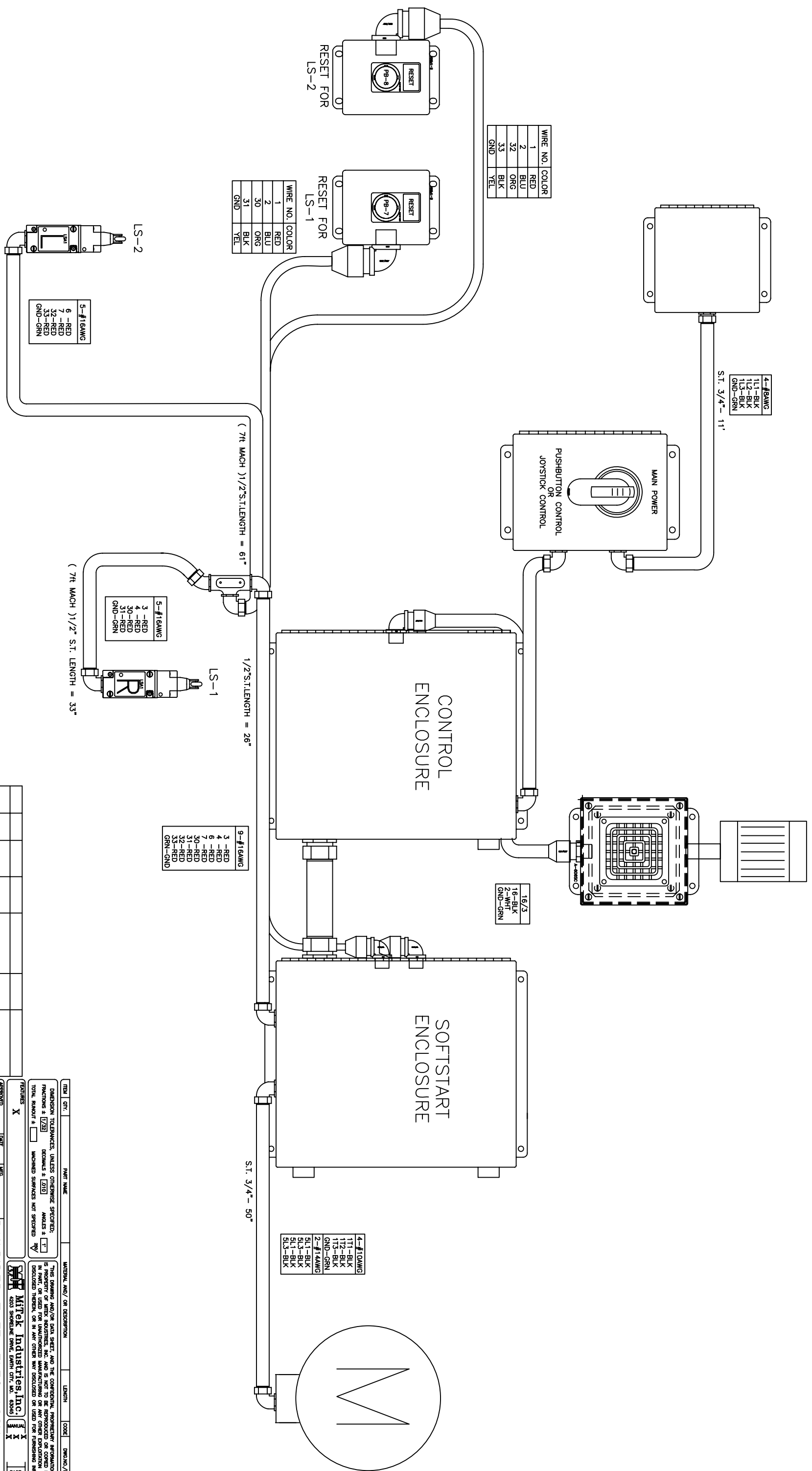
NOTE: CABLE RUNNING FROM THE HORN/LIGHT ASSY SHOULD BE WIRE TIED TO THE INCOMING 3-PHASE CABLE ASSY EVERY 12".



KEY	NO. OF HOLES	Ø	DEPTH	Ø	TYP	REMARKS
A	X	X	X	X		

ITEM	QTY.	PART NAME	MATERIAL AND/OR DESCRIPTION	LENGTH	CODE	DRG NO./PART NO.
DIMENSION TOLERANCES, UNLESS OTHERWISE SPECIFIED: FINISHES: <input type="checkbox"/> ZINC <input type="checkbox"/> ANODIZE <input type="checkbox"/> POLISH TOTAL FINISHES: <input type="checkbox"/> MACHINED SURFACES NOT SPECIFIED <input type="checkbox"/>						
APPROVED	DATE	DRG.	DATE	SCALE	PAGE	DWG NO. REV.
CHECKED	DATE	DRG.	DATE	SCALE	PAGE	DWG NO. REV.
RAILRIDER 7 FT. ELEC ASSY Miteck Industries, Inc. 4225 SHORELINE DRIVE, EARTH CITY, MO. 63146			DATE: 9/19/97 SCALE: NONE PAGE: 2 of 3 DASH NO.: 90110-507 REV: B			

NOTE: THIS PRINT IS TO CALL OUT CONDUIT PARTS. IT DOES NOT REPRESENT ACTUAL DIRECTION OR LENGTHS OF CONDUIT RUNS.



KEY	NO. OF HOLES	DN	DEPTH	DN	TAP	DEPTH	REMARKS
A	X	X	X	X			

ITEM	QTY.	PART NAME	MATERIAL AND/OR DESCRIPTION	LENGTH	CODE	DWG. NO./PART NO.

APPROVED	DATE	DRG.	DATE	DRAWN	DATE	SCALE	PAGE	OF	3	3	DWG. NO.	REV.

FEATURES	DATE	DRG.	DATE	DRAWN	DATE	SCALE	PAGE	OF	3	3	DWG. NO.	REV.
X												

RAILRIDER 7 FT. ELEC ASSY	DATE	DRG.	DATE	DRAWN	DATE	SCALE	PAGE	OF	3	3	DWG. NO.	REV.

MITTEK Industries Inc.	DATE	DRG.	DATE	DRAWN	DATE	SCALE	PAGE	OF	3	3	DWG. NO.	REV.

4225 SHORELINE DRWG. EARTH. CNT. INC. 82040	DATE	DRG.	DATE	DRAWN	DATE	SCALE	PAGE	OF	3	3	DWG. NO.	REV.

RAILRIDER 7 FT. ELEC ASSY	DATE	DRG.	DATE	DRAWN	DATE	SCALE	PAGE	OF	3	3	DWG. NO.	REV.

MITTEK Industries Inc.	DATE	DRG.	DATE	DRAWN	DATE	SCALE	PAGE	OF	3	3	DWG. NO.	REV.

4225 SHORELINE DRWG. EARTH. CNT. INC. 82040	DATE	DRG.	DATE	DRAWN	DATE	SCALE	PAGE	OF	3	3	DWG. NO.	REV.

RAILRIDER 7 FT. ELEC ASSY	DATE	DRG.	DATE	DRAWN	DATE	SCALE	PAGE	OF	3	3	DWG. NO.	REV.

REV.	DATE	DESCRIPTION	BY	CHKD	APPRD	DATE