



Summary	Updating a System 3 Controller with a 24v Brake Motor				
Products Affected	All System 3 Controllers with a New Motor				
Key Word Tags	24v Brake, Motor, Power Supply, Retro				
Tools/Equipment (If Required)	Wire Stripper, Fish Tape, Terminal Block Screw Driver, Phillips and Flat Blade Screw Driver				
Parts/Materials (If Required)	Motor with 24v Brake (PN will vary) 24vdc Power Supply Kit, Installation Schematics R00141131				
Related Media					
Author	Curt Eggert, RevC M. Burzlaff	Issue Date	5/15/12	Status	Active

Please Read The Entire Bulletin Before Beginning The Procedure

Failure to read and understand this service bulletin may cause permanent electrical damage to the motor and/or the control board. If you have any questions please contact Ryttec Technical Support at 1-800-628-1909.

WARNING

High voltage is present inside the control panel. Do not touch the circuit board, electrical components or wiring inside the control panel with power applied. Lock out and Tag out electrical supply before performing work. Modification work should be made by qualified electrical personnel only.

The replacement motor supplied to be utilized on your Ryttec High Performance Door is now equipped for System 4 with a 24Vdc powered brake. To operate this motor with your System 3 Door controller, a 24Vdc power supply must be installed. The power supply, wire, and wiring diagrams needed have been sent with your replacement motor. For this installation, B1 & B2 terminals on the control board will no longer be used, B3 & B4 terminals on the lower din rail will become the brake control terminals brake wires B1-B2 will land there. The power supply sent with your replacement motor can be used with either, 208, 230 or 460 volt power systems. If there are other components inside your System 3 controller that may prohibit the connection of replacement components, contact Ryttec Technical Support at 1-800-628-1909 for assistance.

Electrical drawing applications are as follows:

System 3 Control, 208, 230 or 460 volt, without internal disconnect, use drawings S43-MTR-0001 & S43-MTR-0002

System 3 Control, 208, 230 or 460 volt, with internal factory disconnect, use drawings S43-MTR-0003 & S43-MTR-0004

System 3 Control, 575 volt with or without disconnect, OR freezer control box, use drawing S43-MTR-0005 & S43-MTR-0006

Connecting wires to B1 & B2 terminals on the control board will cause immediate and permanent damage to the brake and the power supply sent with your motor.

1. Verify motor data plate, confirming brake voltage is 24Vdc. If not, contact Rytec Technical Support at 1-800-628-1909.
2. Remove the wires from B1 & B2 terminals on the control board and B1 & B2 terminals on the lower Din Rail. Retain for future use.
3. Remove the wires from B3 & B4 terminals on the control board and B3 & B4 terminals on the lower Din Rail. If your control does not have B3 & B4 wires, proceed to step 4.
4. Remove wires from white magnet, if equipped.
5. Install power supply as close to left side of control box as possible. Location is not critical; wiring convenience is the focus in this step.
6. Following the wiring diagram appropriate for your control box arrangement, install a black wire, retained earlier, into terminal L1 on the power supply. Connect remaining end of wire to the appropriate power location, L1 terminal block, top of disconnect or L1 terminal on control board as shown on wiring diagram.
7. From earlier retained wires, install a black wire into terminal L2 on the power supply. Connect remaining end of wire to the appropriate power location, L2 terminal block, top of disconnect or L2 terminal on control board as shown on wiring diagram.
8. Cut and strip the ends of a section of the blue wire supplied with your power supply, to a length appropriate to the distance from terminal B4 on your System 3 control board to terminal V+ on the power supply. Install this wire into the fore-mentioned terminals.
9. Cut and strip the ends of another section of the blue wire at a length appropriate to the distance from terminal B3 on your System 3 controller to terminal B1 on the lower Din Rail. Install this wire into the fore-mentioned terminals.
10. Cut and strip the ends of another section of blue wire at a length appropriate to the distance from terminal B2 on the lower Din Rail to power supply terminal V-. Install the wire into the fore-mentioned terminals.
11. Cut and strip the ends of another section of blue wire at a length appropriate to the distance from the DC OK common terminal on the power supply to terminal 4 on the system 3 control board. Install wire into the fore-mentioned terminals.
12. Cut and strip the ends of the green and yellow wire supplied with your power supply at a length appropriate to terminal PE on the lower din rail to the Ground Terminal on the power supply.

13. Fasten or secure any loose wires inside the control box as necessary to prevent wear and damage to the wires or any other components.

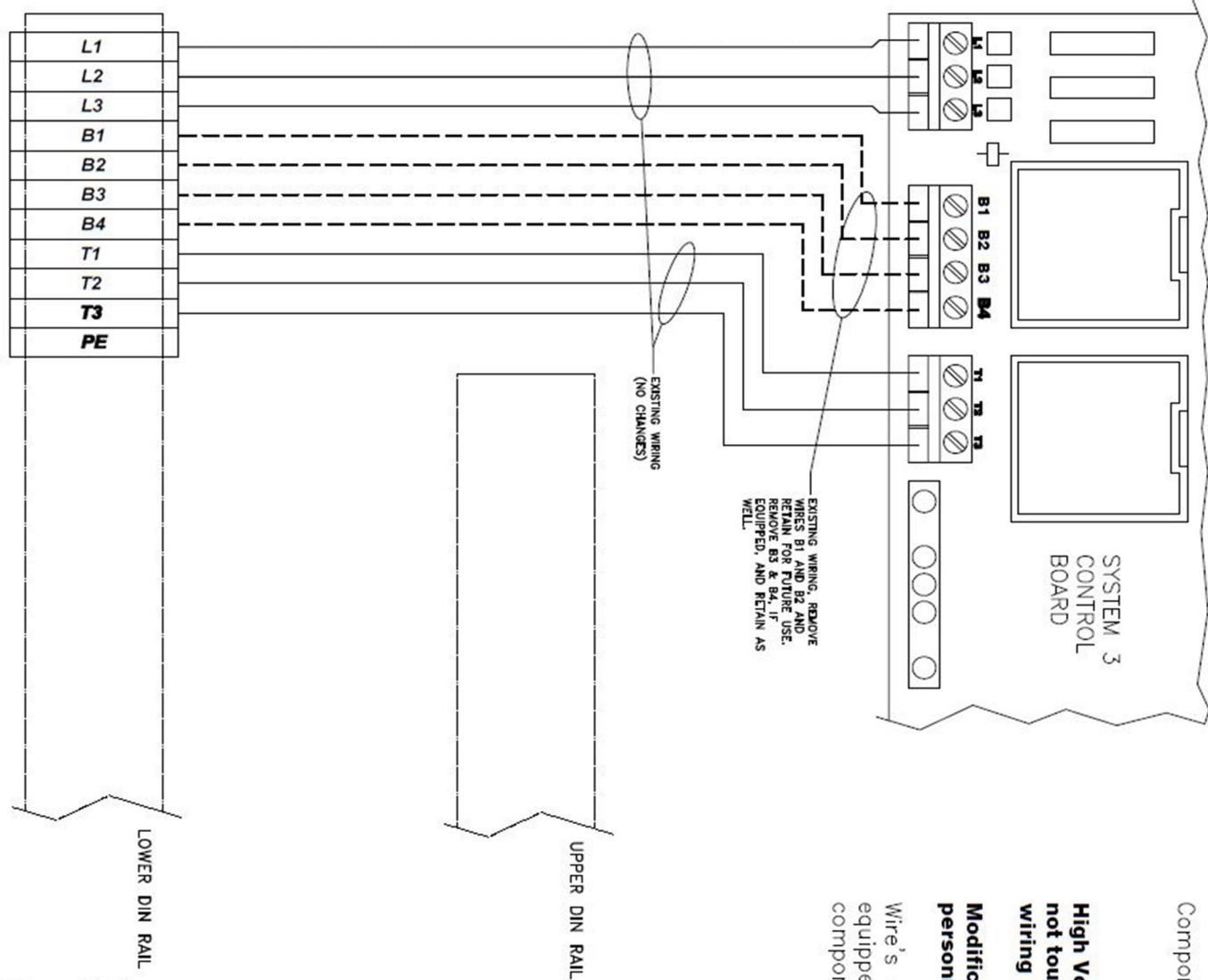


There should be NO WIRES installed in Terminals
B1 & B2 on the System 3 Control board

If there is currently a wire in terminal(s) B1 and or B2 on the System 3 Controller, Do Not Power the controller, re-read this bulletin or contact Rytec Technical Support for assistance. Do not power the controller until there are no wires in terminals B1 & B2 on the controller.

If all work has been performed and components installed properly, you should now be able install and terminate your replacement drive motor, and return your Rytec Door to service. Be advised that your door limits will need to be adjusted and or reset. Replacement schematics have been sent for your specific door showing proper terminations to the System 3 Control panel.

Please contact Rytec Technical Support at 1-800-628-1909 with any further questions.



Component removal notes:

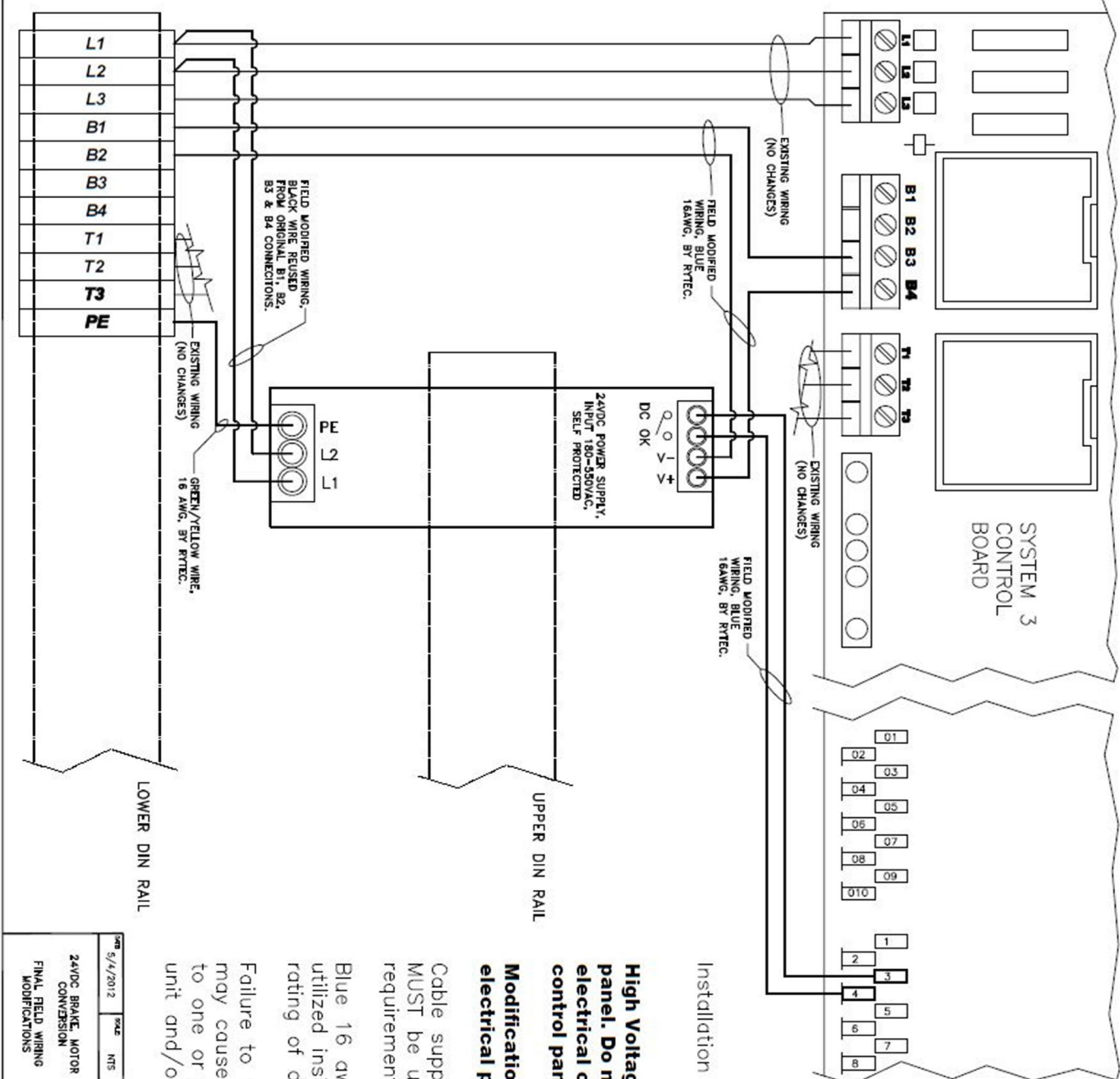
WARNING!!!!

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Modifications should be made by qualified electrical personnel only.

Wire's removed from B1 & B2, and B3 & B4, if equipped, should be retained for re-use with new components.

DATE 5/1/2012	SCALE	NTS
24VDC BRAKE MOTOR CONVERSION		
EXISTING WIRING DIAGRAM, NO DISCONNECT.		
RYTEC CORPORATION P.O. BOX 403 JACKSON, WI 53037 CONFIDENTIAL THIS DRAWING IS THE PROPRIETARY PROPERTY OF RYTEC CORPORATION AND IS NOT TO BE REPRODUCED OR TRANSMITTED IN ANY FORM OR BY ANY MEANS, ELECTRONIC OR MECHANICAL, INCLUDING PHOTOCOPYING, RECORDING, OR BY ANY INFORMATION STORAGE AND RETRIEVAL SYSTEM. ELECTRICAL CONNECTION DIAGRAM SYSTEM 3 MOTOR CONVERSION 24VDC BRAKE AND POWER SUPPLY DRAWN BY: CME DATE: 5/1/2012 FILE NO: S43-MTR-0001 SHEET: 1 OF 1		



Installation notes:

WARNING!!!!

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Modifications should be made by qualified electrical personnel only.

Cable supplied with replacement drive unit **MUST** be used to maintain NEC requirements.

Blue 16 awg supplied wire must be utilized inside control box to maintain UL rating of door controls.

Failure to wire as shown on schematics may cause damage or permanent failure to one or more components on the drive unit and/or control.

DATE	SIZE	NTS
5/4/2012		
24VDC BRAKE MOTOR CONVERSION		
FINAL FIELD WIRING MODIFICATIONS		
RYTEC CORPORATION P.O. BOX 403 JACKSON, MI 48207 CONFIDENTIAL: THIS DRAWING IS THE PROPERTY OF RYTEC CORPORATION AND IS NOT TO BE USED WITHOUT THE WRITTEN CONSENT OF RYTEC CORPORATION. ELECTRICAL CONNECTION DIAGRAM SYSTEM 3 MOTOR CONVERSION 24VDC BRAKE AND POWER SUPPLY DRAWN BY: CME REV. NO.: S43-MTR-0002 APP. BY: A		

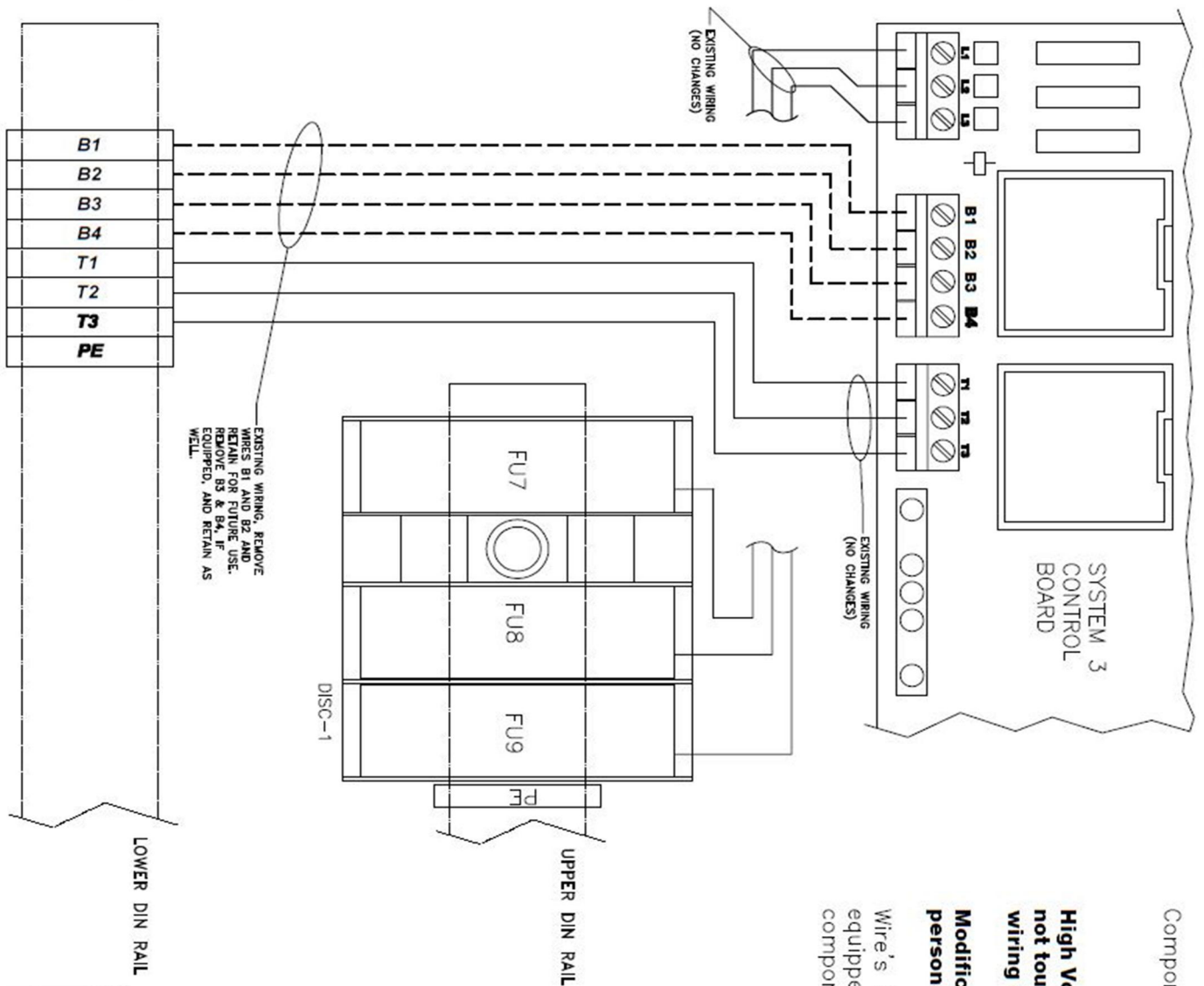
Component removal notes:

WARNING!!!!

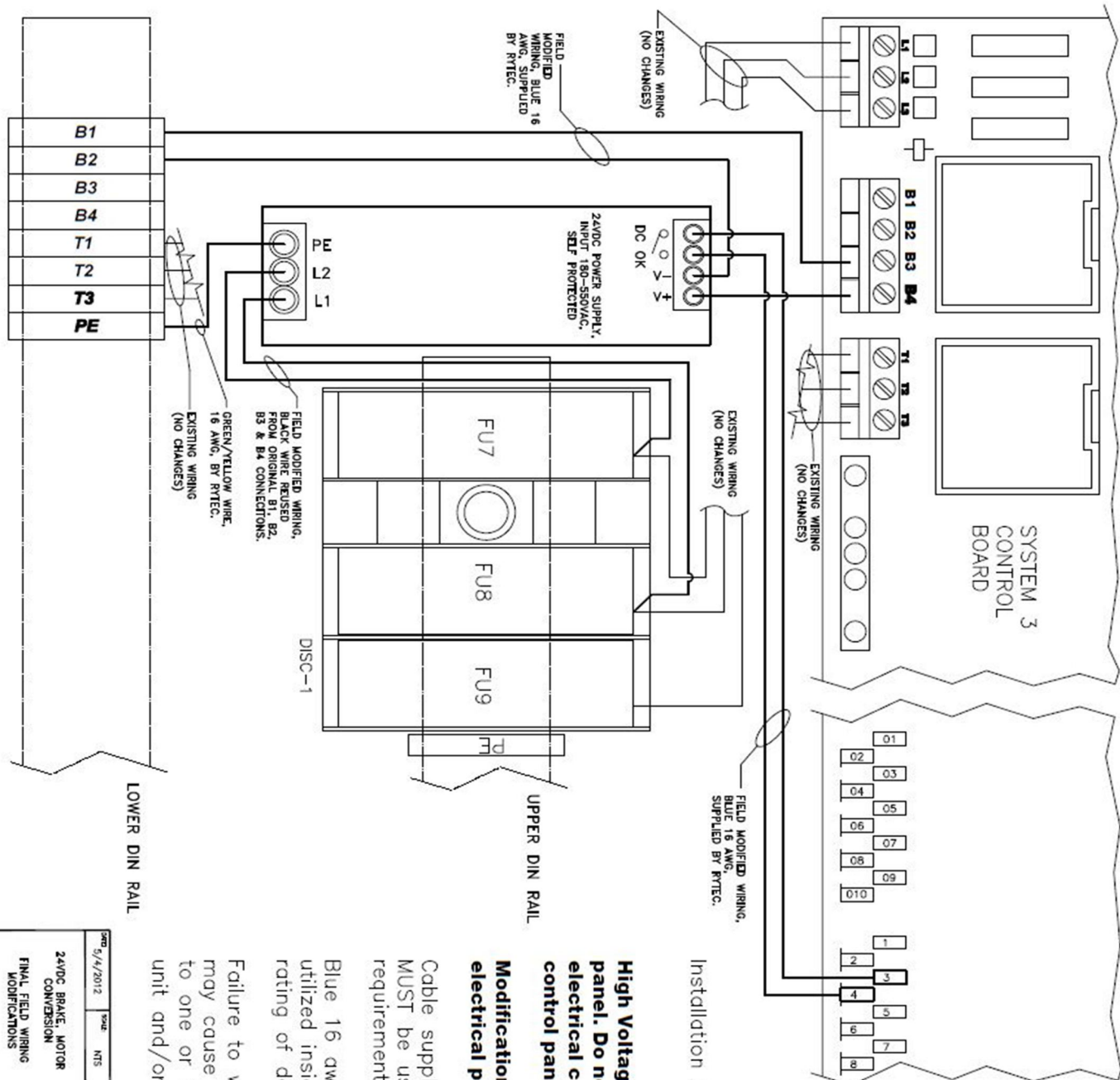
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DATE	5/4/2012	BY	NTS
24VDC BRAKE MOTOR CONVERSION			
EXISTING WIRING DIAGRAM, DISCONNECT.			
RYTEC CORPORATION			
P.O. BOX 403 JACKSON, WI 53037			
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SYSTEM 3 MOTOR CONVERSION			
ELECTRICAL CONNECTION DIAGRAM			
24VDC BRAKE AND FORD SHUTTER			
FORM NO.	CME	REV. NO.	S43-MTR-0003
			100 A



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Blue 16 awg supplied wire must be utilized inside control box to maintain UL rating of door controls.

Failure to wire as shown on schematics may cause damage or permanent failure to one or more components on the drive unit and/or control.

REV 9/4/2012	NTS	RYTEC CORPORATION	
24VDC BRAKE, MOTOR CONVERSION		P.O. BOX 428 JACOBSON, MI 48457	
FINAL FIELD WIRING MODIFICATIONS		FOR RYTEC & THE RYTEC MOTOR OF RYTEC CORPORATION AND FOR THE RYTEC MOTOR OF RYTEC CORPORATION	
ELECTRICAL CONNECTION DIAGRAM		SYSTEM 3 MOTOR CONVERSION	
Drawn by:	CME	Spec. No.:	S43-MTR-0004
		Rev.:	A

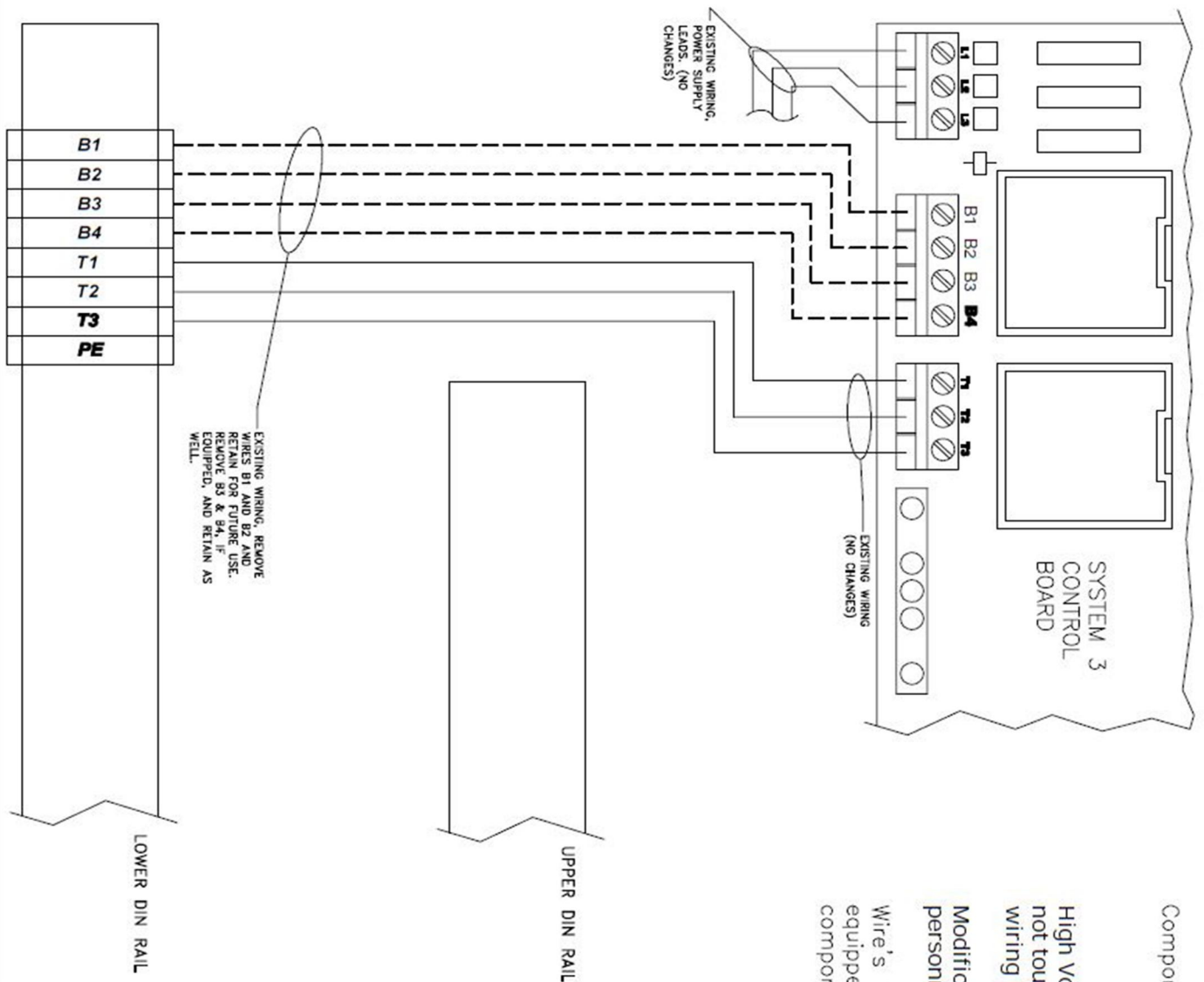
Component removal notes:

WARNING!!!!

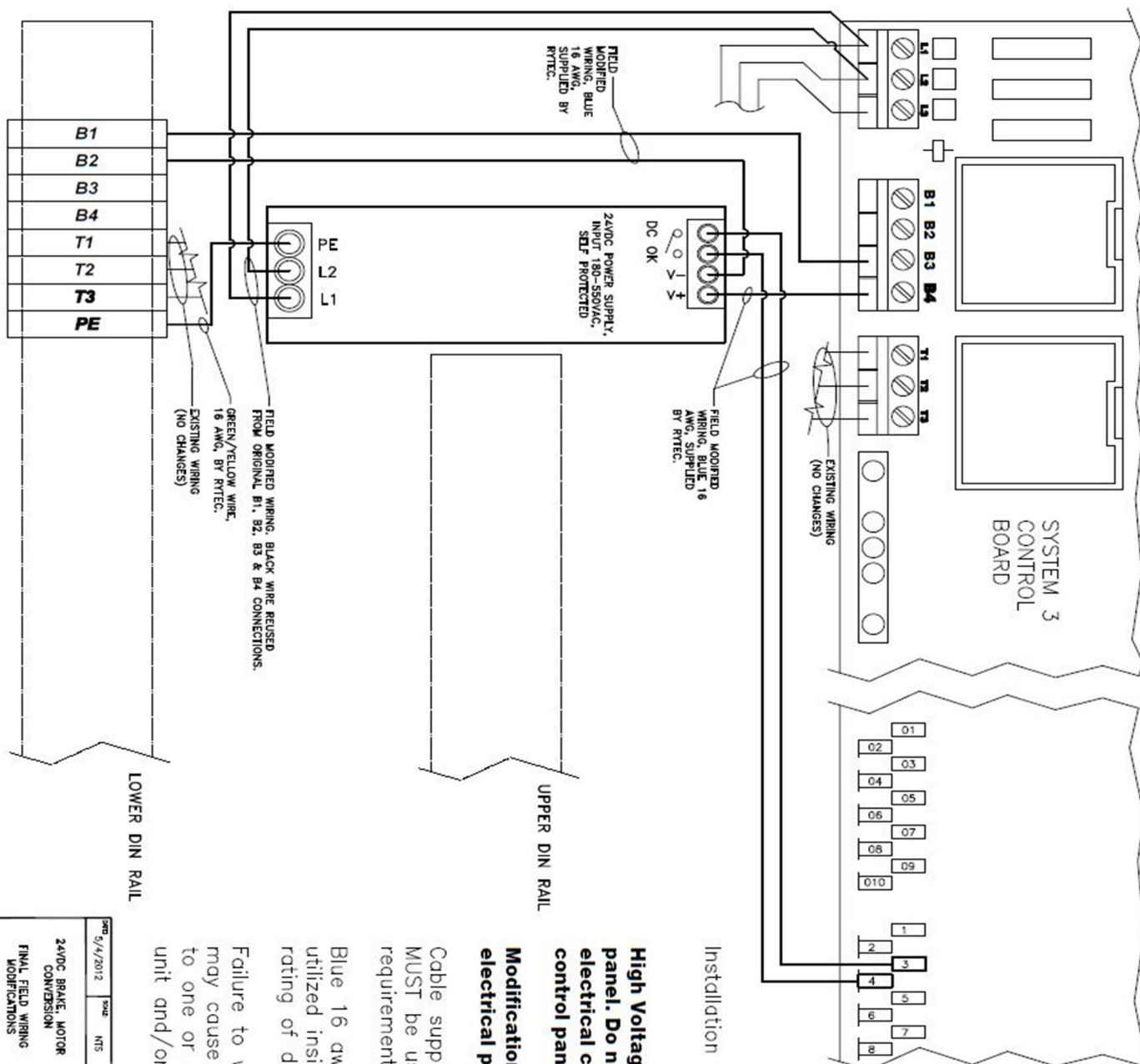
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REV	5/4/2012	DATE	NFS
24VDC BRAKE MOTOR CONVERSION			
EXISTING WIRING DIAGRAM, 575V.			
RYTEC CORPORATION			
P.O. BOX 403 JACKSON, WI 53037			
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DATE	BY	CHK	DATE
5/4/12	CUE		5/4/12
S43-MTR-0005			B



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24VDC BRAKE MOTOR CONVERSION			P.O. BOX 403 JACKSON, WI 53037
FINAL FIELD WIRING MODIFICATIONS			THIS DRAWING IS THE PROPERTY OF RYTEC CORPORATION AND IS NOT TO BE USED WITHOUT THE WRITTEN CONSENT OF RYTEC CORPORATION.
			ELECTRICAL CONNECTION DIAGRAM SYSTEM 3 MOTOR CONVERSION 24VDC BRAKE AND POWER SUPPLY
DATE	5/4/2012	BY	SA3-MTR-0006
DATE		BY	