Product Support Bulletin 2005-015A

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Maintenance of Way ~ Work Equipment Bulletin

NOTE: THIS BULLETIN SUPERCEDES PSB 2005-015
Please Discard PSB 2005-015

DATE: April 24, 2006

SUBJECT: Rewiring to Prevent Accidental Brake Release
Secure EEROM with Double-sided Tape

RATING:

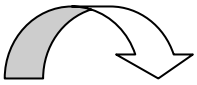
- [X] **DIRECTIVE** (Action is required)
- [ ] **ALERT** (Potential Problem)
- [ ] **INFORMATION** (Action is optional)
- [ ] **PRODUCT IMPROVEMENT** (Enhance Product)

MACHINE MODEL(S):
Spiking Machine Model 99C with PLC control
CX Hammer
Any Spiking Machine Model C or 99C converted to PLC control
Two-Tie Screw Spiker (TTSS)
Production Screw Spiker (PSS)

SERIAL NUMBER(S):
Spiking Machine Model 99C: 410400-410424
CX Hammer: 410500-410687
TTSS: 400101-400104
PSS: 400100, 400105-400111

SUMMARY:
Rewire the PLC +V3 terminal and both Brake Pedals to wire #300 Secure the EEPROM to the PLC with double-sided tape to help prevent lost contact between the EEPROM and PLC.

OPERATIONAL IMPACT:
If either CB8, CB13 or CB16 trips, or if the EEPROM loses contact with the PLC while the engine is running with the pump engaged, Relay CR22 will de-energize. Electrical Power would be applied to the Brakes Off Solenoid Valve through the Brake Pedals and the brakes will release. **NOTE: THE BRAKES WILL STILL APPLY IF EITHER ONE OF THE BRAKE PEDALS ARE DEPRESSED, EVEN IF CB8, CB13 or CB16 IS TRIPPED OR IF THE EEPROM IS REMOVED. The brakes will also apply if the engine is shut down, the yellow Electrical Interlock Button is pushed in or the pump is turned off.**



ACTION:

To prevent accidental brake release under these circumstances, the **PLC +V3** terminal, **RPC14**, **RPC17** and the **Brake Pedals (P8-E)** are to connected to wire #300. This will prevent the Brakes Off Valve from receiving any electrical power if power is lost to the PLC or RPCs.

Refer to the Wire Connection Chart shown below and Figures 1 through 7 for the wiring changes. This change should take 30-60 minutes to complete.

In addition, the EEPROM is to be secured to the PLC with double-sided tape. Use 3M #9576Y (yellow) or equivalent. The tape is to be wrapped around both ends as well as the back of the EEPROM. Do not cover the connector or handle with the tape. **CAUTION!** Do not apply tape at temperatures below 50°F. See Figure 8 for EEPROM location.

WARRANTY:

Nordco will provide telephone technical support for rewiring. Double-sided tape will be provided at no charge. Contact the Nordco Service Department at 1-800-445-9258.

Wire Connection Chart (Machine NOT MODIFIED per PSB 2005-015)
See Figures 1, 2 and 3.

	Original Connections		New Connections	
Wire No.	**From**	**To**	**From**	**To**
19	PLC +V2	PLC +V3	PLC +V2	PLC +V4
19	PLC +V3	PLC +V4	Removed	
21	CB15@21	P8-E	Removed	
22	RPC13 (Bus Bar)	RPC14 (Bus Bar)	RPC13 (Bus Bar)	RPC 20 (Bus Bar)
22	RPC17 (Bus Bar)	RPC20 (Bus Bar)	Removed	
300			CB8@300	PLC +V3
300			P8-E	PLC +V3
300			CB8@300	RPC14 (Bus Bar)
300			RPC14 (Bus Bar)	RPC17 (Bus Bar)

Wire Connection Chart (Machine MODIFIED per PSB 2005-015)
See Figures 4, 5, 6 and 7.

	Original Connections		New Connections	
Wire No.	**From**	**To**	**From**	**To**
22	P8-E	RPC1 (Bus Bar)	Removed	
22	RPC2 (Bus Bar)	PLC +V3	Removed	
300			CB8@300	PLC +V3
300			PLC +V3	RPC14 (Bus Bar)
300			P8-E	RPC17 (Bus Bar)
300			RPC14 (Bus Bar)	RPC17 (Bus Bar)

Instructions if machine was NOT MODIFIED per PSB 2005-015 (Figures 1, 2 & 3)

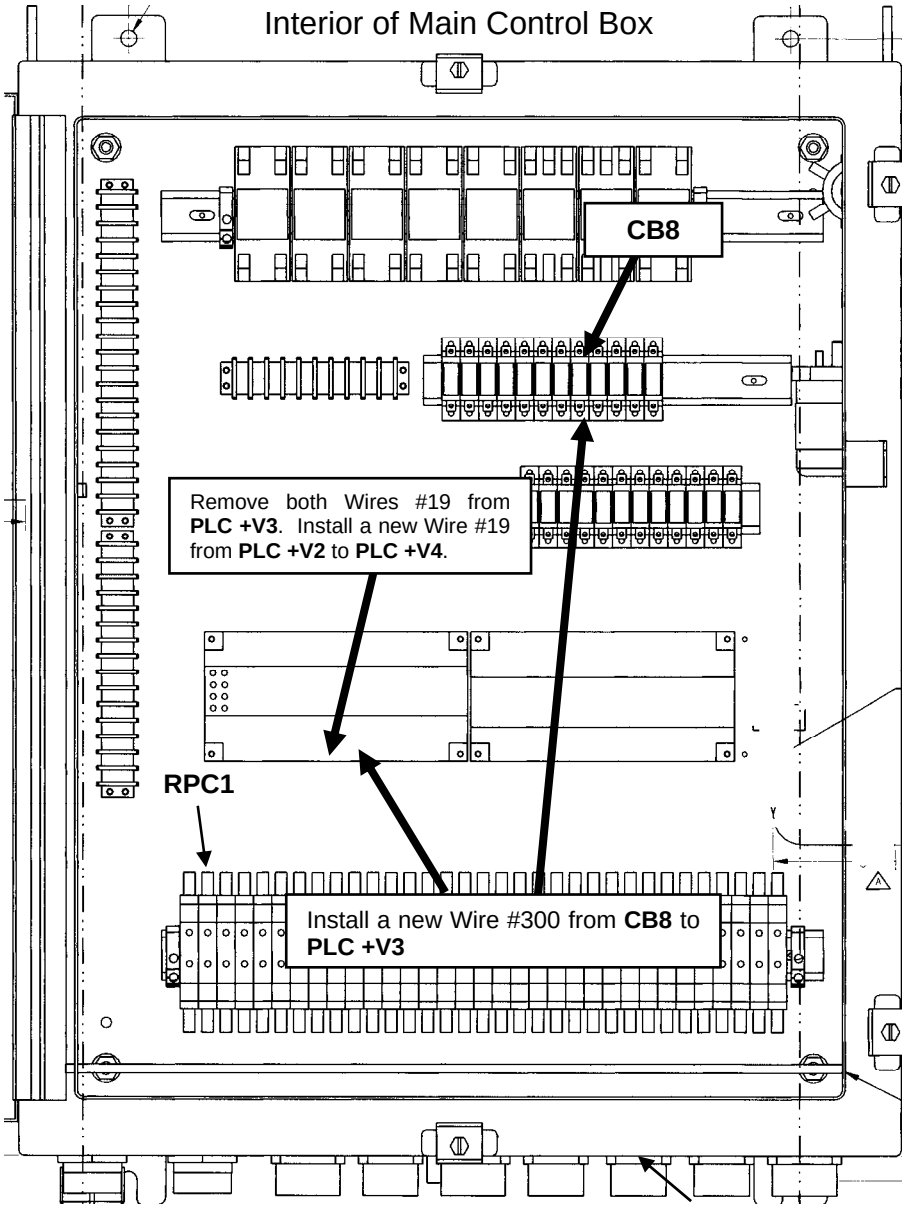


Figure 1
Rewire PLC +V3 from Wire #19 to Wire #300

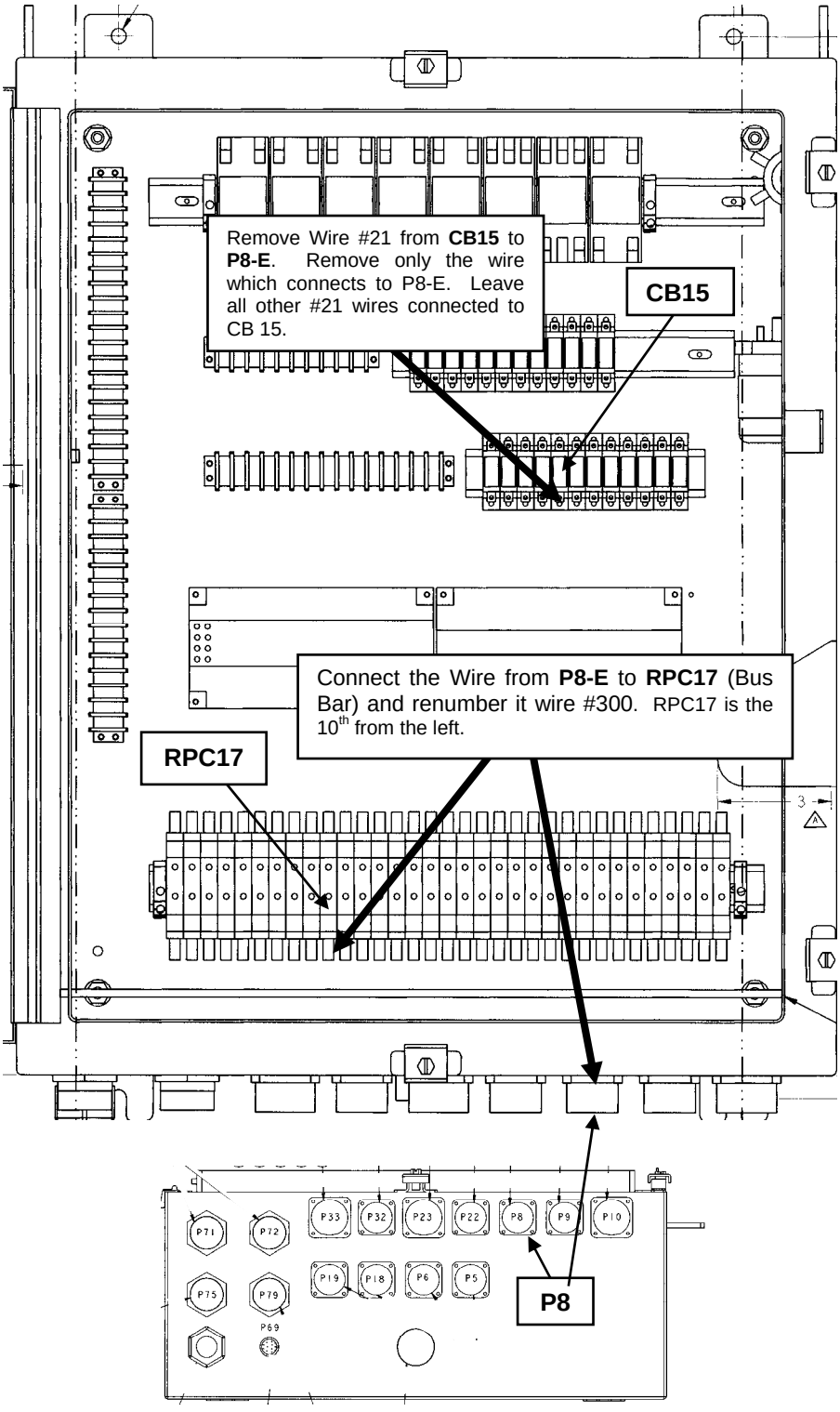


Figure 2
Rewire P8-E (Brake Pedals) from Wire #21 to Wire #300

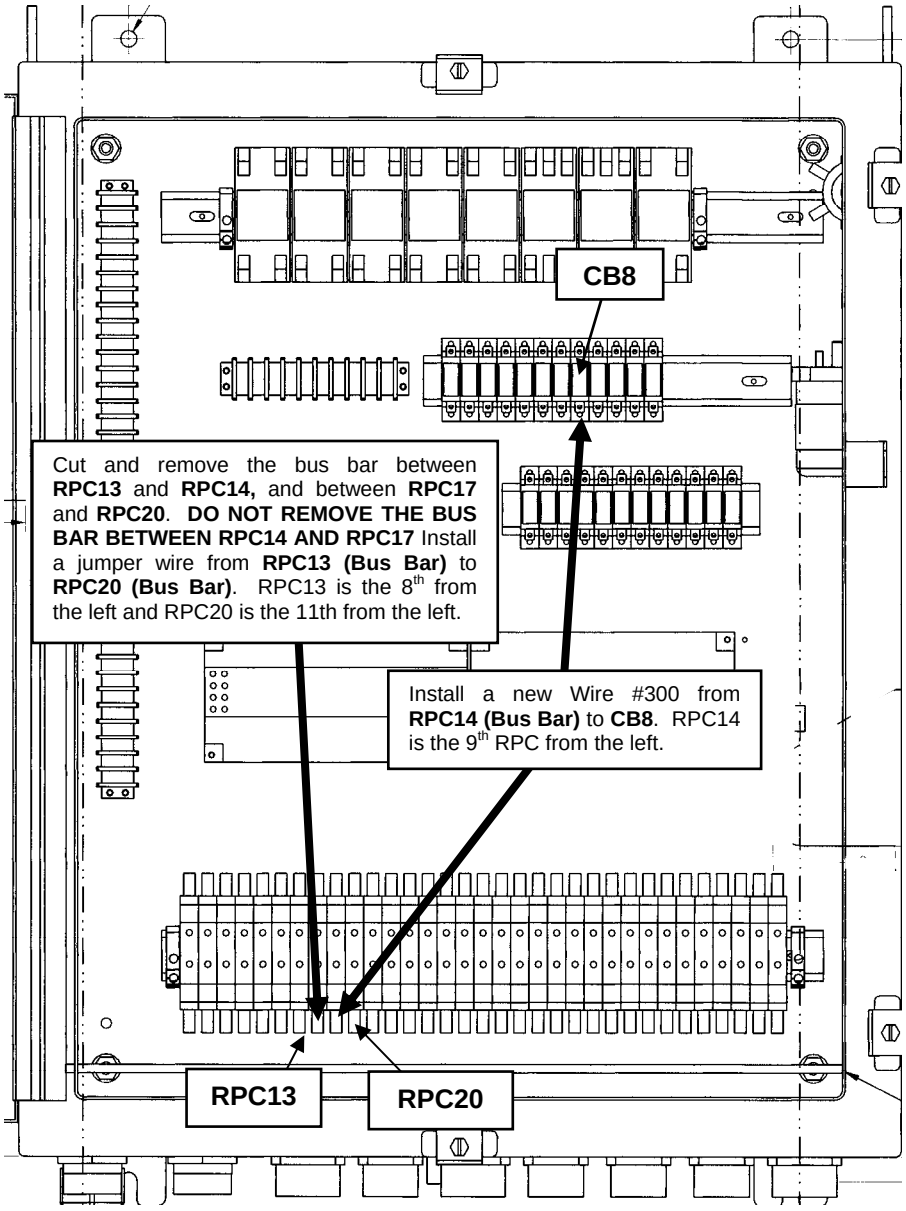


Figure 3
Rewire RPC14 and RPC17 from Wire #22 to Wire #300

Instructions if machine was MODIFIED per PSB 2005-015 (Figures 4, 5, 6 & 7)

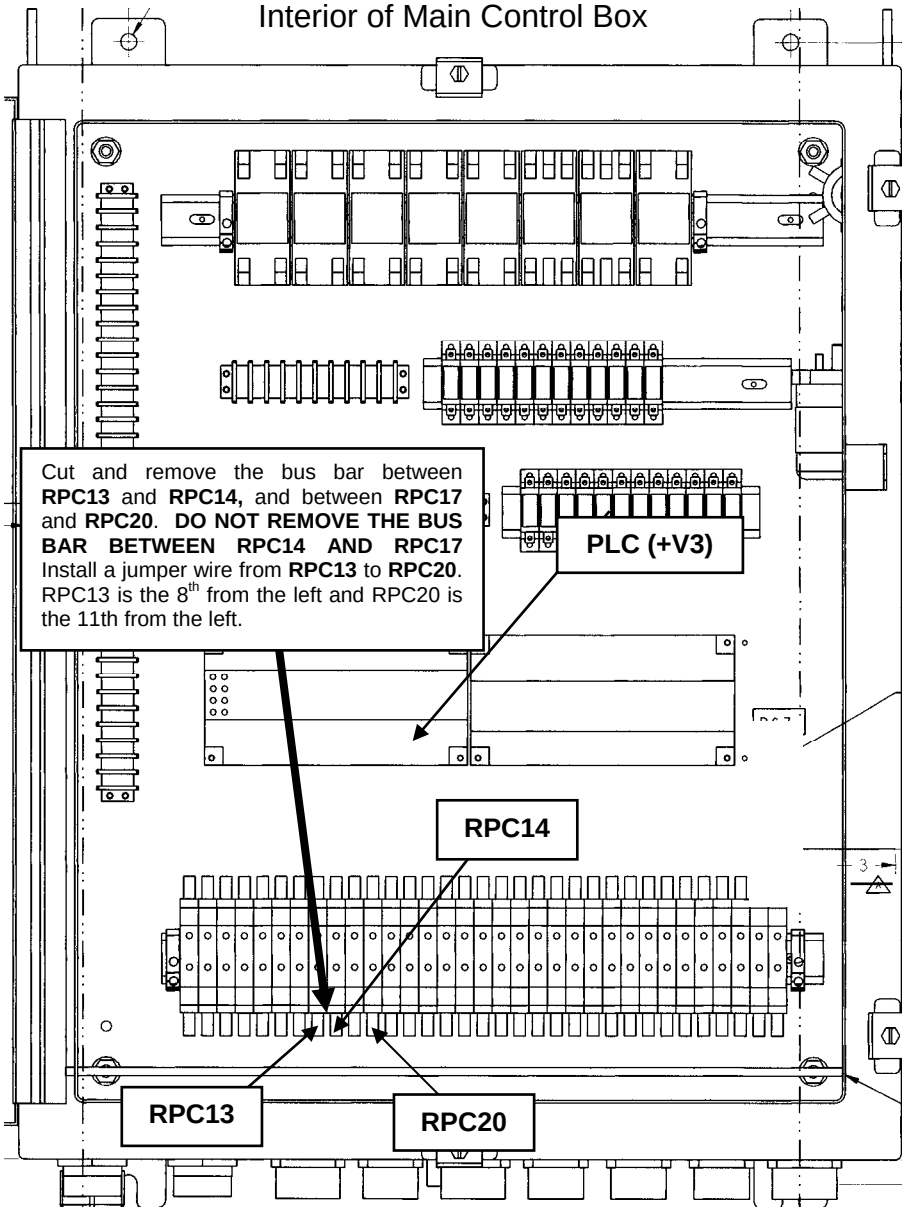


Figure 4
Isolate RPC 14 and RPC17 from Wire #22

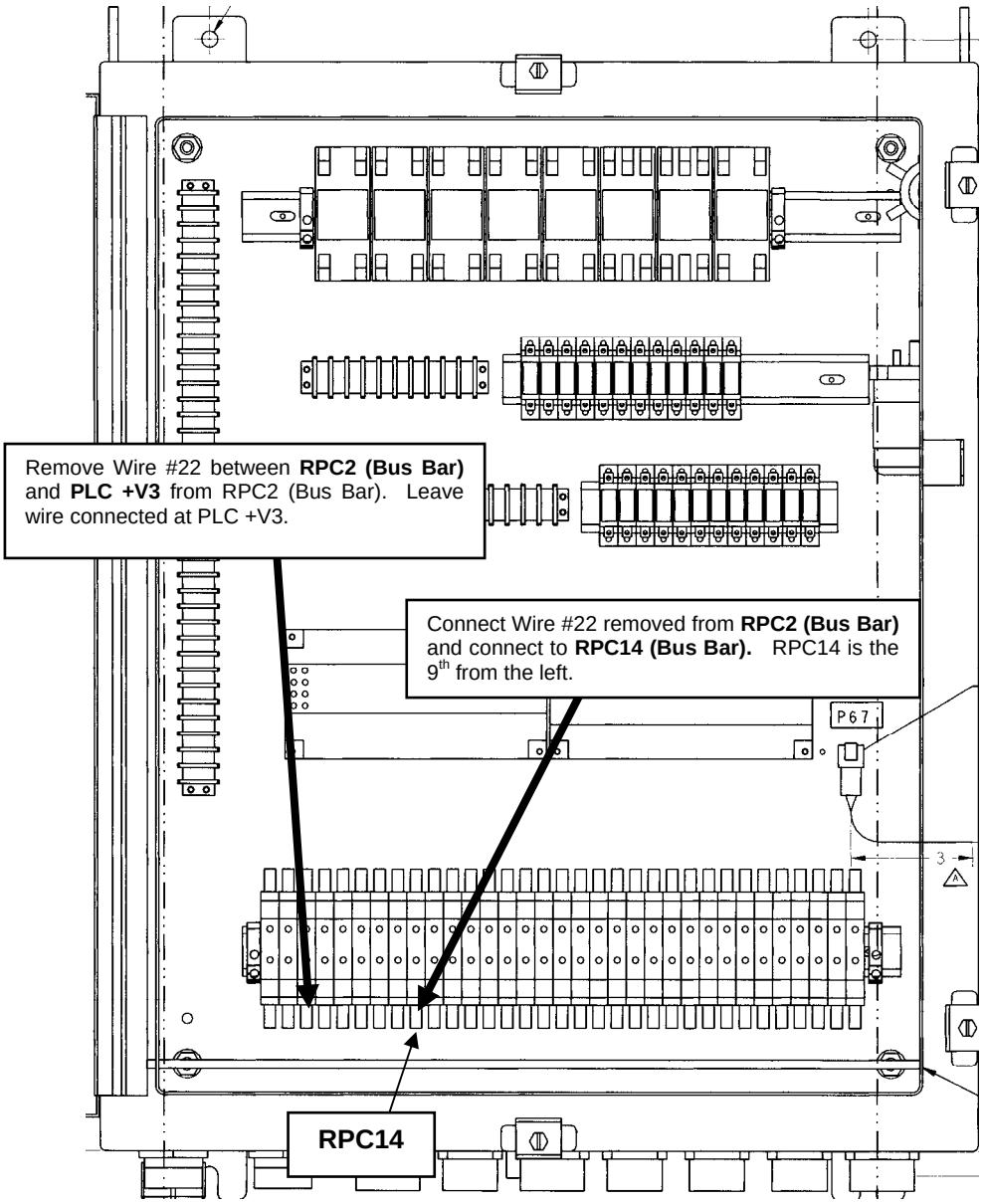


Figure 5
Rewire RPC14 and RPC17 from Wire #22 to Wire #300

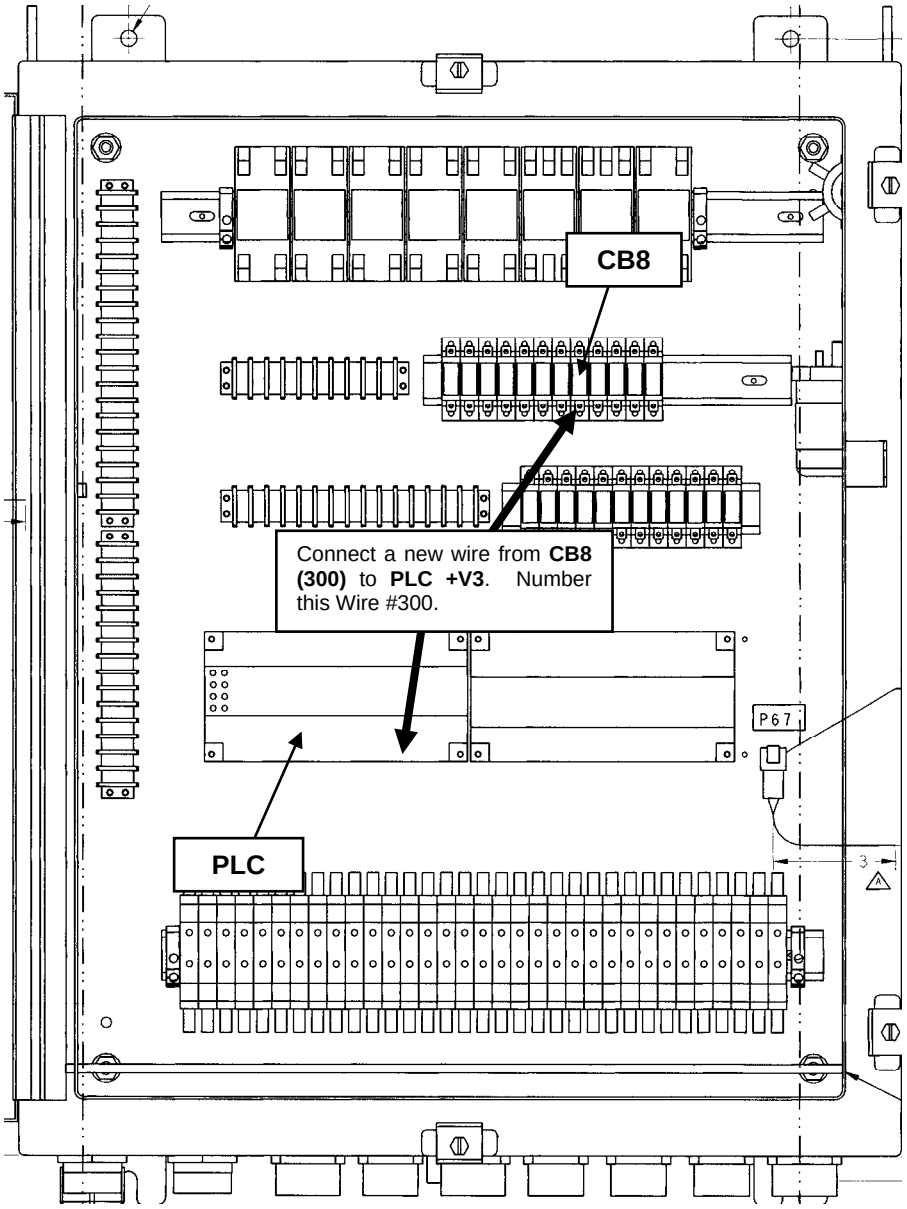


Figure 6
Connect PLC +V3 to Wire #300

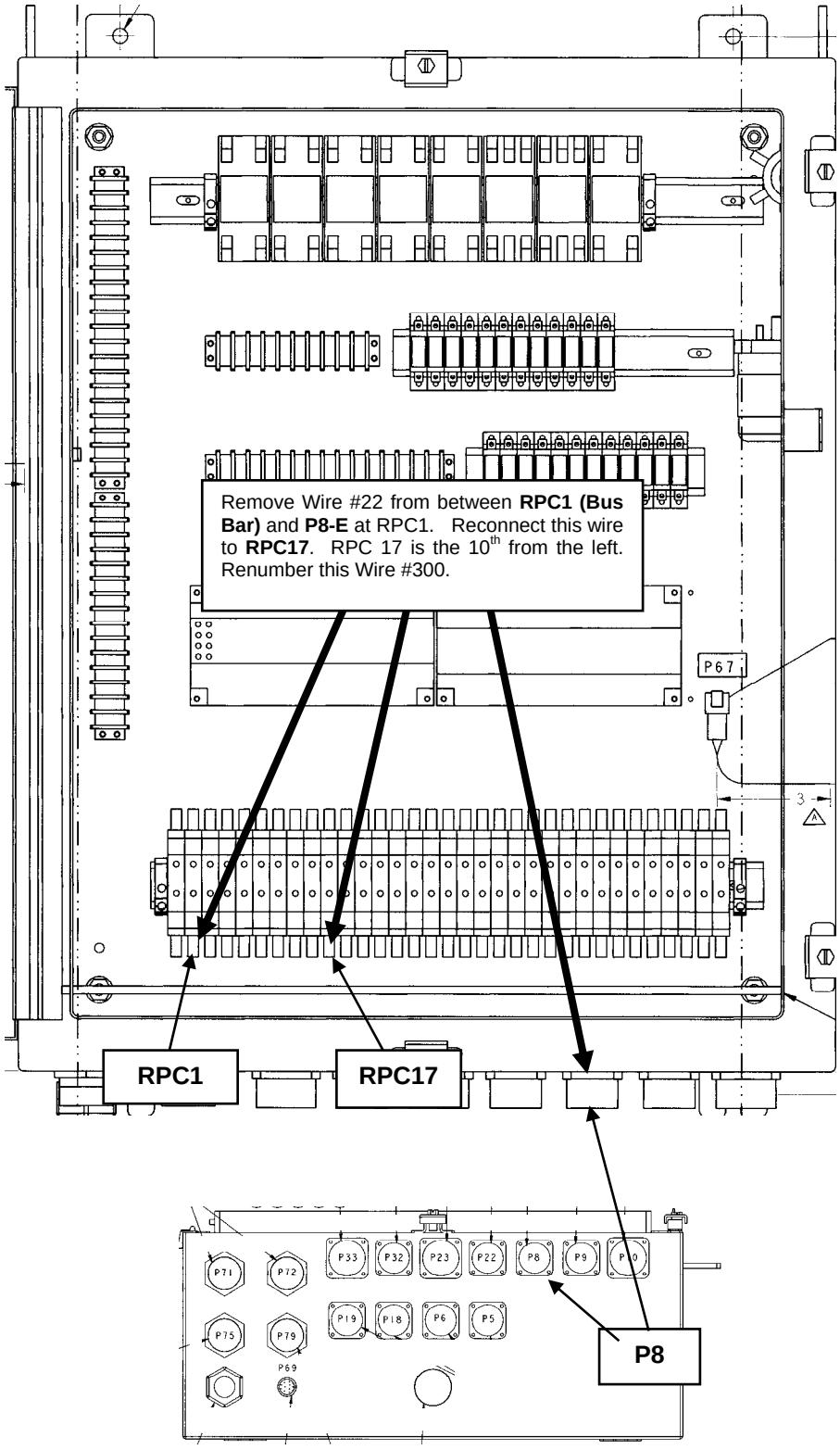


Figure 7
Rewire P8-E from Wire #22 to Wire #300

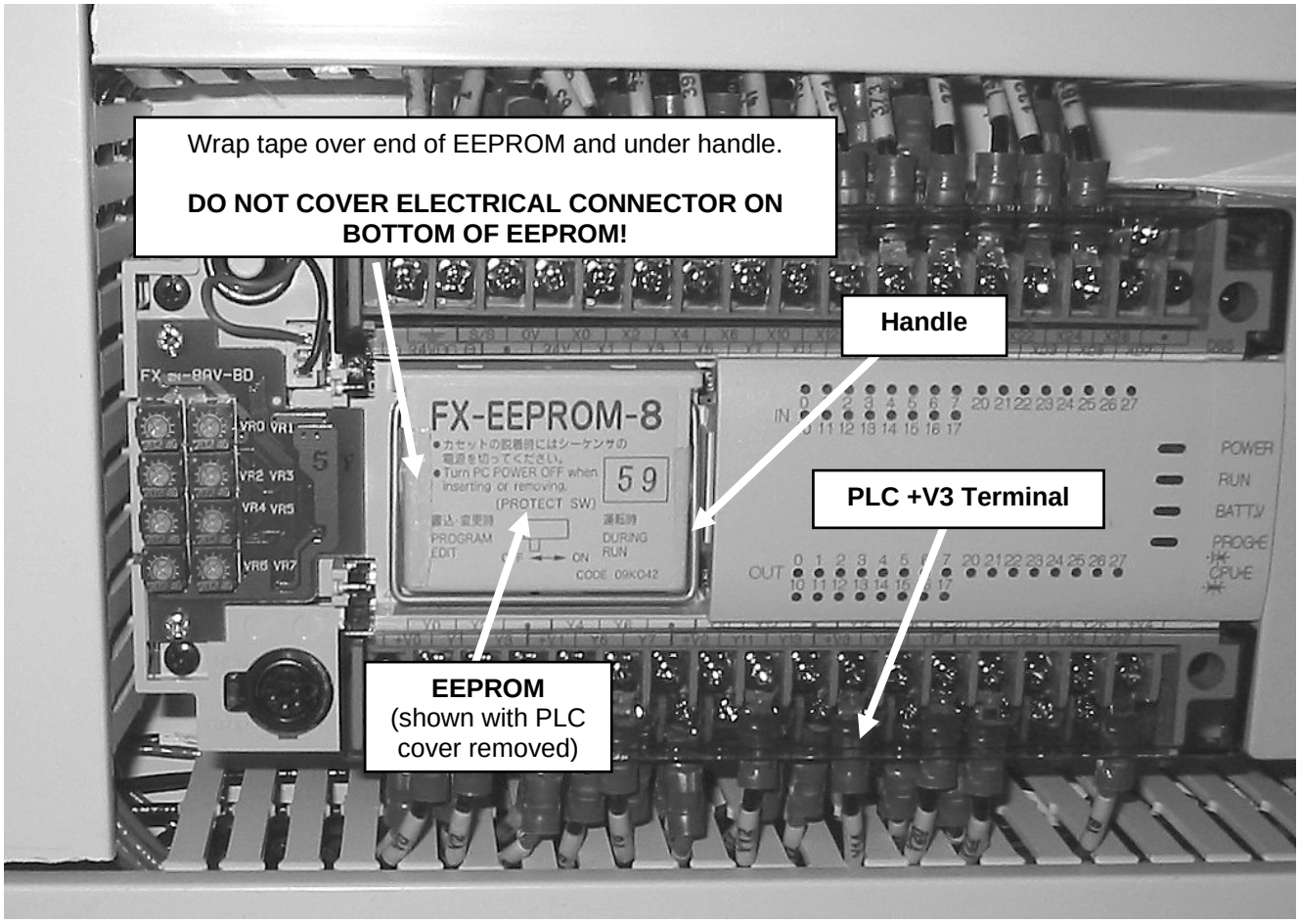


Figure 8
Typical EEPROM