

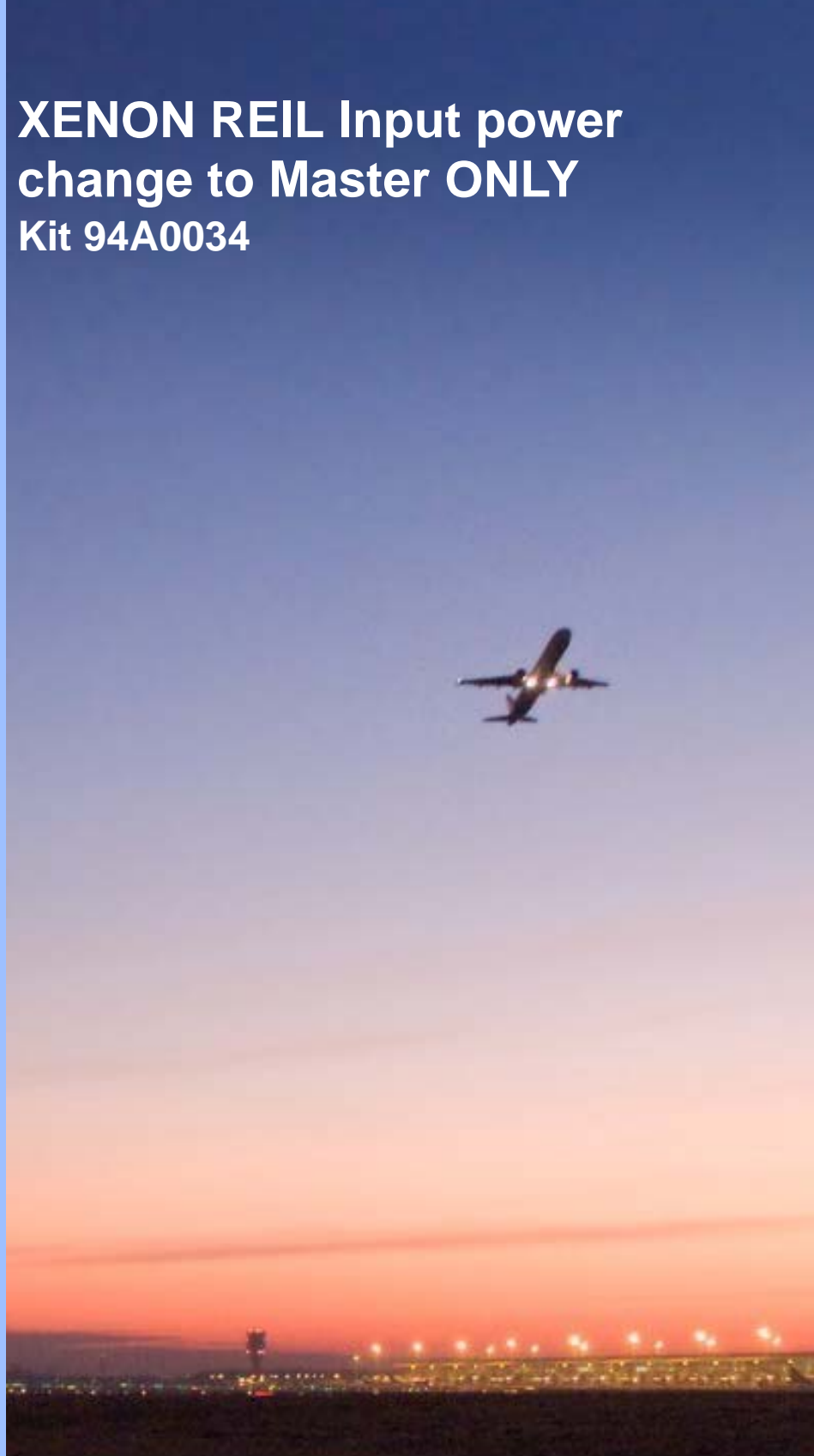
# XENON REIL Input power change to Master ONLY Kit 94A0034

Service Bulletin

ALN030

Retain for future use.

Rev. C, 4/4/12



Disclaimer

# 1.0 REIL

Input power change from 220 Vac w/ neutral to 240 Vac Master ONLY

## 1.1 About this manual

This kit is designed to upgrade a REIL from 120/240 Vac 3-wire powered to a 240 Vac 2-wire powered unit.

Required tools: a Volt, Ohm, Amp meter, a drill motor with a 1/8 inch bit, wire cutters, Phillips screwdriver, a small adjustable wrench and a pair of needle nose pliers.

- Refer to 96A0008 user manual for REIL Operation, Start up Procedures.

### 1.1.1 How to work with the manual


1. Become familiar with the structure and content.
2. Carry out the actions completely and in the given sequence.

### 1.1.2 Record of changes

Page	Rev	Description	Checked	Approved	Date
All	A	Released Manual	DM	ER	12/10
All	B	ECO 3605	AV	JC	3/29/12
All	C		SR	JC	4/3/12

### 1.1.3 To use this equipment safely:

**WARNING**



**READ INSTALLATION INSTRUCTIONS IN THEIR ENTIRETY BEFORE STARTING THIS INSTALLATION.**

- Refer to the FAA Advisory Circular AC 150/5340-26, Maintenance of Airport Visual Aids Facilities, for instructions on safety precautions.
- Observe all safety regulations. To avoid injuries, always disconnect power before making any wiring connections or touching any parts. Refer to FAA Advisory Circular AC 150/5340-26.
- Become familiar with the general safety instructions in this section of the manual before installing, operating, maintaining or repairing this equipment.
- Read and carefully follow the instructions throughout this manual for performing specific tasks and working with specific equipment.
- Make this manual available to personnel installing, operating, maintaining or repairing this equipment.
- Follow all applicable safety procedures required by your company, industry standards and government or other regulatory agencies.
- Install all electrical connections to local code.
- Use only electrical wire of sufficient gauge and insulation to handle the rated current demand. All wiring must meet local codes.
- Allow ample room for maintenance, panel accessibility, and cover removal.
- Protect equipment with safety devices as specified by applicable safety regulations.
- If safety devices must be removed for installation, install them immediately after the work is completed and check them for proper functioning prior to returning power to the circuit.

### 1.1.4 Additional Reference Materials:

- C22.1 Canadian Electrical Code (latest rev)
- NFPA 70B, Electrical Equipment Maintenance.
- NFPA 70E, Electrical Safety Requirements for Employee Workplaces.
- ANSI/NFPA 79, Electrical Standards for Metalworking Machine Tools.
- OSHA 29 CFR, Part 1910, Occupational Health and Safety Standards.
- National and local electrical codes and standards.

REIL

## 1.2 REIL A and C Wiring

### 1.2.1 Installing the 94A0034 kit

1. Turn off power to the REIL. Let stand 5 minutes to allow for a proper discharge of high voltage circuits. CAUTION: Lethal Voltages are Present.
2. Remove wires 226, 227 and 235 as shown in Figure 1. Also see Figure 2 thru 5 of the 11x17 schematics section.
3. Check both sides for obstructions prior to drilling.
4. Drill the four holes in the base of the REIL leaving an even amount of space for clearance on all sides. Do not screw assembly into place yet.
5. Un-clip the Oscillator PCB from the REIL to make the connections. See Figure 1. DO NOT DISCONNECT THE WIRES.

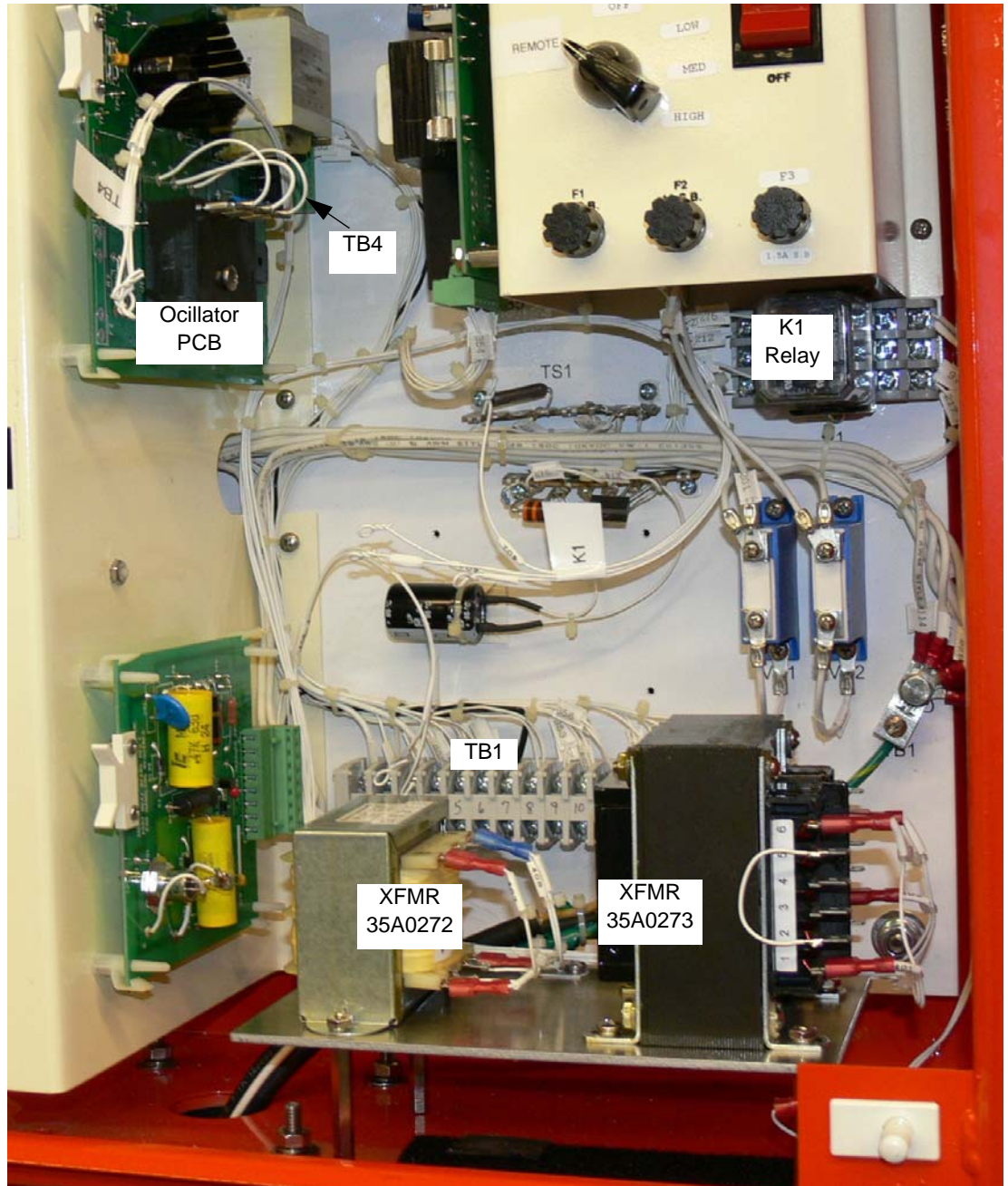
### 1.2.2 Wire the (large) transformer (35A0273)

6. Check jumper from terminal 5 to 2.
7. Check jumper from terminal 8 to 12.
8. Check jumper from terminal 11 to 7.
9. Connect wire #400 from terminal 7 and 11 to TB4 - 1 (master oscillator).
10. Connect wire #401 from terminal 1 to K1 - 7.
11. Connect wire #402 from terminal 6 to K1 - 9.
12. Connect wire #403 from terminal 8 and 12 to TB1 - 2.

### 1.2.3 Wire the (small) transformer (35A0272)

13. Check jumper terminal 2 to 4.
14. Connect wire #404 from terminal 5 to K1 - 6.
15. Connect wire #405 from terminal 1 to K1 - 4.
16. Connect wire #406 from terminal 6 to TB4 - 5.
17. Connect wire #407 from terminal 10 to TB4 - 4 (master oscillator).
18. Connect wire #408 from terminal 6 to TB1 - 2 (master oscillator).
19. Re-clip the Oscillator PCB from step 5 to the REIL after checking the connections. See Figure 1 and Figure 2.
20. Connect the slave REIL as normal, see 43A3111 page 3 of 5, Figure 3.

Figure 1: REIL A Master



REIL A and C  
Wiring

NOTE: See Schematics Figure 2 thru Figure 5

## 1.3 REIL E Wiring

### 1.3.1 Installing the 94A0035 kit

For REIL E masters with the kit installed at the factory please use the following schematics for maintenance and troubleshooting.

See schematics:

- REIL E wiring diagram of the master unit, 43A3112 1 of 6, Figure 6
- REIL E wiring diagram of the secondary unit, 43A3112 4 of 6, Figure 7
- REIL E master with the kit installed, 43A3112 page 6 of 6), Figure 8
- REIL E External Wiring Diagram, 43A3114, Figure 9

## 2.0 Wiring Schematics

Figure 2: 43A3111 1 of 5

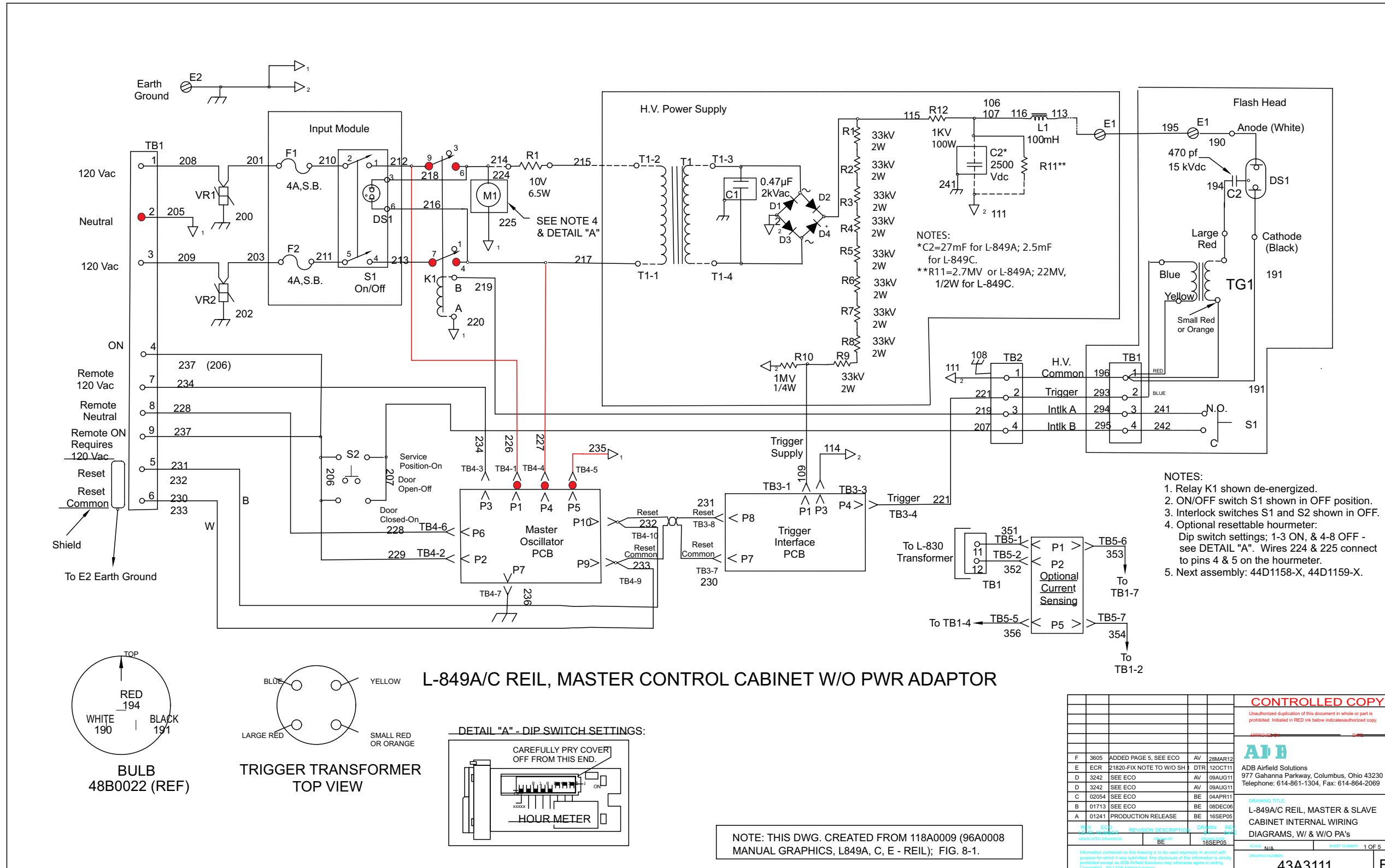


Figure 3: 43A3111 3 of 5

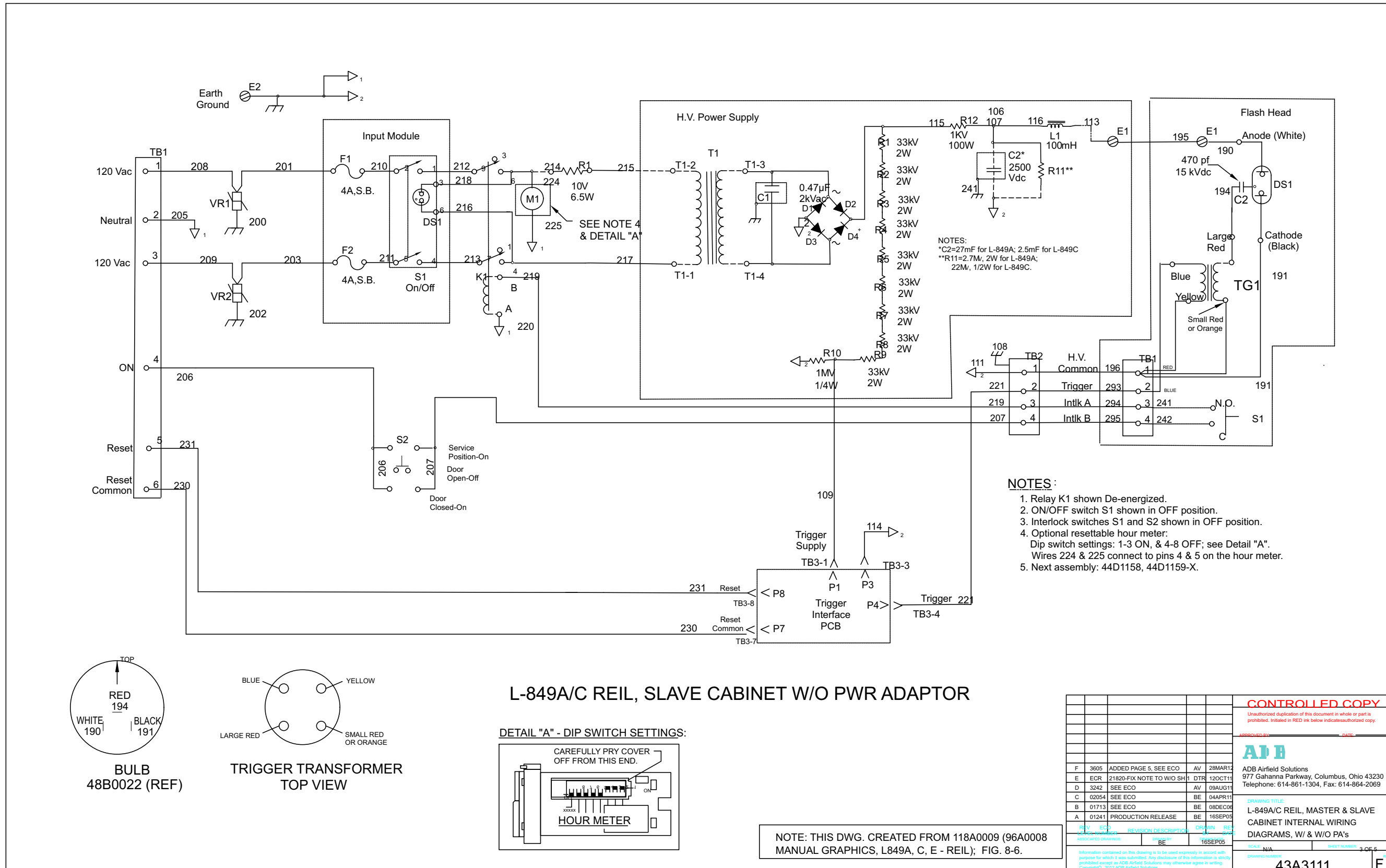
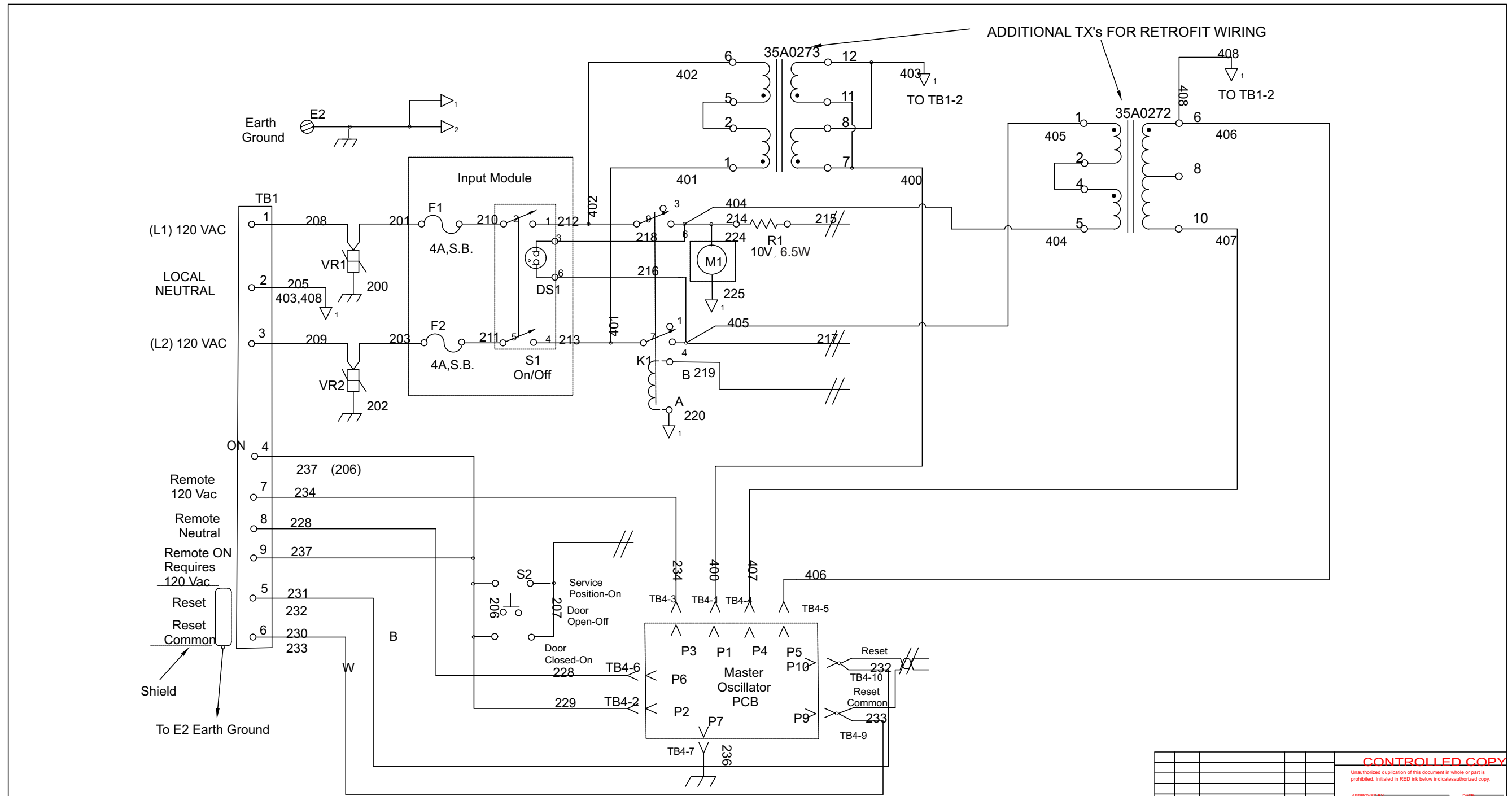




Figure 4: 43A3111 page 5 of 5)



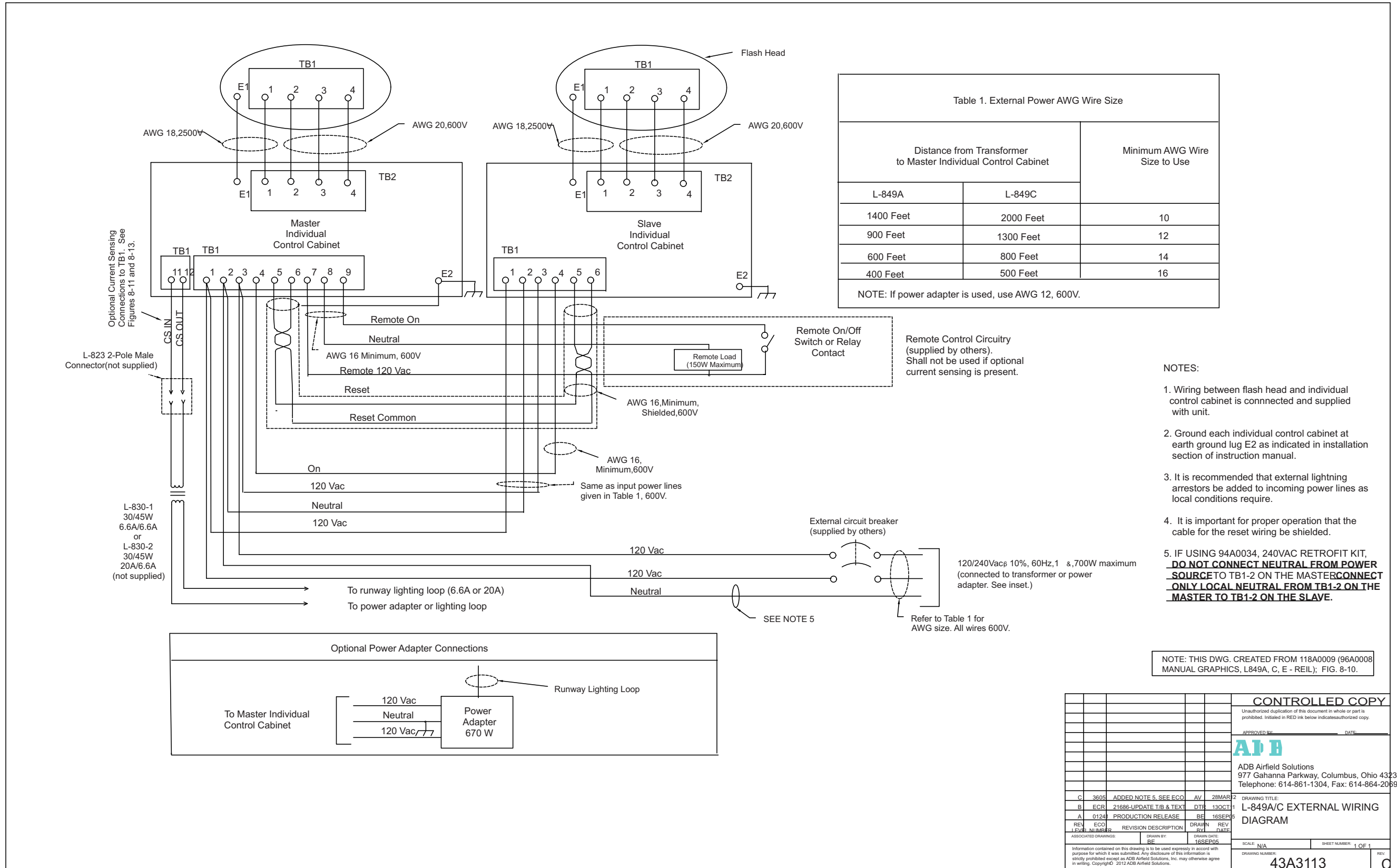
240VAC RETROFIT KIT WIRING FOR  
L-849A/C REIL, MASTER CONTROL CABINET W/O PWR ADAPTOR  
Kit 94A0034

DOC. NO.	DESCRIPTION
ALN030	SERVICE BULLETIN
Q0201	WORK INSTRUCTION
DOC. NO.	DESCRIPTION

RELATED DOCUMENTS

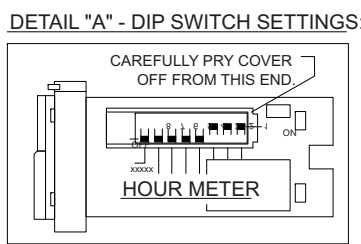
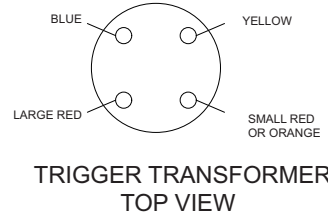
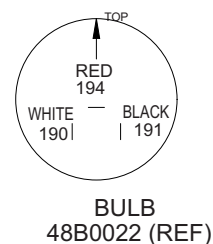
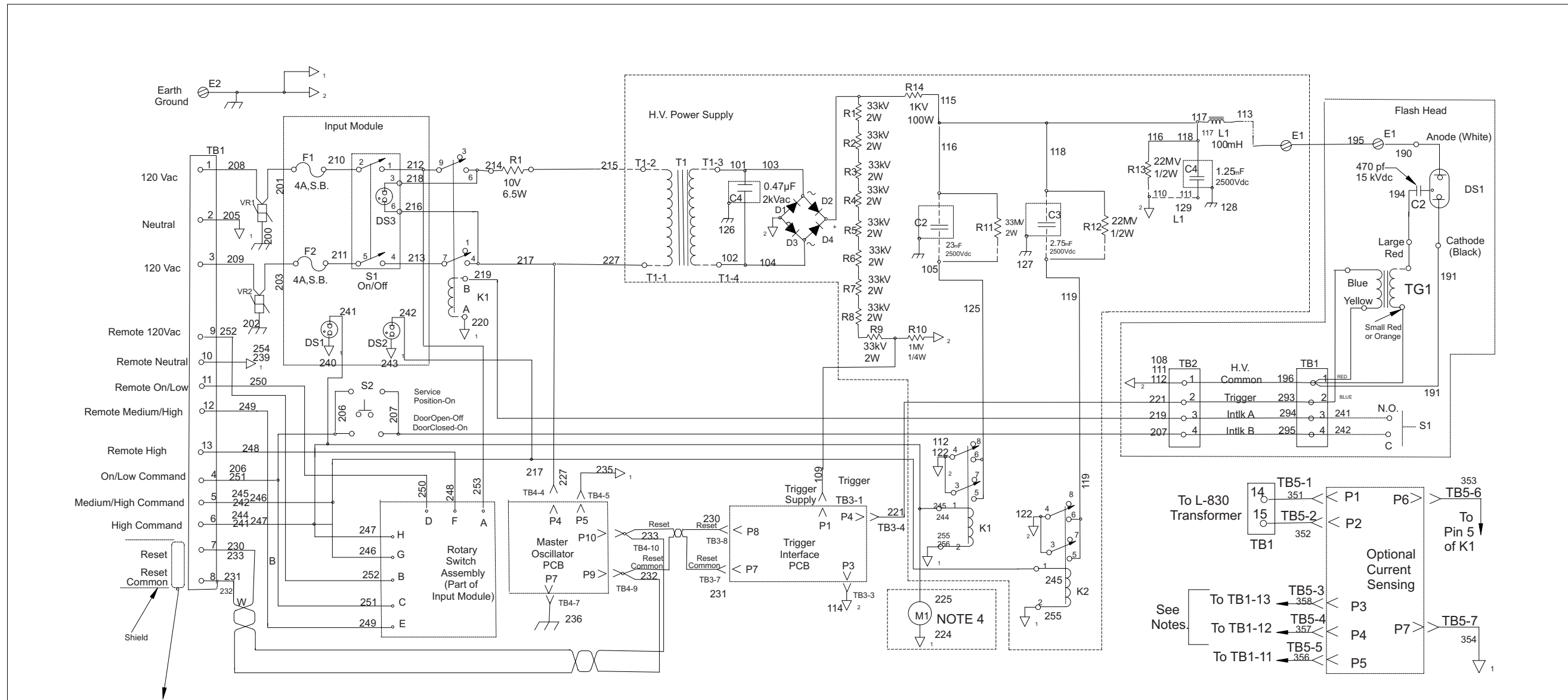
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AD B			
F	3605	ADDED PAGE 5, SEE ECO	AV 28MAR12
E	ECR	21820-FIX NOTE TO W/O SH	DTR 12OCT11
D	3242	SEE ECO	AV 09AUG11
D	3242	SEE ECO	AV 09AUG11
C	02054	SEE ECO	BE 04APR11
B	01713	SEE ECO	BE 08DEC08
A	01241	PRODUCTION RELEASE	BE 16SEP05
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DRAWING TITLE: L-849A/C REIL, MASTER & SLAVE CABINET INTERNAL WIRING DIAGRAMS, W/ & W/O PA's			PROJECT NUMBER: 1 OF 5
43A3111			F

Figure 5: 43A3113 External Wiring Diagram



Schematics

Figure 6: REIL E - 43A3112 1 of 6

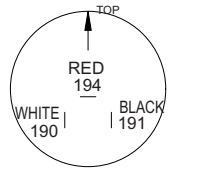
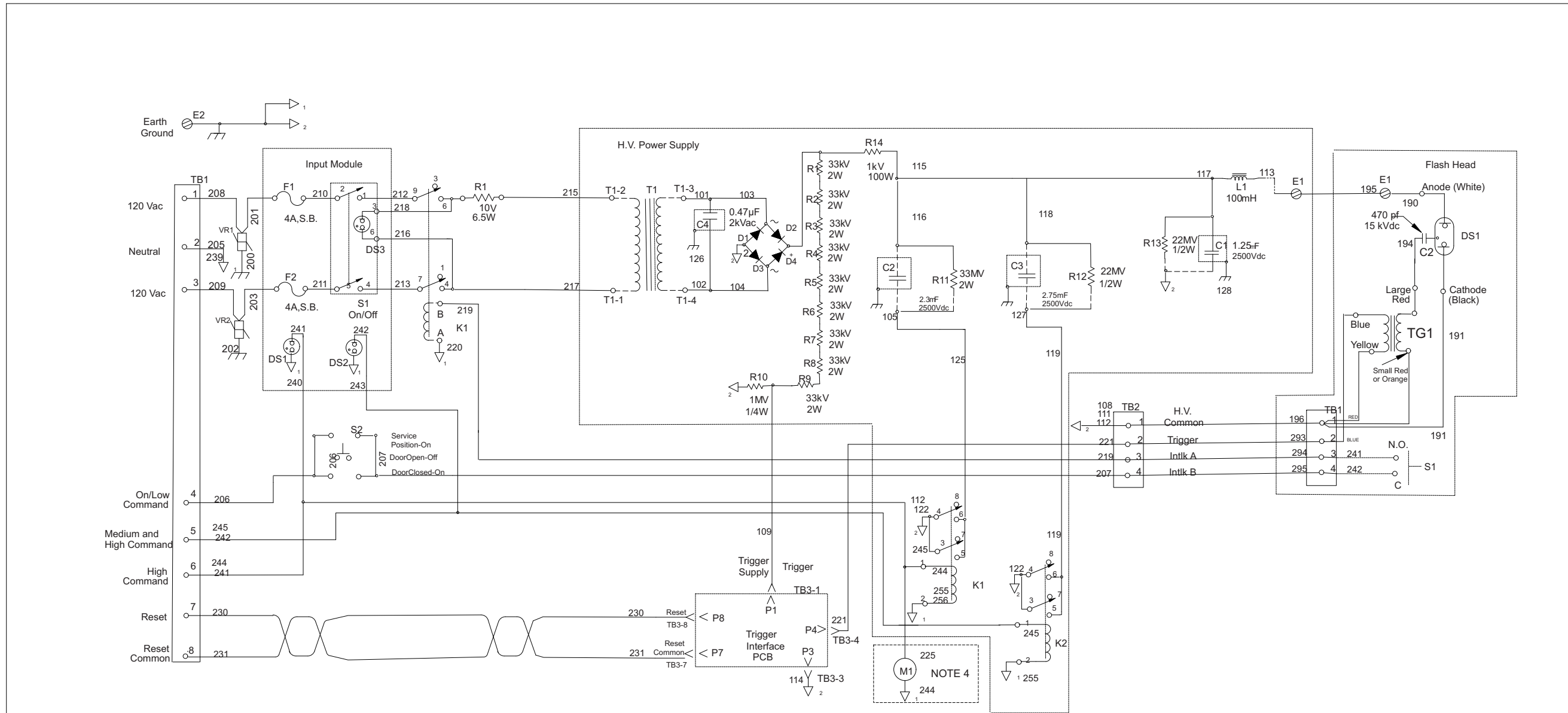


- NOTES:**
1. Relays K1 in input module and K1, K2 in HV Power supply shown de-energized.
  2. ON/OFF switch S1 shown in OFF position.
  3. Interlock switches S1 and S2 shown in OFF position.
  4. Optional (M1) resettable hour meter (part of input module) - Dip switch settings: 1-3 ON, and 4-8 OFF (see Detail "A"). Wires 224 and 225 connect to pins 4 & 5 on the hour meter.
  5. TB5-3 and TB5-4 are used only on 3-Step current sensing.

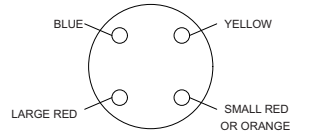
NOTE: THIS DWG. CREATED FROM 118A0009 (96A0008 MANUAL GRAPHICS, L849A, C, E - REIL); FIG. 8-2.

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LEVEL NUMBER	REVISION DESCRIPTION	DRAWN BY	REV DATE
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Figure 7: REIL E - 43A3112 4 of 6

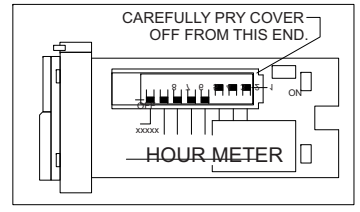


BULB  
48B0022 (REF)



TRIGGER TRANSFORMER  
TOP VIEW

DETAIL "A" - DIP SWITCH SETTINGS:



NOTES:

1. Relays K1 in input module and K1,K2 in H.V. power supply shown de-energized.
2. ON/OFF switch S1 shown in OFF position.
3. Interlock switches S1 and S2 shown in OFF position.
4. Optional (M1) resettable hour meter (part of input module) - Dip switch settings: 1-3 ON, and 4-8 OFF (see Detail "A"). Wires 224 and 225 connect to pins 4 & 5 on the hour meter.

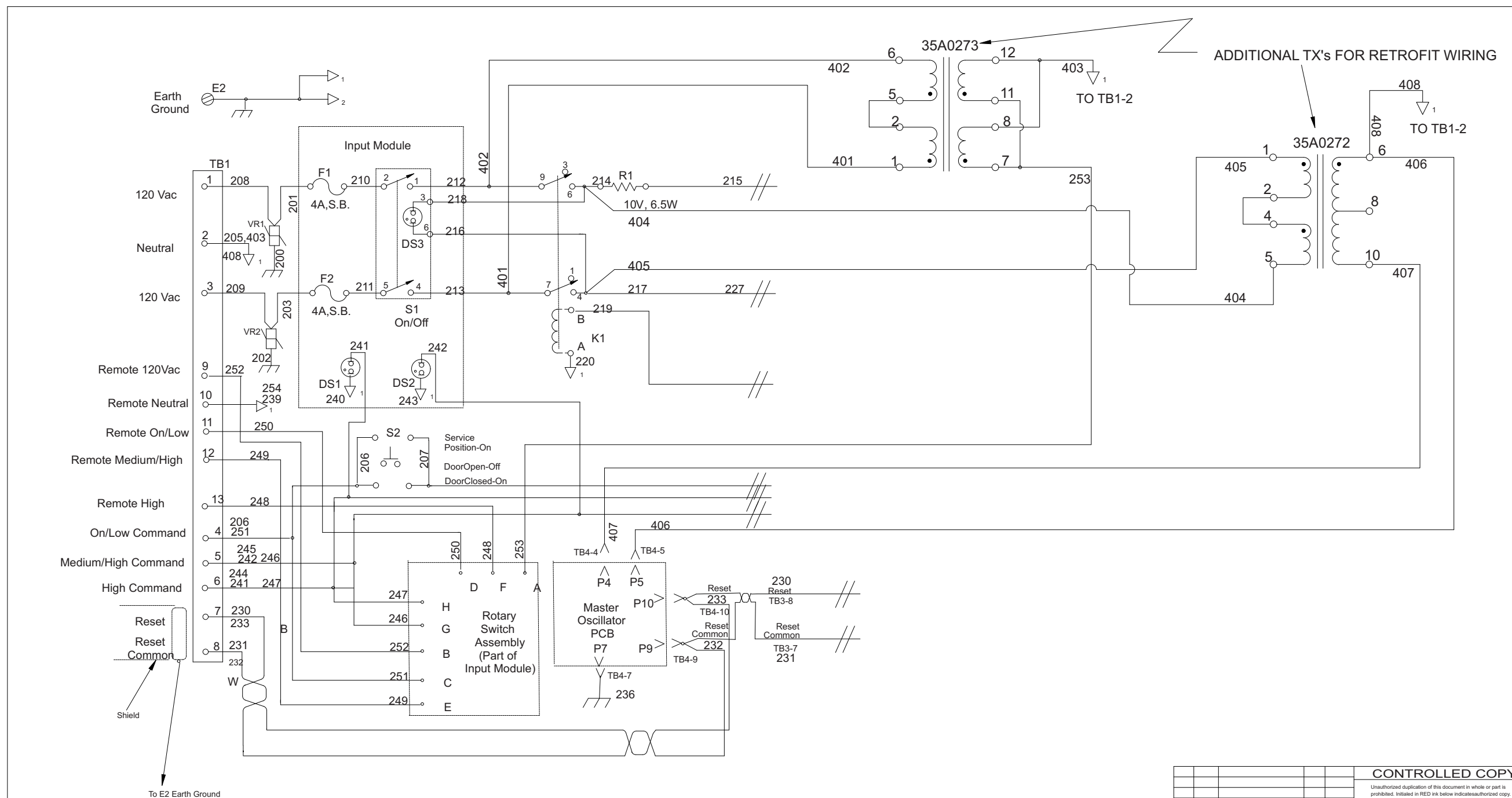
L-849E REIL, SLAVE CABINET W/O PWR ADAPTOR

NOTE: THIS DWG. CREATED FROM 118A0009 (96A0008 MANUAL GRAPHICS, L849A, C, E - REIL); FIG. 8-7.

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				43A3112 F			

Schematics

Figure 8: REIL E - 43A3112 page 6 of 6)



240VAC RETROFIT KIT WIRING FOR  
L-849E REIL, MASTER CONTROL CABINET W/O PWR ADAPTOR (60Hz)

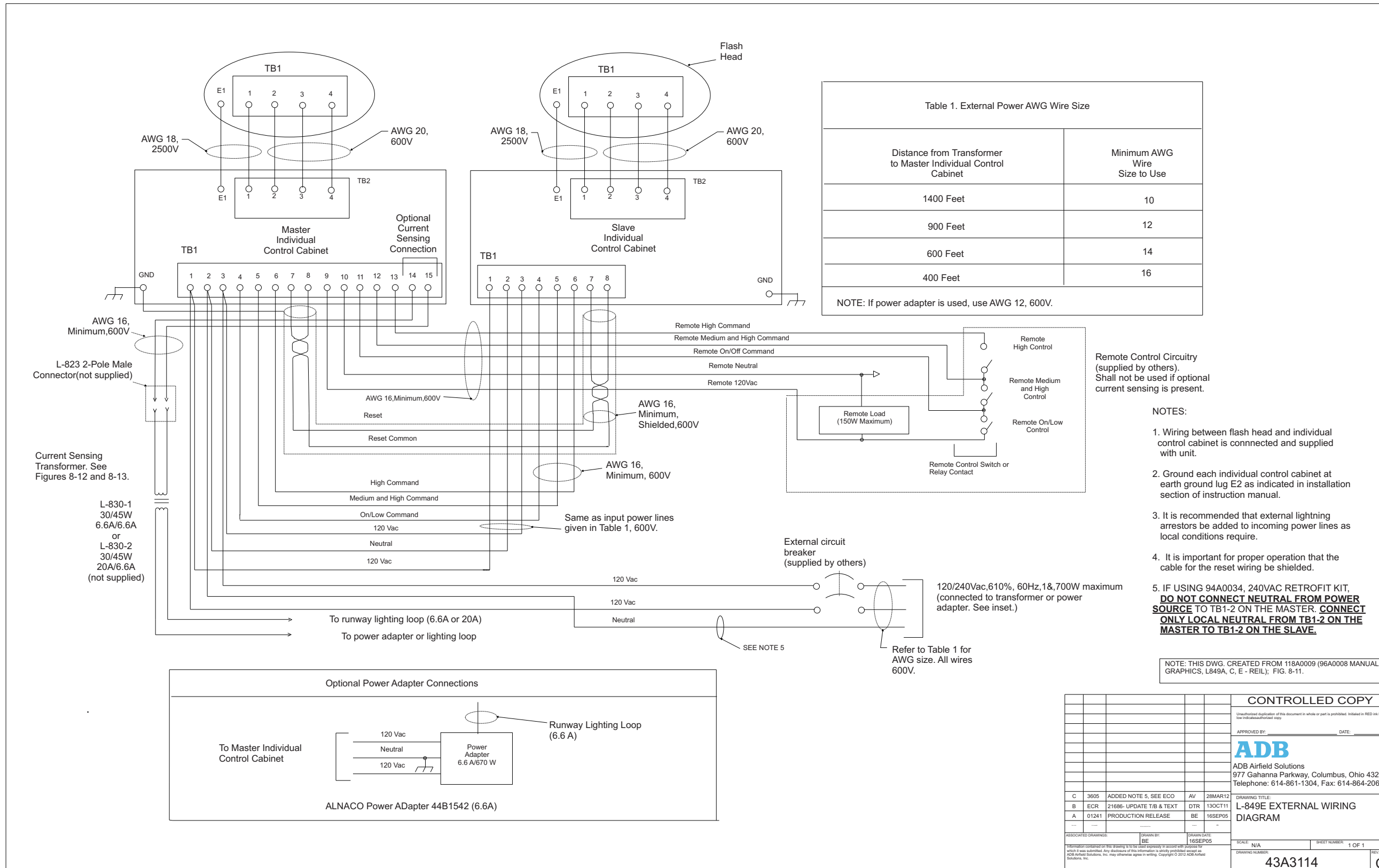
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A	01241	PRODUCTION RELEASE	BE 18SEP05
B	01713	SEE ECO	BE 12DEC09
C	03242	REVISED NOTE 4, + DETAIL "A"	BE 22AUG11
D	03161	UPDATED PWR ADAPTOR PCB	BE 12SEP11
E	03161	UPDATED PWR ADAPTOR PCB	BE 12SEP11
F	3605	ADDED PAGE 6, SEE ECO	AV 28MAR12

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DRAWING NUMBER: 43A3112 SHEET NUMBER: 6 OF 6

Figure 9: REIL E - 43A3114 External Wiring Diagram





**XENON REIL Input power change to Master ONLY  
Service Bulletin**

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