

MINI FRONT 2

DATE: 10/28/2022  
COMFORMS TO UL STD 2703  
PATENT PENDING  
INTERNAL SER 010A

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1 1 1 1 1 1



**TrinaSolar**  
A TRINA ENERGY COMPANY  
40125 1000127255

**TrinaSolar**  
40125 1000127255

WARNING: This product contains lead and cadmium. Do not ingest or inhale dust. For more information, see the Safety Data Sheet (SDS) located at the bottom of the page.

CE  
RoHS  
RECYCLED

UL listed for use with Eaton 800V AC photovoltaic systems.  
 Eaton's IQ Gateway Series is designed for use with Eaton IQ Gateway Series photovoltaic systems.

**All LEDs**

- • • • Flashing green when sufficient upgrade is in progress.
- • • • Flashing amber when IQ Gateway is booting up.



**IQ Combiner 4**

Photovoltaic  
 Combiner Box  
 X-IQ-AM1-240-4



**Electrical ratings**

Voltage 240VAC, 60Hz  
 DG Breakers 80A MAX (combined)  
 DG Inputs 64A MAX (combined)  
 Output 60A MAX, 90A MAX Feeder OCPD  
 Temperature -46°C MAX ambient  
 For DG breaker, use only Eaton BR series.



202249057781

SN# [ ]  
 202249057781

P/N



583-00386 23

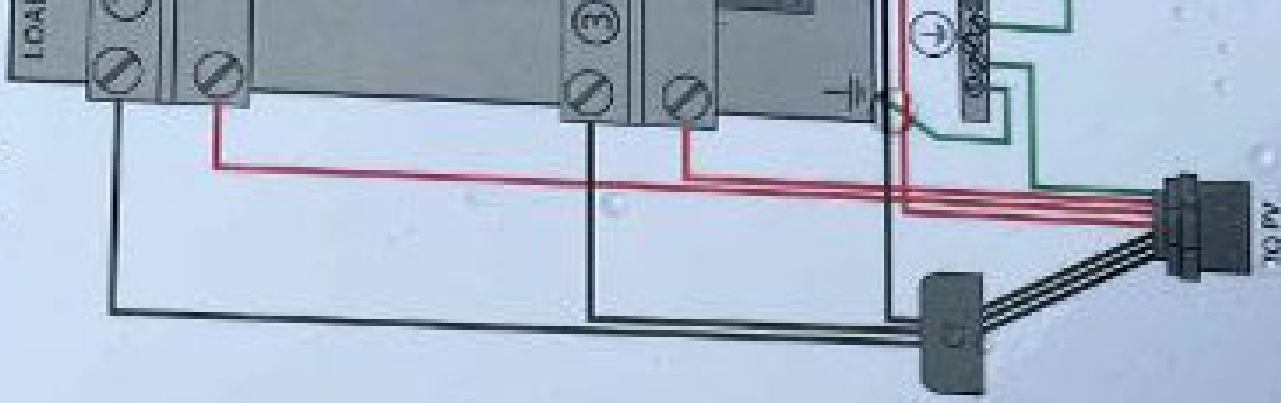
Dedicated solar and DG Combiner Box - do not add loads.  
 10 AMP or 15 AMP 10 Gateway Breaker not used for backfeed.

Connection	Wire size	Torque
DG Breaker (1, 2, 3, 4)	14-10 AWG	2.2 Nm (20 lb-in)
	8 AWG	2.8 Nm (25 lb-in)
	6-4 AWG	3.0 Nm (27 lb-in)
60A Circuit Breaker only	4-1/0 AWG	5.0 Nm (45 lb-in)
IQ Gateway Breaker	14-10 AWG	2.26 Nm (20 lb-in)
	2-1/0 AWG	5.6 Nm (45 lb-in)
Neutral and ground	Large screw	5.1 Nm (45 lb-in)
	Small screw	3.6 Nm (32 lb-in)
Main lug	6 AWG	2.6 Nm (23 lb-in)
	8 AWG	3.3 Nm (30 lb-in)
	10-14 AWG	5.0 Nm (45 lb-in)
	10-4 AWG	5.6 Nm (50 lb-in)
	3-2/0 AWG	5.6 Nm (50 lb-in)

Copper conductors only, rated min. 75°C.  
 Follow NFPA 70 (NEC), or CSA C22.1 part 1, and all local codes.  
 For DG breakers larger than 20A, use wire insulated for 90°C  
 based on 75°C ampacities.

Designed in California and New Zealand  
 Made in Mexico

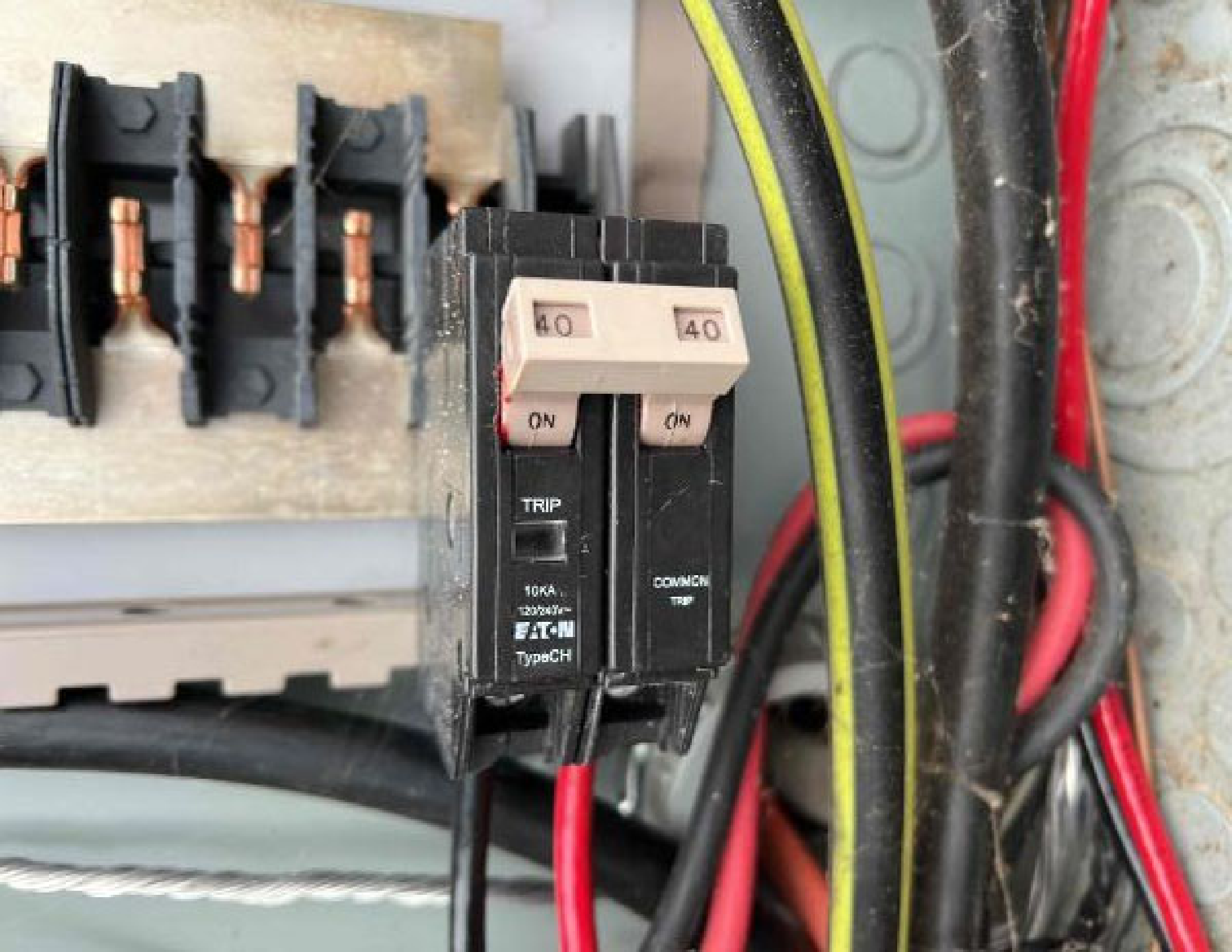
**For IQ-8 Grid  
 Forming System**





Handwritten labels on the patch panel:  
100-1000  
100-1000  
100-1000  
100-1000

Printed text on the patch panel:  
100-1000  
100-1000



40

40

ON

ON

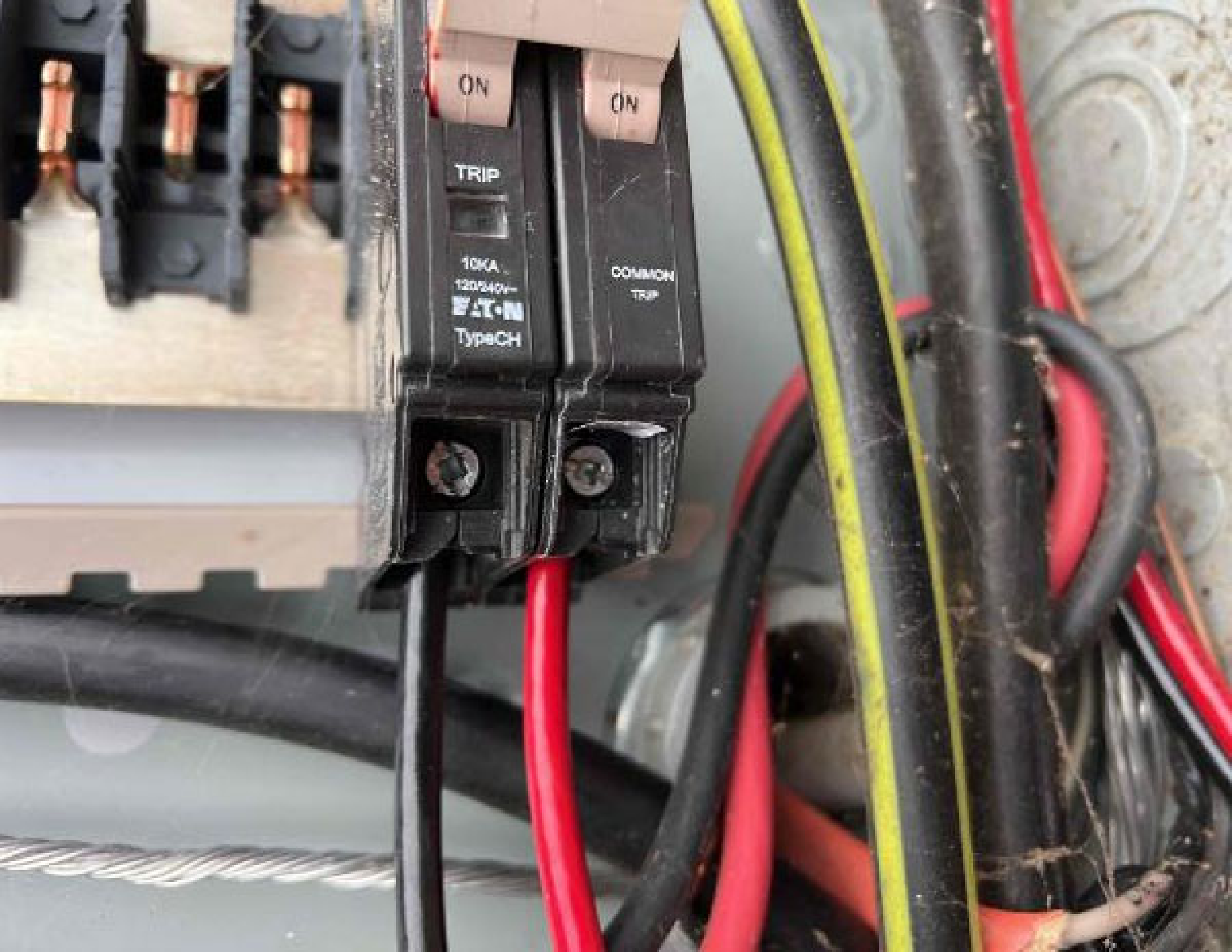
TRIP

10KA  
120/240V~

**EATON**

Type CH

COMMON  
TRIP



ON

ON

TRIP

10KA  
120/240V-1  
Eaton  
Type CH

COMMON  
TRIP







PACIFIC POWER & LIGHT  
100% Renewable Energy



GENUINE CALIFORNIA  
SOLAR PHOTOVOLTAIC PANELS

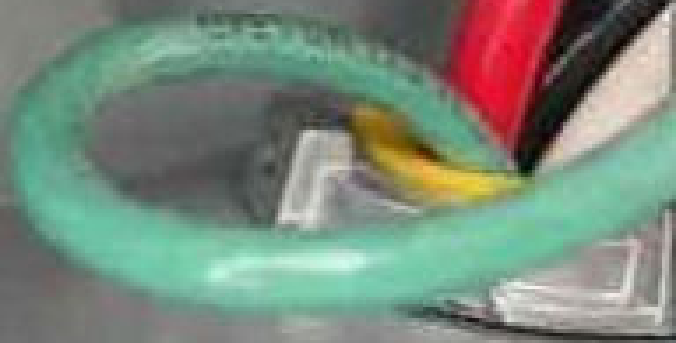






EQUIPMENT DESCRIPTION

Terminal	Wire Labeling System	Wiring	Notes
		14-15-16-17	
Multi Pin	Scotch		
		Temp 14 or 15	
		Temp 16 or 17	
Temp	Temp	6-20	6-20
TS Switch	Temp	1-10	1-10
Temp	Temp	1-10	1-10















 **ENPHASE®**

**IQ8+**

Grid-Support Utility Interactive Inverter  
with Three-Phase Output

20 and 25kW Models (3-Phase)

Continuous Power: 20kW

AC Output Voltage: 240V

Max. Input Power: 25kW

Max. Output Power: 20kW

AC Output Frequency: 60Hz

AC Output Current: 120A

AC Output Voltage: 240V

AC Output Phase: 3-Phase

AC Output Frequency: 60Hz

AC Output Voltage: 240V

AC Output Current: 120A

AC Output Phase: 3-Phase

AC Output Frequency: 60Hz

AC Output Voltage: 240V

AC Output Current: 120A

AC Output Phase: 3-Phase

AC Output Frequency: 60Hz

AC Output Voltage: 240V

AC Output Current: 120A

AC Output Phase: 3-Phase

AC Output Frequency: 60Hz

AC Output Voltage: 240V

This device complies with part 15 of the FCC Rules. Operation of this device is subject to the condition that the device may not cause harmful interference. (2) This device may accept any new functions added, including those that may require a separate connection.



**CAUTION: RISK OF ELECTRIC SHOCK! DO NOT OPEN. RISK OF FIRE! RISK OF BURNING! RISK OF EXPLOSION! RISK OF ELECTRIC SHOCK! RISK OF BURNING! RISK OF EXPLOSION!**

**WARNING: ELECTRIC SHOCK HAZARD! DO NOT TOUCH THE HOTWIRE SYSTEM. THE HOTWIRE SYSTEM MAY BE ENERGIZED AT ANY TIME. ALWAYS DISCONNECT THE HOTWIRE SYSTEM FROM THE MAIN POWER SUPPLY BEFORE WORKING ON THE HOTWIRE SYSTEM. ALWAYS USE PROPER SAFETY PROCEDURES WHEN WORKING ON THE HOTWIRE SYSTEM. ALWAYS WEAR PROTECTIVE EQUIPMENT. ALWAYS USE THE PROPER TOOLS AND TECHNIQUES. ALWAYS FOLLOW THE INSTRUCTIONS IN THE USER MANUAL. ALWAYS USE THE PROPER WIRING DIAGRAMS. ALWAYS USE THE PROPER WIRING METHODS. ALWAYS USE THE PROPER WIRING MATERIALS. ALWAYS USE THE PROPER WIRING TERMINALS. ALWAYS USE THE PROPER WIRING CONNECTIONS. ALWAYS USE THE PROPER WIRING METHODS. ALWAYS USE THE PROPER WIRING MATERIALS. ALWAYS USE THE PROPER WIRING TERMINALS. ALWAYS USE THE PROPER WIRING CONNECTIONS.**

**ATTENTION: RISK OF ELECTRIC SHOCK! DO NOT TOUCH THE HOTWIRE SYSTEM. THE HOTWIRE SYSTEM MAY BE ENERGIZED AT ANY TIME. ALWAYS DISCONNECT THE HOTWIRE SYSTEM FROM THE MAIN POWER SUPPLY BEFORE WORKING ON THE HOTWIRE SYSTEM. ALWAYS USE PROPER SAFETY PROCEDURES WHEN WORKING ON THE HOTWIRE SYSTEM. ALWAYS WEAR PROTECTIVE EQUIPMENT. ALWAYS USE THE PROPER TOOLS AND TECHNIQUES. ALWAYS FOLLOW THE INSTRUCTIONS IN THE USER MANUAL. ALWAYS USE THE PROPER WIRING DIAGRAMS. ALWAYS USE THE PROPER WIRING METHODS. ALWAYS USE THE PROPER WIRING MATERIALS. ALWAYS USE THE PROPER WIRING TERMINALS. ALWAYS USE THE PROPER WIRING CONNECTIONS.**









Amber Huey  
1-17-23

Contract

HAZARD CATEGORY	POTENTIAL HAZARDS	HAZARD CATEGORY
Aviation Safety		HORNS / STRAP
Taxi Operations		ROPES
Electrical Safety		SHUT OFF
Wind or Structural Issues		WATER
Public Perception		STRAPS
NEAREST IDENTICAL	<b>Central Harnett</b>	
HAZARD CONTACT		
Additional Notes		
Crew Members		
1. NAME	ALFREDO DELFINO	AD
2. POSITION	NATE HIGHTOVER	NH
3. SIGNATURE		
4. SIGNATURE		
5. SIGNATURE		
6. SIGNATURE		

NATE HIGHTOVER NH

Crew Signatures

Crew Lead Signature



MAXIMUM VOLTAGE  
MAXIMUM CURRENT CANNOT EXCEED 120VAC  
MAY EXCEED OUTPUT CAPACITY OF  
THE CIRCUIT CONTROLLER  
OR CIRCUIT BREAKER  
IF INSTALLED

**CAUTION: DO NOT INSTALL  
ADDITIONAL LOADS IN THIS PANEL**

**▲ WARNING**  
**ELECTRICAL SHOCK HAZARD**  
TERMINALS ON THE LINE AND  
LOADS MAY BE ENERGIZED  
IN THE OPEN POSITION

**▲ WARNING**  
THIS COMPONENT FED BY  
MULTIPLE SOURCES  
TOTAL RATING OF ALL OVERCURRENT  
DEVICES EXCLUDING MAIN POWER  
SUPPLY SHALL NOT EXCEED  
AMPERAGE OF BUSBAR

**▲ WARNING**  
SEE ELECTRICAL WIRING REQUIREMENTS  
FOR ALL ELECTRICAL CONNECTIONS  
FROM ALL SOURCES INCLUDING  
SPLIT-PHASE SYSTEMS AND TRANSFORMER  
SERVICES AVAILABLE WITHIN 100 FT OF THIS  
RATED BY THE MANUFACTURER





PHOTOVOLTAIC AC DISCONNECT 1

MAXIMUM AC OPERATING CURRENT:

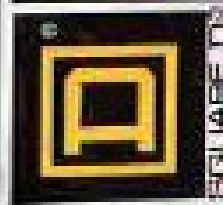


30.25A

30.0A

NOMINAL OPERATING AC VOLTAGE:  
120 Volts

**RAPID SHUTDOWN SWITCH  
FOR SOLAR PV SYSTEM**



SQUARE D

**GENERAL DUTY  
SAFETY SWITCH  
INTERRUPTOR DE  
SEGURIDAD DE  
SERVICIO GENERAL**

60 A

240 Vac / V~



**⚠ DANGER / PELIGRO**

HAZARD OF ELECTRIC SHOCK, EXPLOSION, OR ARC FLASH  
PELIGRO DE DESCARGA ELÉCTRICA, EXPLOSIÓN O  
DESCARGO POR ARQUEO

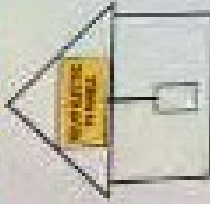
- Apply appropriate personal protective equipment (PPE) for the anticipated hazards.
- This equipment is not to be used for purposes not intended by the manufacturer.
- Before opening, disconnect and lock out the energy source.
- The lock-off mechanism is not to be used for anything other than its intended purpose.
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**⚠ WARNING**  
POWER TO THIS BUILDING IS ALSO  
SUPPLIED FROM MAIN DISTRIBUTION  
UTILITY DISCONNECT LOCATED  
INSIDE OUTSIDE SLAB

**⚠ WARNING**  
**ELECTRIC SHOCK HAZARD**  
TERMINALS ON THE LINE AND  
LOAD SIDES MAY BE ENERGIZED  
IN THE OPEN POSITION

**SOLAR PV SYSTEM EQUIPPED  
WITH RAPID SHUTDOWN**

**TURN RAPID SHUTDOWN  
SWITCH TO THE  
"OFF" POSITION TO  
SHUT DOWN PV SYSTEM  
AND PREVENT  
SHOCK HAZARD  
IN THE ARRAY**



**WARNING**  
See page 13 for information on  
the safety of the system.  
For more information, see  
the safety manual.

**WARNING**  
DUAL POWER SUPPLY  
SOURCES: UTILITY GRID  
AND PV SOLAR  
ELECTRIC SYSTEM

**WARNING**  
ELECTRICAL SHOCK HAZARD  
TERMINALS ON THIS WIRE HAVE  
LOADS THAT SHOULD BE  
REMOVED FROM THIS POSITION

**WARNING**  
This system is not designed to be  
used in a wet or damp location.  
For more information, see the  
safety manual.

**WARNING**  
This system is not designed to be  
used in a wet or damp location.  
For more information, see the  
safety manual.

1 solarpv

1 solarpv



**WARNING**  
POWER SOURCE OUTPUT CONNECTION.  
DO NOT RELOCATE THIS OVERCURRENT DEVICE

















PATENTS WWW.UNIBAC.COM/PATENTS  
CONFORMS TO UL 610 2103

0512022

UNIBAC SPM

UNIBAC UNIBAC UNIBAC





W. Green Solar  
QR Code  
CE  
Panel 1  
1000W

Amber Honeywell  
15W 20V 1500mA  
2.25

**Trina Solar**  
15W-20V-1500mA  
1500mA 20V 15W  
1500mA 20V 15W

1500mA	20V	15W
1500mA	20V	15W

1500mA 20V 15W  
1500mA 20V 15W

CE

RoHS

RECYCLED

















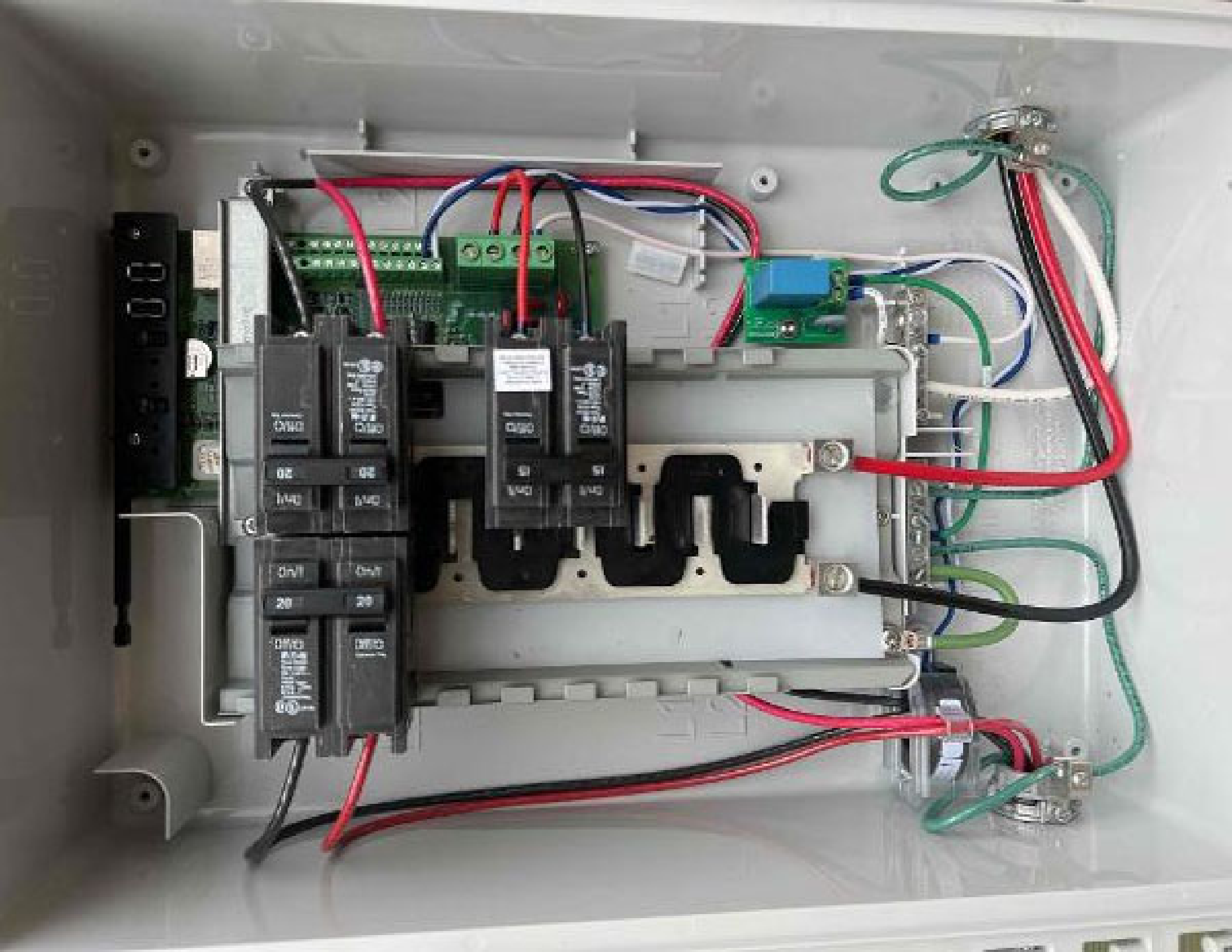
































Check for a Ground Fault  
If a ground fault is detected, the system will shut down. Check the ground connection and the ground wire for proper installation.

**WARNING**  
READ ALL INSTRUCTIONS AND GO TO THE SYSTEM CONTROL PANEL FOR ALL PHOTO-VOLTAIC SYSTEMS INSTRUCTIONS IN G-20

**CAUTION**  
PHOTO-VOLTAIC SYSTEM CIRCUIT

CIRCUIT 1

20 20  
OFF OFF  
CIRCUIT 1

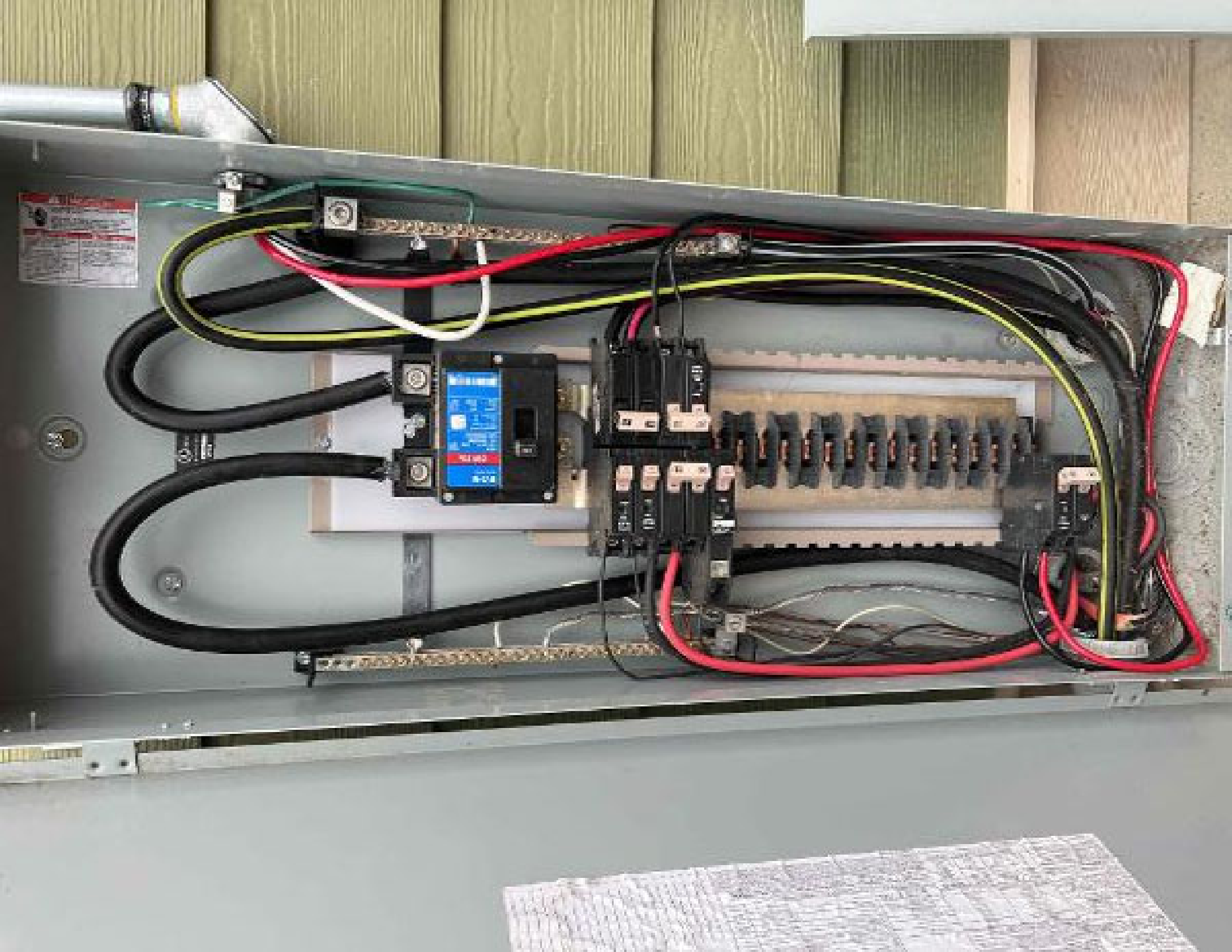
CIRCUIT 2

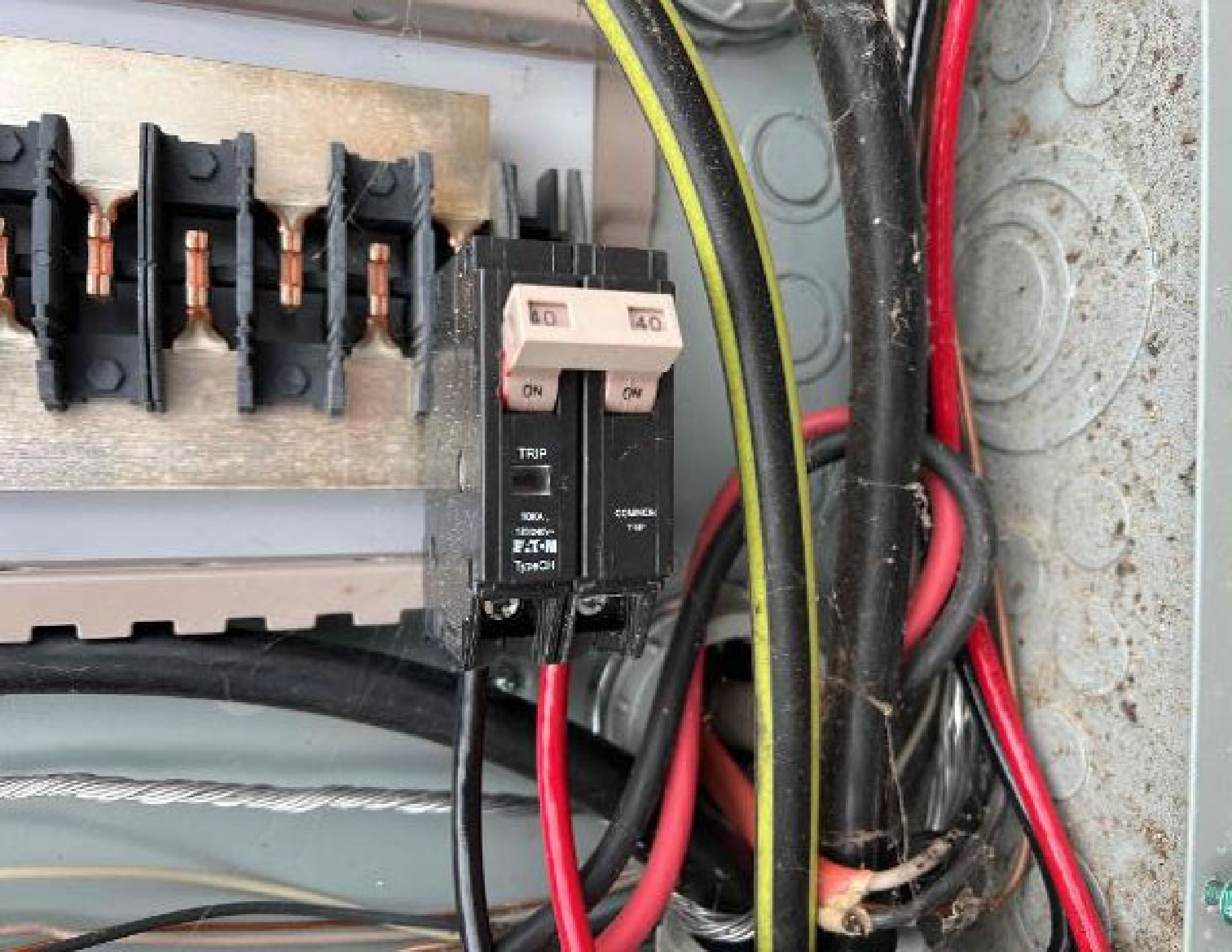
20 20  
OFF OFF  
CIRCUIT 2

15 15  
OFF OFF  
CIRCUIT 3









40

40

ON

ON

TRIP



100A

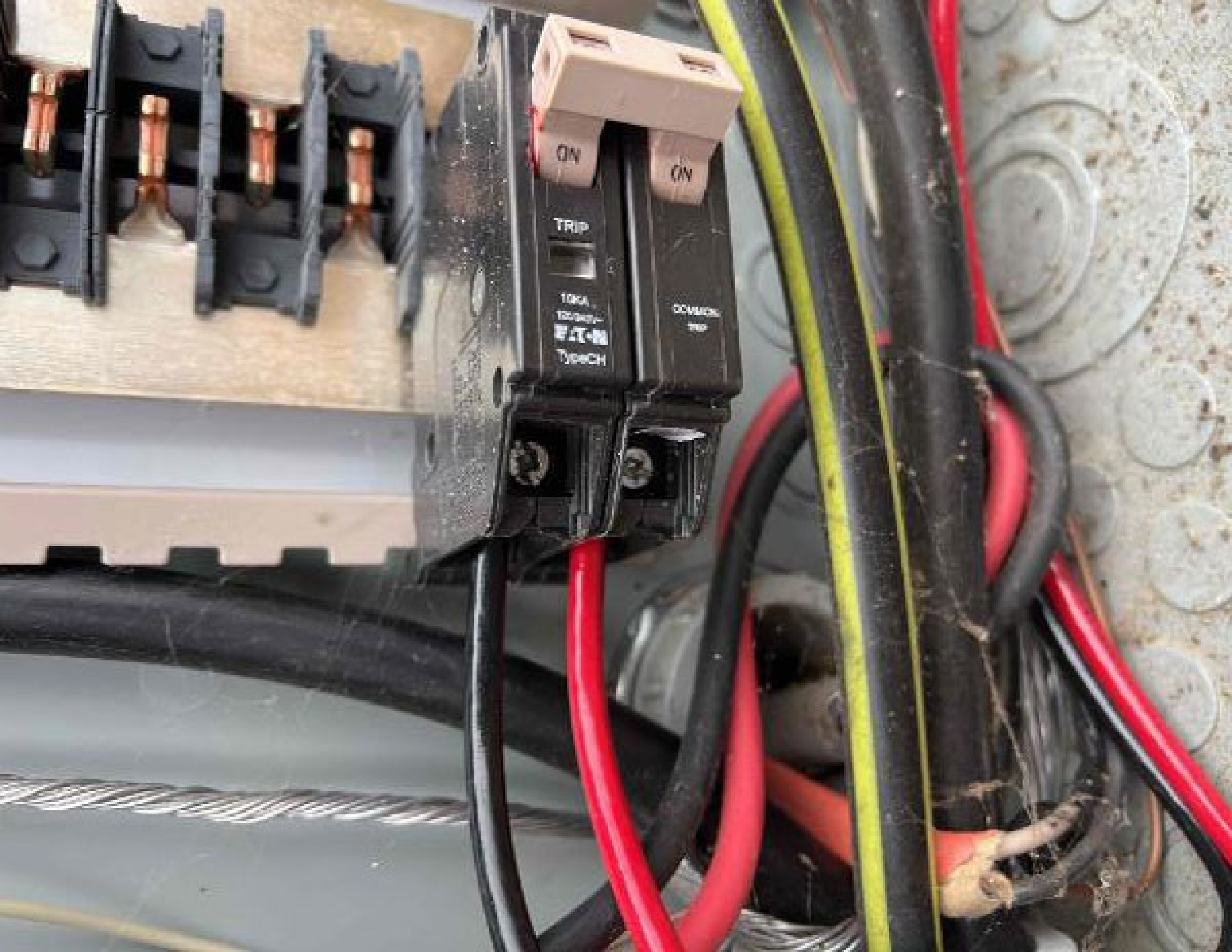
1000V

E-T-N

Type CH

COMMON

TRIP











**UNIRAC SFM INFINITY RACKING**  
FOR MOUNTING AND GROUNDING SOLAR SYSTEMS

UL 1703, UL 2703



164

640-00388-16  
250VAC 20A  
4791C 2202









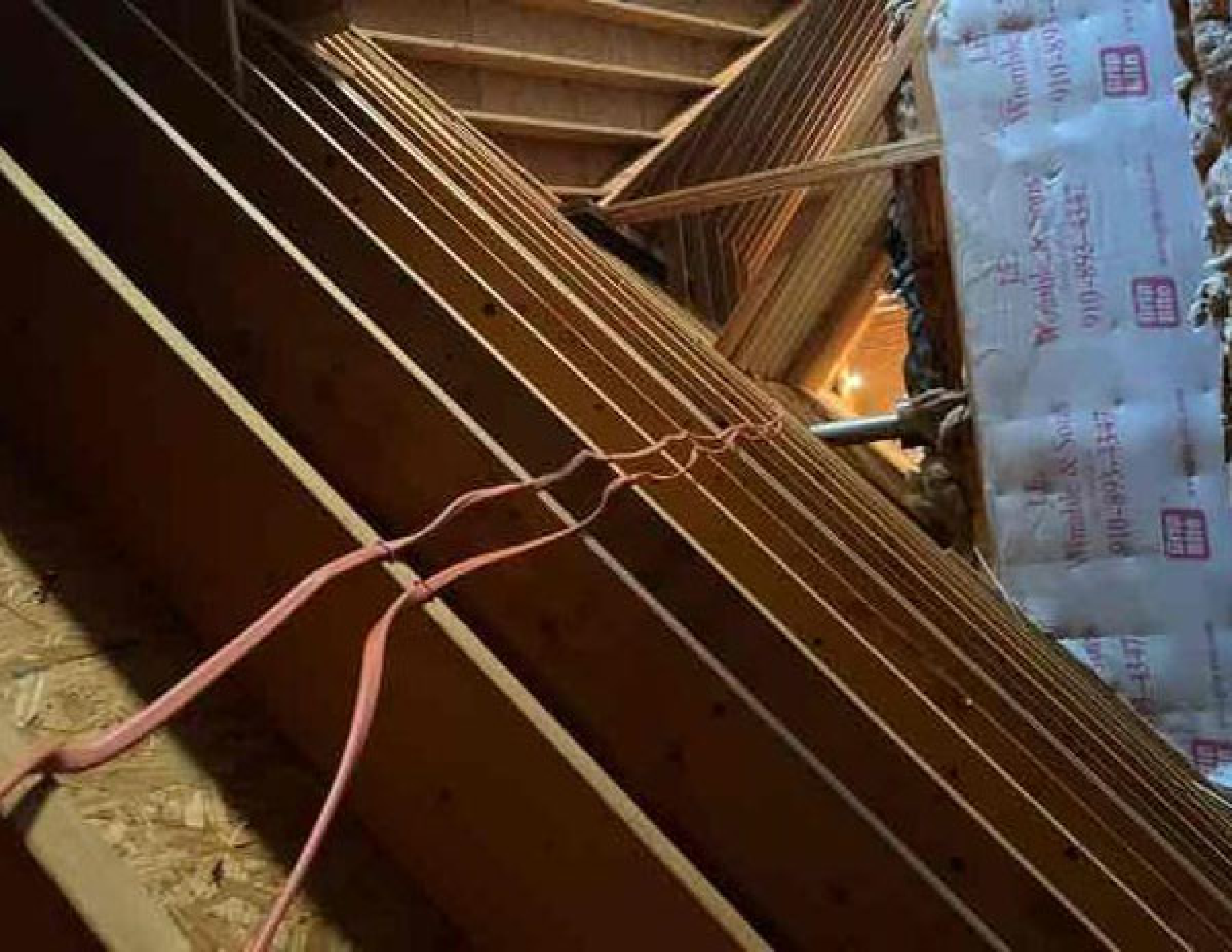


South  
Complete & Your  
300-891-1110









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07/2019  
CONFORMS TO UL STD 2703  
PATENT PENDING  
UL 94V-0