



**WARNING**  
PV SOURCE CIRCUIT

MAXIMUM VOLTAGE 1.21 A  
MAXIMUM CIRCUIT CURRENT 240 V  
MAX RATED OUTPUT CURRENT OF  
THE CHARGE CONTROLLER  
OR DC-TO-DC CONVERTER  
(IF INSTALLED)


 ENPHASE

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

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

**SOLAR PV SYSTEM EQUIPPED  
WITH RAPID SHUTDOWN**

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



**WARNING: PHOTOVOLTAIC  
POWER SOURCE**

PHOTOVOLTAIC SYSTEM  
kWh METER

**DANGER**  **PELIGRO**



**PHOTOVOLTAIC SYSTEM**  
**kWh METER**

**⚠ DANGER**



**⚠ PELIGRO**

High voltage hazard.  
Do not touch wires, terminals or other exposed parts.  
Turn off power before any maintenance work.

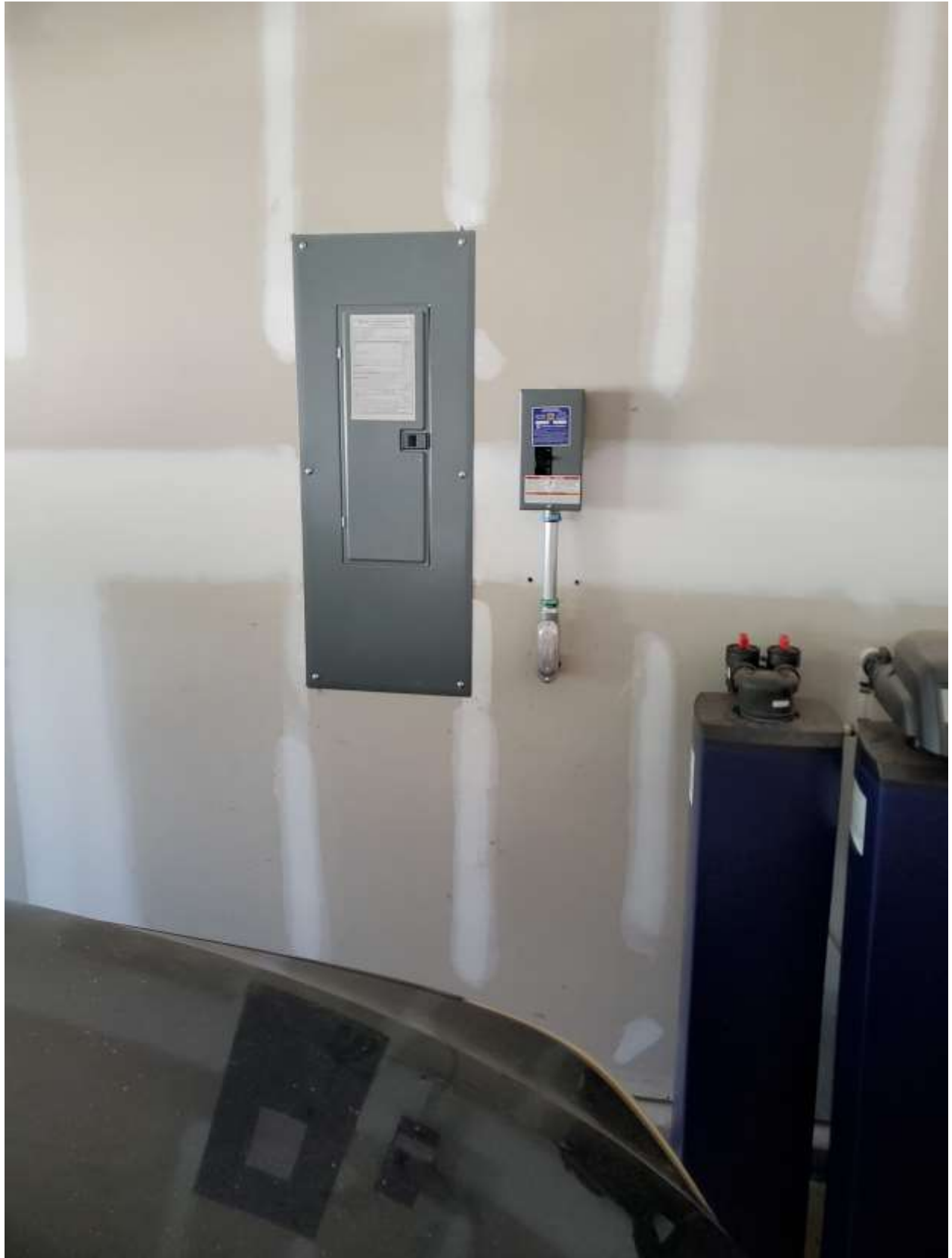
Alto voltaje. Cuidado.  
No toque cables, terminales u otros componentes.  
Desconecte el suministro de energía antes de cualquier mantenimiento.

CL300 240V 3W TYPE CDM BOTA 1.000  
\*222 575721 H67\*  
DUKE ENERGY PROGRAM  
305-187-000  
OpenWay  
www.dukeenergy.com

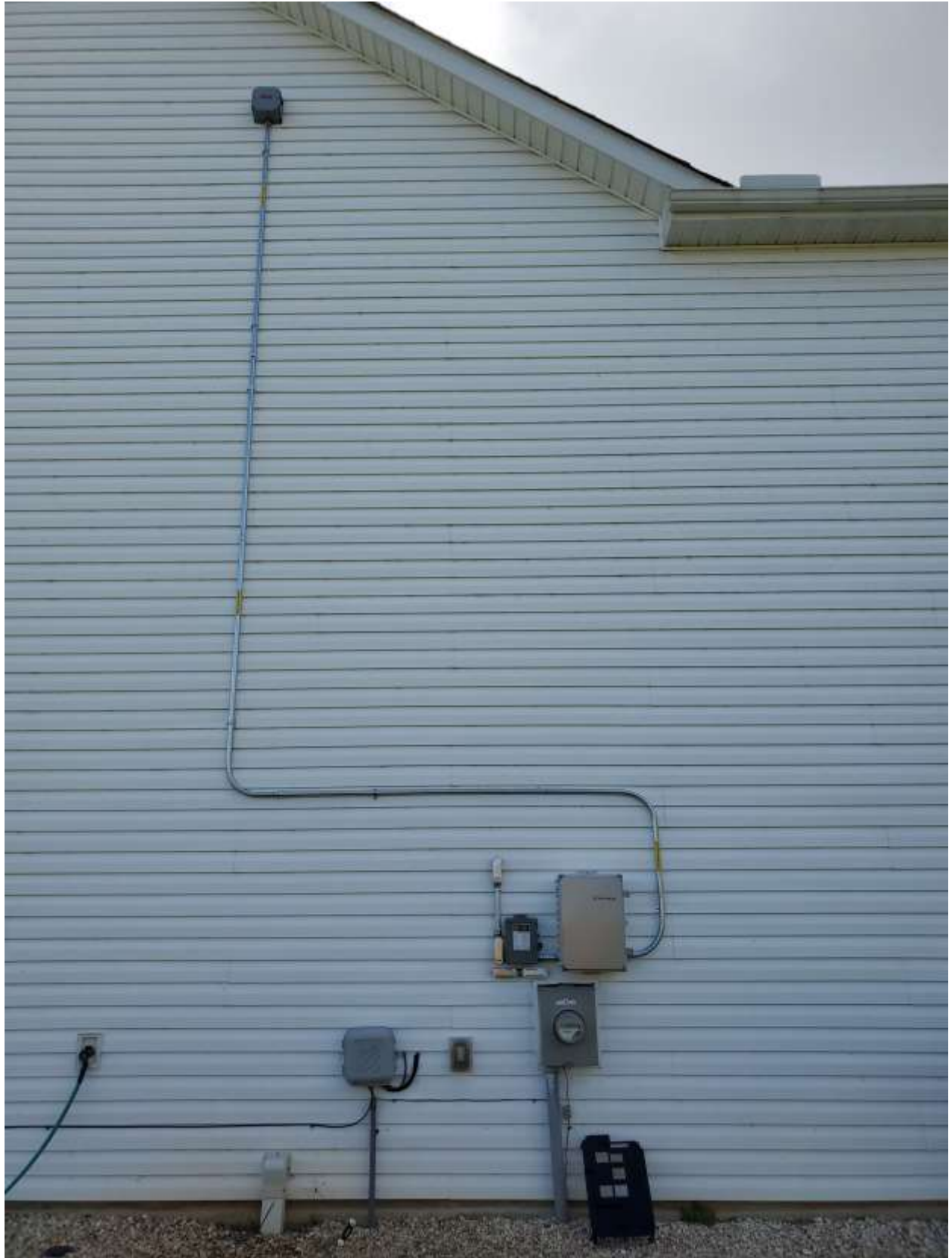
**WARNING**

THIS SERVICE METER IS SERVED BY A PHOTOVOLTAIC SYSTEM.











**⚠ DANGER**  
Maximum Voltage  
All exposed parts, including those on disconnected property, may be energized.  
Use of proper safety and equipment when working on this.

**⚠ PELIGRO**  
Máxima peligrosidad. Contacto con partes energizadas puede ocasionar lesiones graves o la muerte.  
Utilice el equipo de seguridad y los equipos adecuados cuando trabaje en esto.

06 01800

DL200 240V 30 TYPE CCM 30TA-1,0KN  
\*ZZZ 575721 H67\*  
DUKE ENERGY, PROGRESS  
325-157-009

OpenWay









Generator: No

Main Breaker size: 200A

System size: 12.05 kW

Battery: No

Attic Access: Yes

Ladder: unknown

Wifi: IWillNoT!0533

Clutter removal needed: No

HOA: YES

### ***Electrical:***

interior tap panel set up. Line tap at interior panel to feed a 60 amp single breaker enclosure with a 60 amp breaker with #6 wire. From the load side of the 60 amp breaker use 6/3 romex to feed an exterior 60A non-fusible solar disconnect. Use #6 wire to feed combiner box. Bring a 60A solar disconnect with 60A fuses incase panel and meter are back to back.

















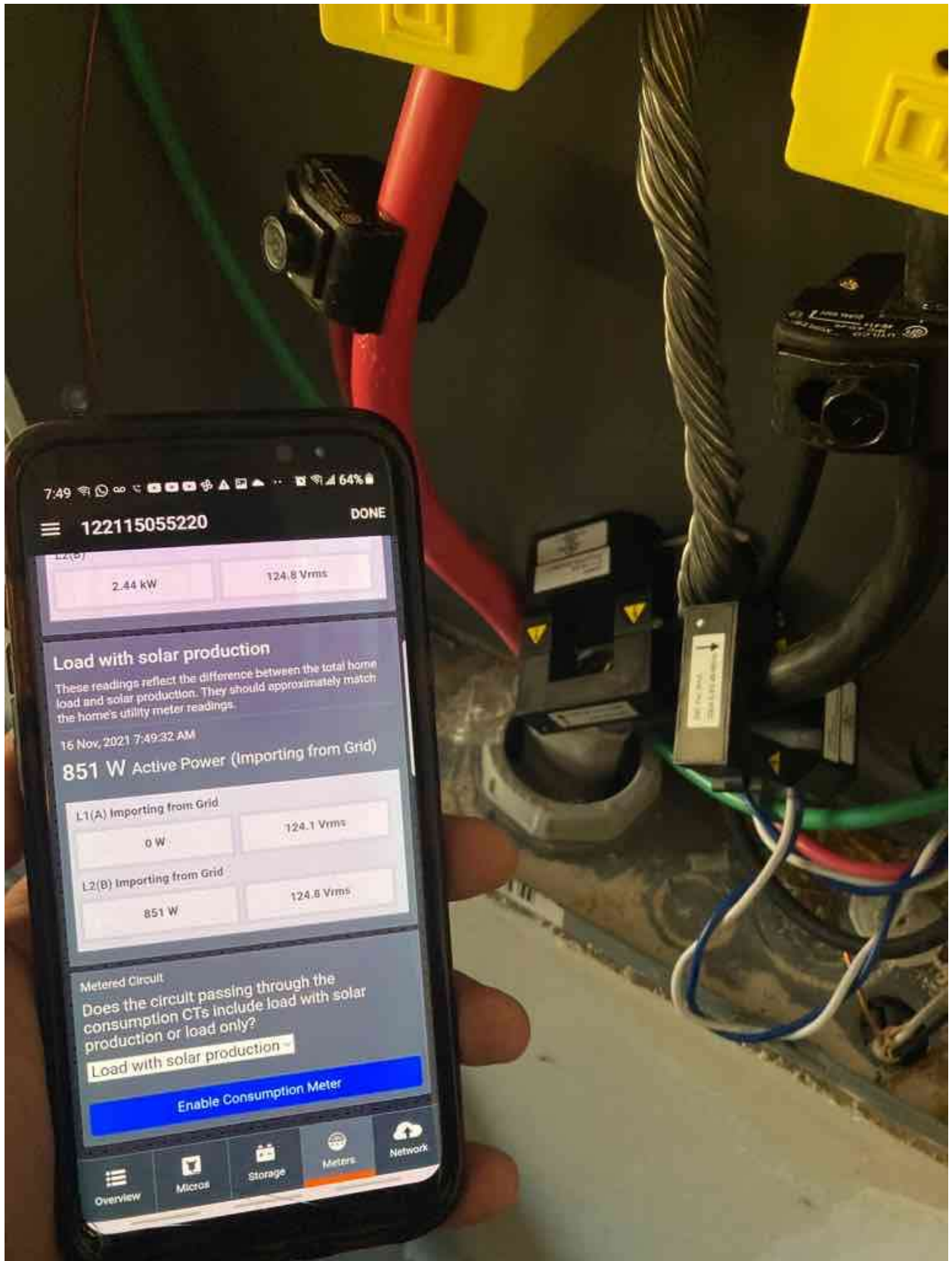




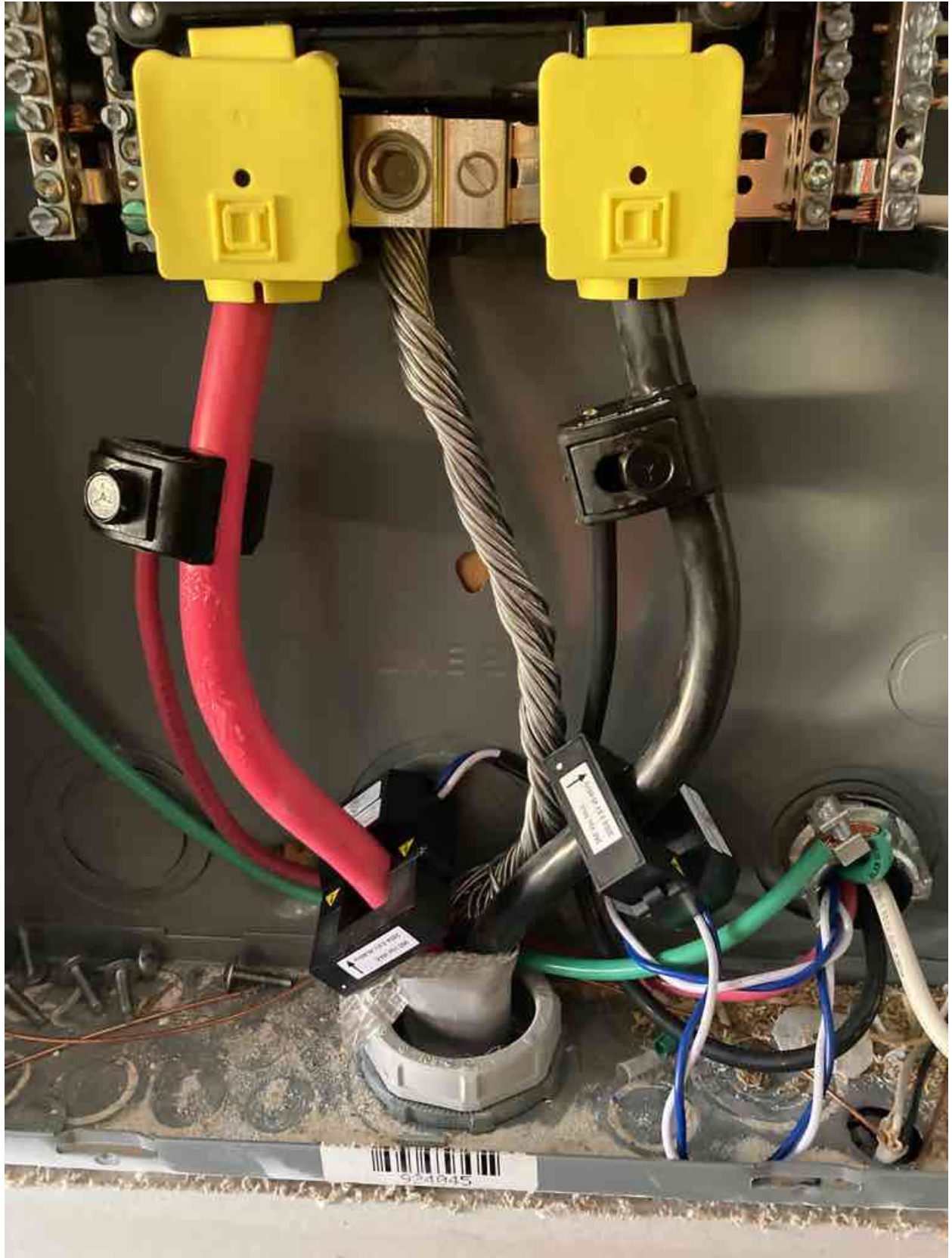












624645





All LED's

- Flashing green when software upgrade is in progress
- Flashing amber when IQ Envoy is booting up.



## IQ Combiner 3 ES

Photovoltaic  
Combiner Box  
X-IQ-AM1-240-3-ES



### Electrical ratings

**Voltage** 240VAC, 60Hz  
**DG Breakers** 80A MAX (combined)  
**DG Inputs** 64A MAX (combined)  
**Output** 65A MAX, 90A MAX feeder OCPD  
**Temperature** 46°C MAX ambient  
Use only Eaton BR series Breakers (60A max)

S/N:



122115055220

P/N:



880-00820 07

**Dedicated solar and DG Combiner Box - do not add loads 10 AMP  
Envoy Breaker not used for backfeed**

Connection	Wire sizes	Torque
DG Breaker	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)
Neutral and ground		
Large screw	14-1/0 AWG	5.0 Nm (45 lb-in)
Small screw	6-14 AWG	2.2 Nm (20 lb-in)
Main lug	10-4 AWG	5.0 Nm (45 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 China

For IQ-





## ELECTRICAL PICTURE CHECKLIST

- Inside of combiner box
- Envoy number
- Inside of disconnect
- Main tie-in point (Rack of breaker or line side tap)
- CTS
- Inside of junction box
- All placards
- Internet connection method (WiFi, Bridges, Cell Modem, Hard Wired)
- WiFi Username and Password
- All equipment mounted on wall (AC Disconnect, Point of Connection) and Main Service Panel location
- If Locus Meter, picture with MAC ID# visible
- If applicable: Inverter screen or Enphase app showing optimizers or microinverters reporting

### [GROUND MOUNT]

- Junction box
- Trench depth
- Trench length



Material	Qty	Material	Qty	Material	Qty
20amp disconnect fused		1" pvc conduit		60amp 2pole BR	
30amp disconnect non fused		1" emt conduit		50amp 2pole BR	
40amp disconnect fused		1" pvc connector		40amp 2pole BR	
60amp disconnect non fused		1" pvc coupling		30amp 2pole BR	
30amp disconnect (		1" pvc LB		20amp 2pole BR	
Meter can ring type		1" LL (		20amp tandem BR	
Meter can ringless		1" LB (		15amp tandem BR	
Polaris Tape (		1" locknuts		20/20 quad BR	
Taps ( insulation piercing tap)		1" bushing		20/30 quad BR	
2awg THHN		1" bonding bushings		20 amp BR	
4awg THHN		1" straps		15 amp BR	
6awg THHN		1" stand off straps		Eaton Misc Breaker (	
10awg THHN		2" PVC conduit		60 amp 2pole SQ D (	
12awg THHN		2" PVC connector		50amp 2pole SQ D (	
12-2 Romex		2" lock ring		40amp 2pole SQ D (	
10-3 Romex		2" Meyers Hub		30amp 2pole SQ D (	
6-3 Romex		2" Square D Hub		20amp 2pole SQ D (	
6awg bare ground		2" Eaton hub		20amp SQ D (	
4awg bare ground		Pvc conduit		15 AMP SQ D (	
1" to 3/4" reducer bushing		Emt conduit		SQ D misc Breaker (	
1" to 1/2" reducer bushing		Pvc connector		Tesla Powerwall	
2" to 1 1/2" reducer washer		meyers hub		Tesla Gateway	
2" to 1 1/4" reducer washer		Hub		Tesla Bundle 1	
2" to 1" reducer washer		LB		Tesla Bundle 2	
Fender washers		LL		Tesla Stacking Kit	
Bonding bushing		LR		Envoy (combiner)	
Plastic bushing		5LB		12x12x6 pvc box	
Locknuts		Red/yellow wire nuts		Cell Modem	
Ground bars		Big blue wirenuts		Bridges (TP-Link)	
Chase nipple		Ground rod		Combiner Box Plug	
Pop in bushing		Ground rod clamps		CT's	
Anchor kit		Other			
2" hex head screws		Other			

ersion 1.0 06/22/20 Customer: \_\_\_\_\_

PROJ# \_\_\_\_\_

Installer Initials: \_\_\_\_\_

# Electrical Checklist



### Address:

- Show clients breakers in panel, combiner box, & disconnect outside
- Equipment mounted securely?
- Conduit mounted Straight and Fastened?
- All piping and Equipment water proof?
- Building Penetrations sealed?
- Safety covers put back on equipment?
- Trash picked up off of jobsite?
- Stickers on equipment?
- One-line updated if changes are made?
- System energized?
- System turned off?

Ready for Final Electrical Inspection?

Yes

No  
Reason: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Did you make a case in salesforce?

### PICTURES OF:

- Wired Interconnection
- Wired Combiner box/Envoy
- Envoy #
- Picture of wall with Equipment Mounted
- Pictures of stickers on Equipment

*T. Ronul Ruff*  
Electrician

10-12-21  
Date

APPROVED BY

OFFICE USE ONLY





+RAL - Malcom Dickens- ELECTRICAL INCOMPLETE-PROJ-40307

Tue Oct 12 2021

All day

Add

Calendar

Raleigh - ELECTRICAL

Who

(E) David J. Wall

Where

439 Avery Pond Dr, Fuquay Varina, NC 27526

Description

10/11 @ 1014am - Amandal - called HO and confirmed appt for 10/12

SF: [https://sunpro.lightning.force.com/lightning/r/Projects\\_\\_c/a0i4T000001QbwWQAS/view](https://sunpro.lightning.force.com/lightning/r/Projects__c/a0i4T000001QbwWQAS/view)

IC: Amanda Labbe-Little

Phone#: 252.347.3840

ETA Given: 10/12 between 8 and 10am

Install Expectations: will provide a 30 min call ahead

Electrical:

To be completed - Commission. NEED ALL ELECTRIC PICTURES.

Run romex in the attic to jbox (panel crew didn't finish)

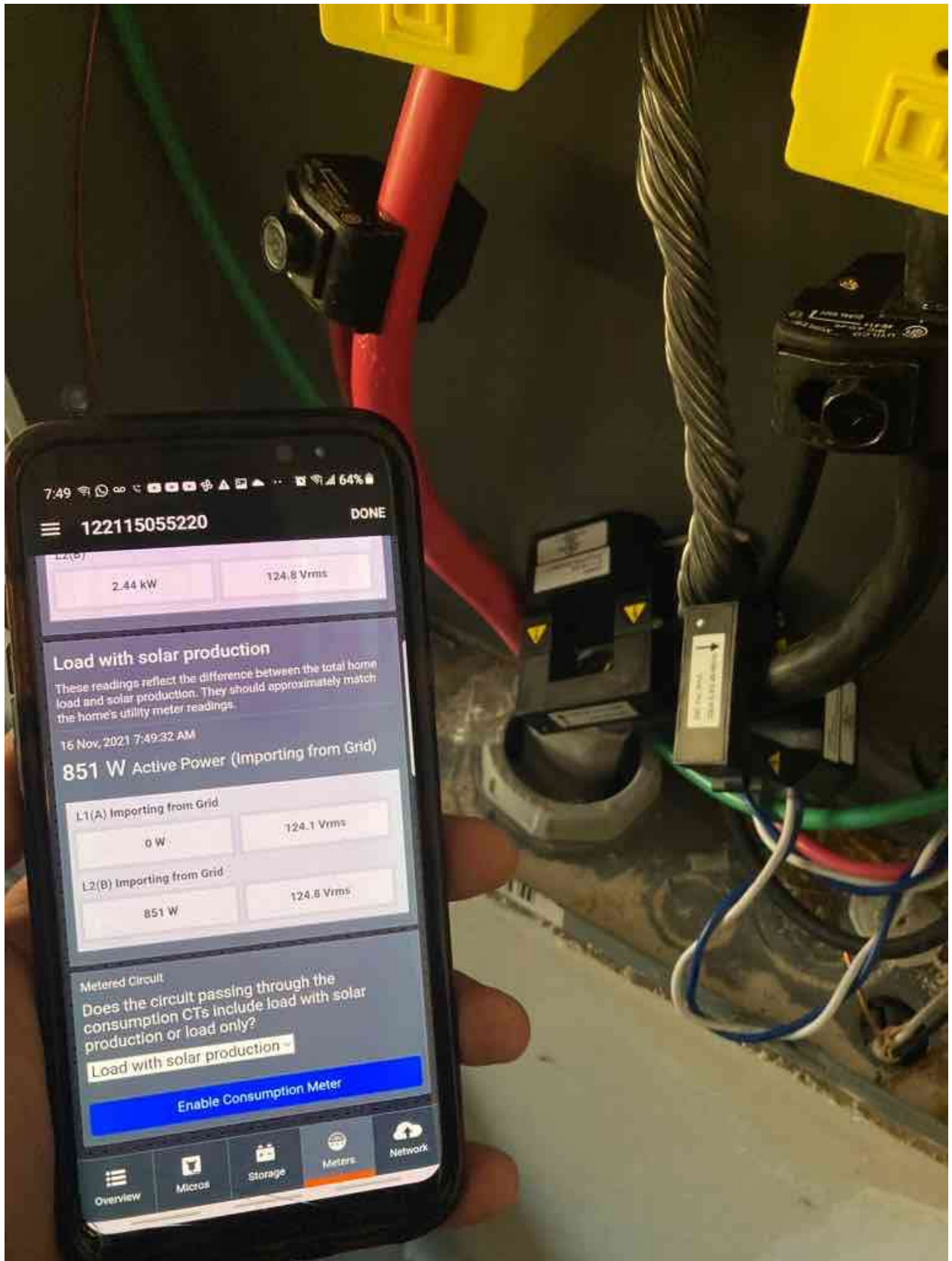
Stickers

Comments: 0 [Add Comment](#)

Created a month ago by Modify, last updated 10 hours ago by Modify

Completed  
Ready for inspection  
Romex in attic in junction Box  
& solo deck is connected.







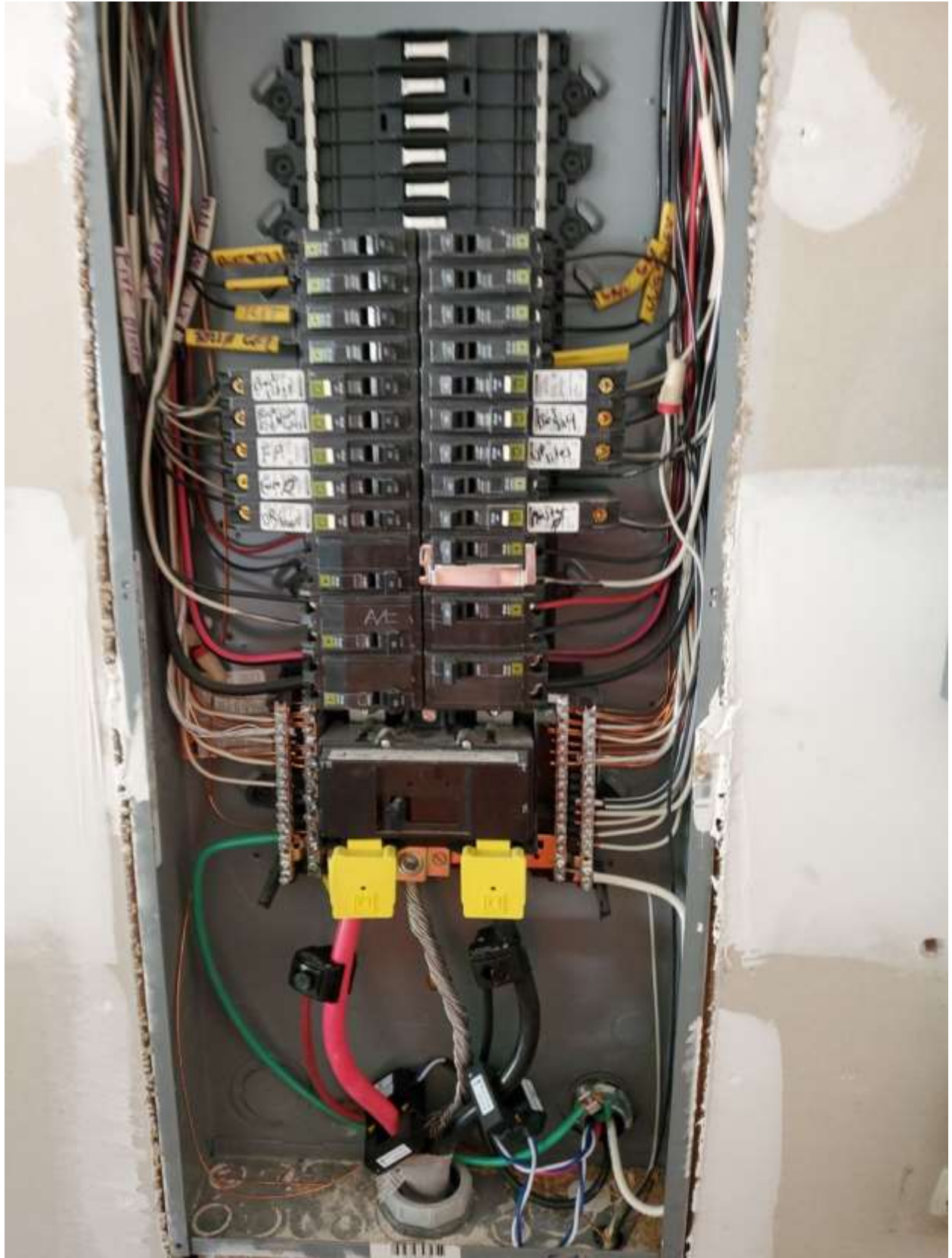








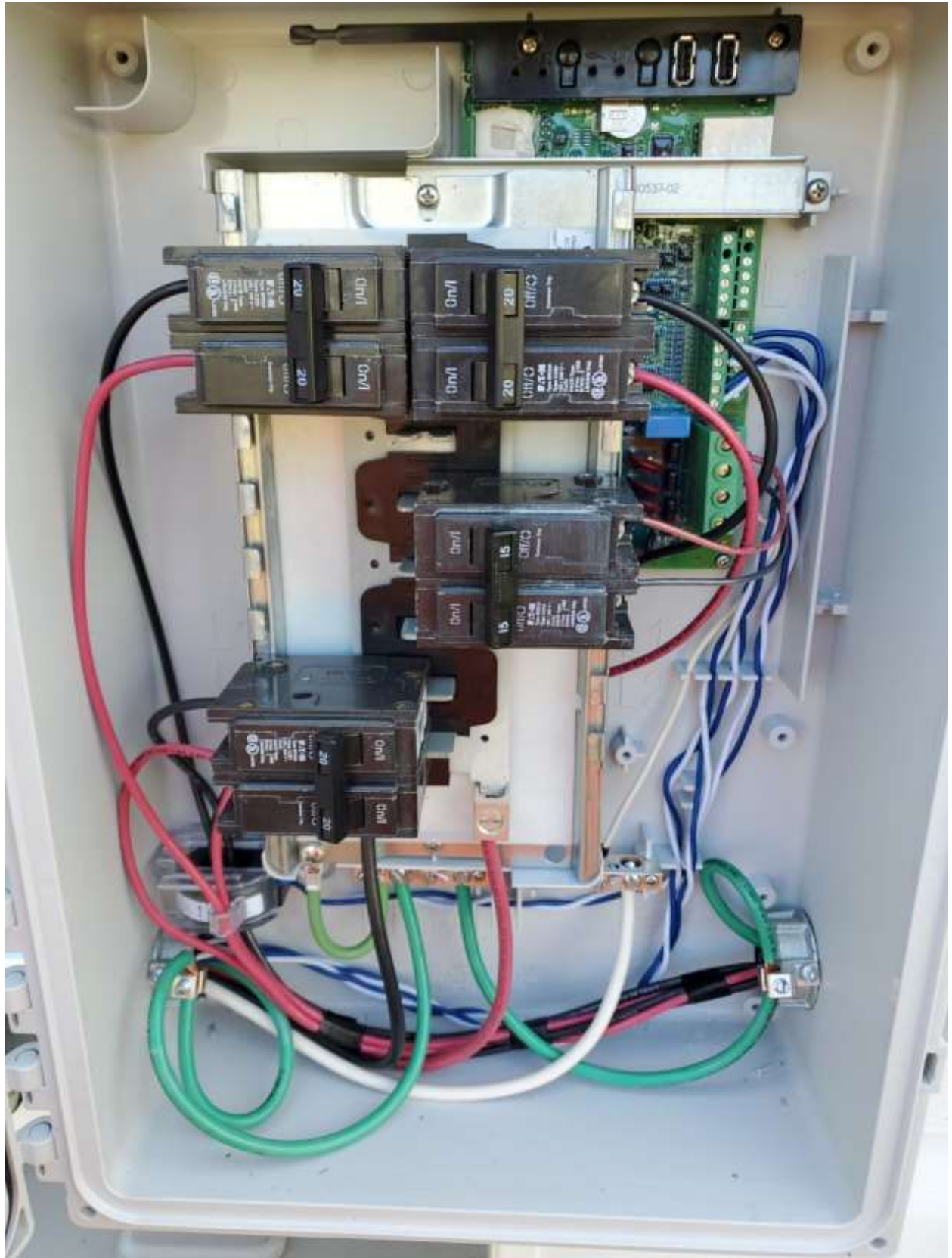




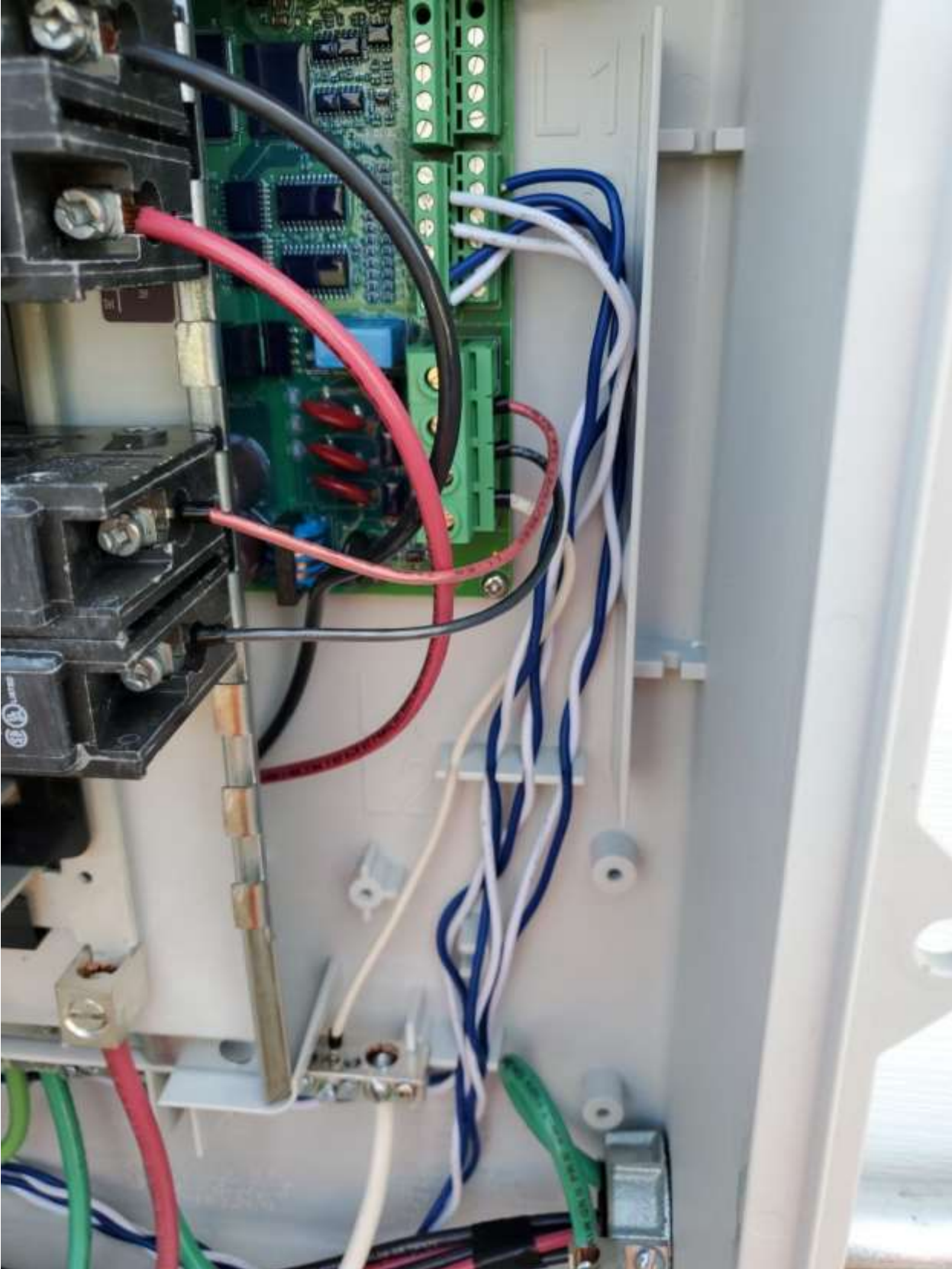






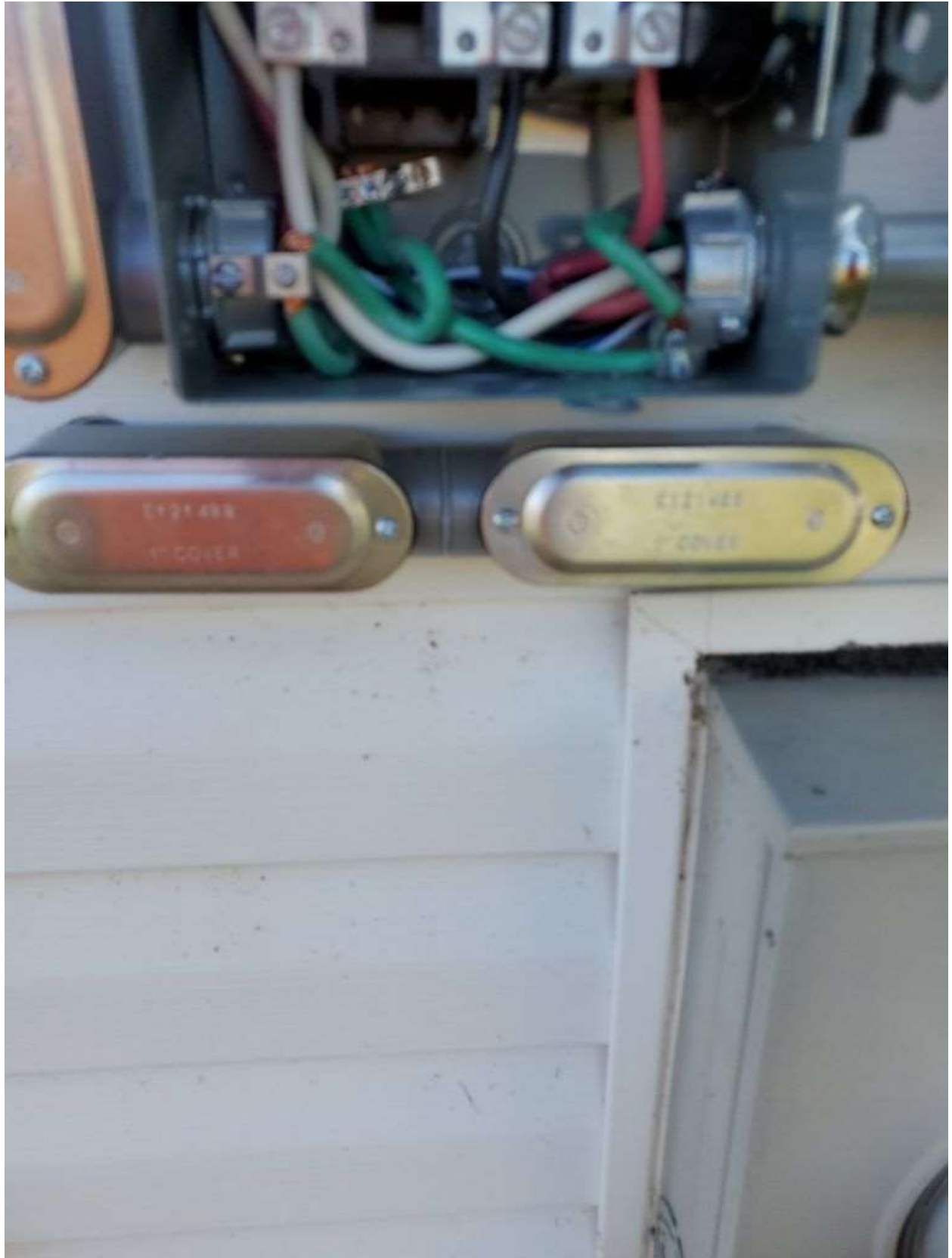


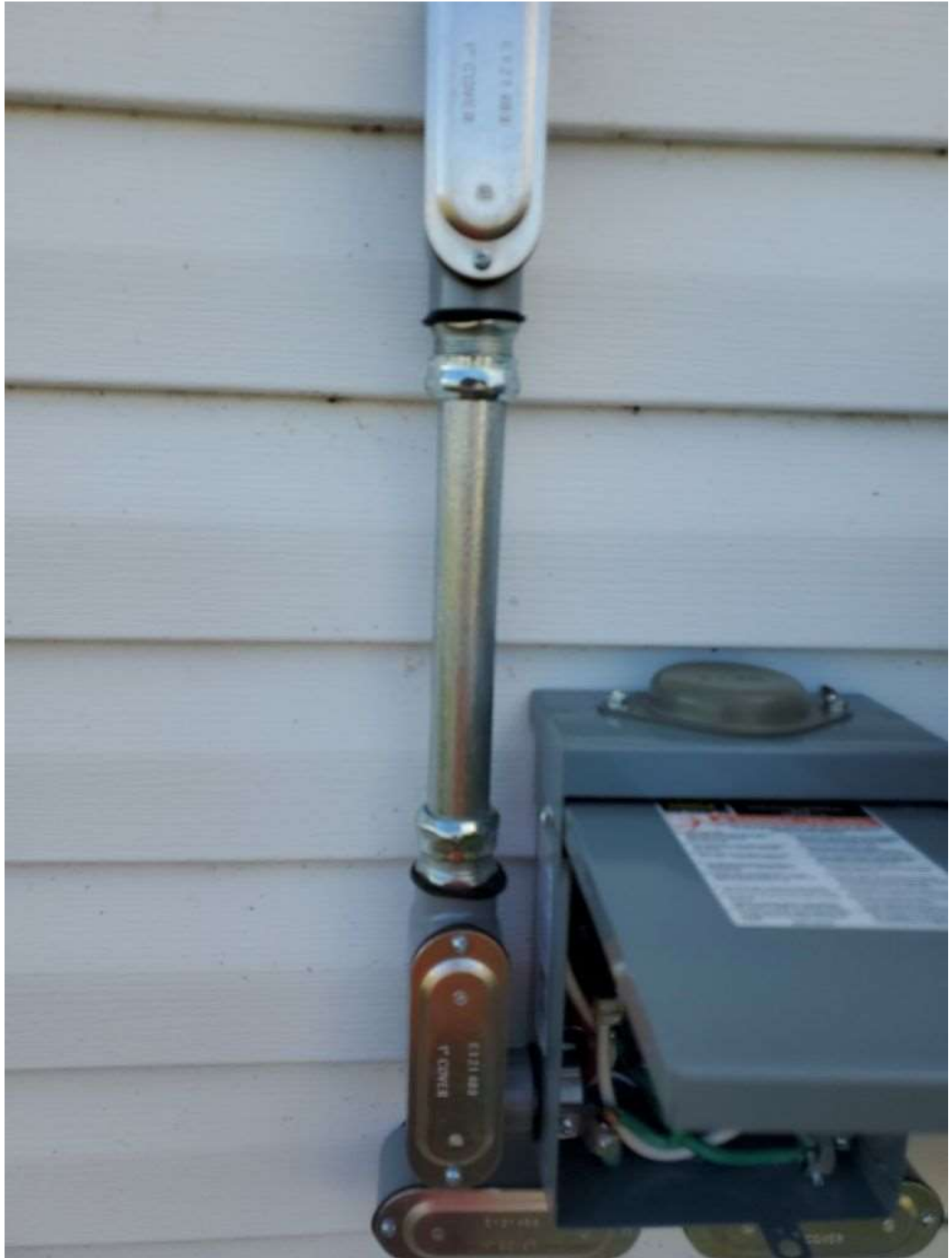






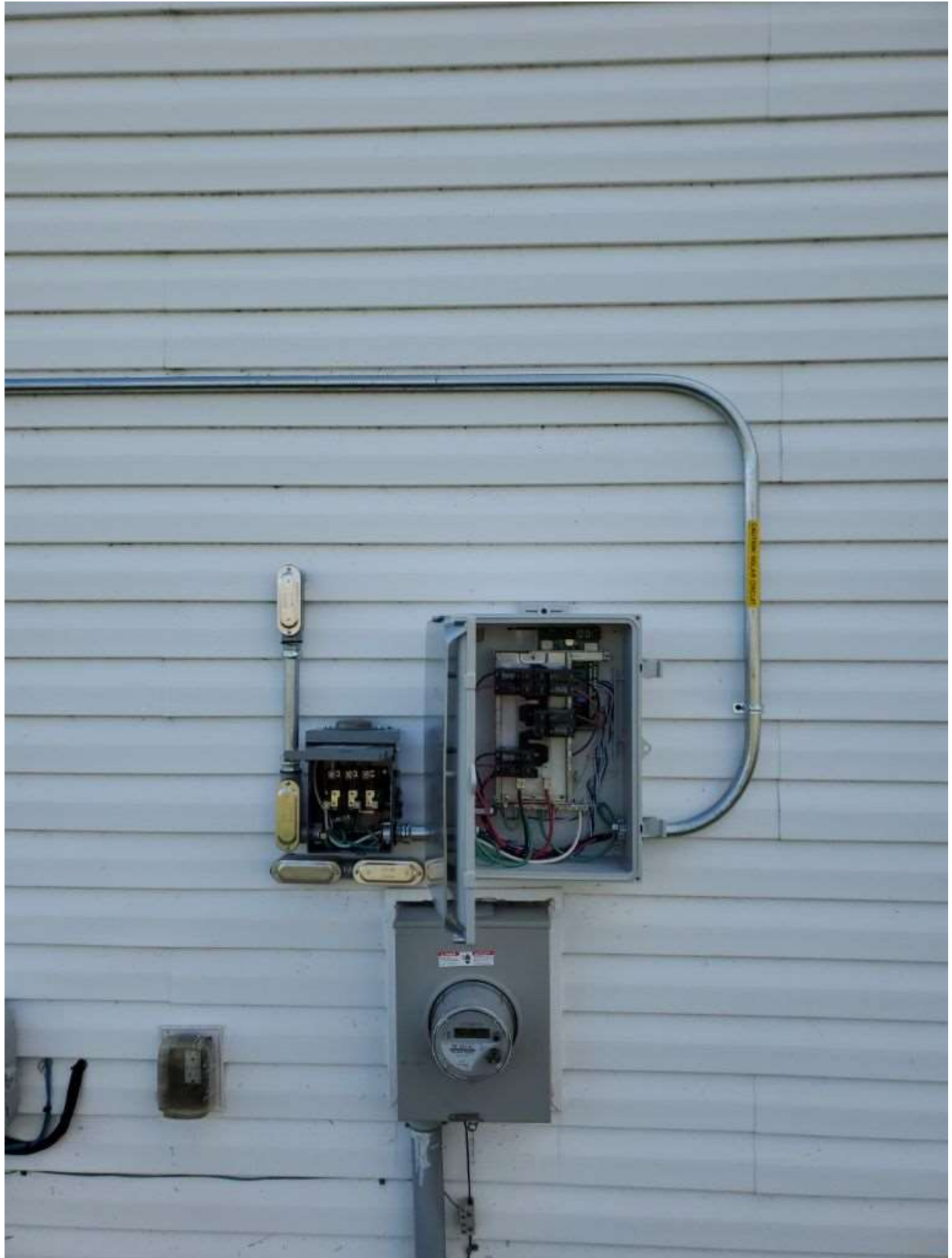












before turning on power to this equipment.  
Failure to follow these instructions will  
result in death or serious injury.

1. Puesto a trabajar todos los dispositivos, las puertas y las  
cubiertas antes de volver a energizar el equipo.  
El incumplimiento de estas instrucciones podrá causar  
la muerte o lesiones graves.

**WARNING / ADVERTENCIA**

This equipment is designed and tested by Square D  
to performance levels which exceed Underwriters  
Laboratories Standards. Use of Other than Square D  
Circuit Breakers May Adversely Affect User Safety  
and Incur Reliability. Square D disclaims all liability  
for damage, injury or non-performance caused by  
the use or failure of non-Square D circuit breakers.

Este equipo diseñado y probado por Square D excede el  
nivel de rendimiento establecido por las normas de UL. El  
uso de interruptores automáticos que no sean de Square D  
puede afectar negativamente la seguridad del usuario y  
degradar la confiabilidad del equipo. Square D no asume  
responsabilidad alguna por daños, lesiones personales o mal  
funcionamiento del equipo causado por el uso o defectos de  
interruptores o dispositivos que no sean de la marca Square D.















