

# Off grid Aquaponics and Aquaculture for a Home Owner on the Leeward side of Oahu

BnB Nursery

Brian Leonida

# Thank You!

CTAHR – Clyde Tamaru and Team

Trent – Inter Island Solar

Albert “Al” Fung- Aquaponics in Paradise

Devin Gomes

Marvin Nuestro

Tina Wegscheid

Mom and Dad

# Why Solar?



# Leeward coast of Oahu



# Power cost

- No power present on property.
- Quote to get HECO power on property,  
\$15,000 a pole.
  - 3 poles needed.
  - \$45,000 total





# Calculations

- Amps x Voltage = Watts
- Watts / 1000 = Kilowatts
- Kilowatts x hours of use = Kilowatt Hours
  
- $.9 \times 120 = 108$
- $108 / 1000 = .108$
- $108 \times 24 = 2.59$
- $2.59 \times .35 = .90$  a day



# Pump usage

- 15 mins on / 45 mins off
- 15 mins x 24 hrs = 360 mins
- 360mins / 60 mins = 6 hours
  
- $.9 \times 120 = 108$  watts
- $.108 / 1000 = .10$
- $.10 \times 6 = .6$
- $.6 \times .35 = .21$  cents a day



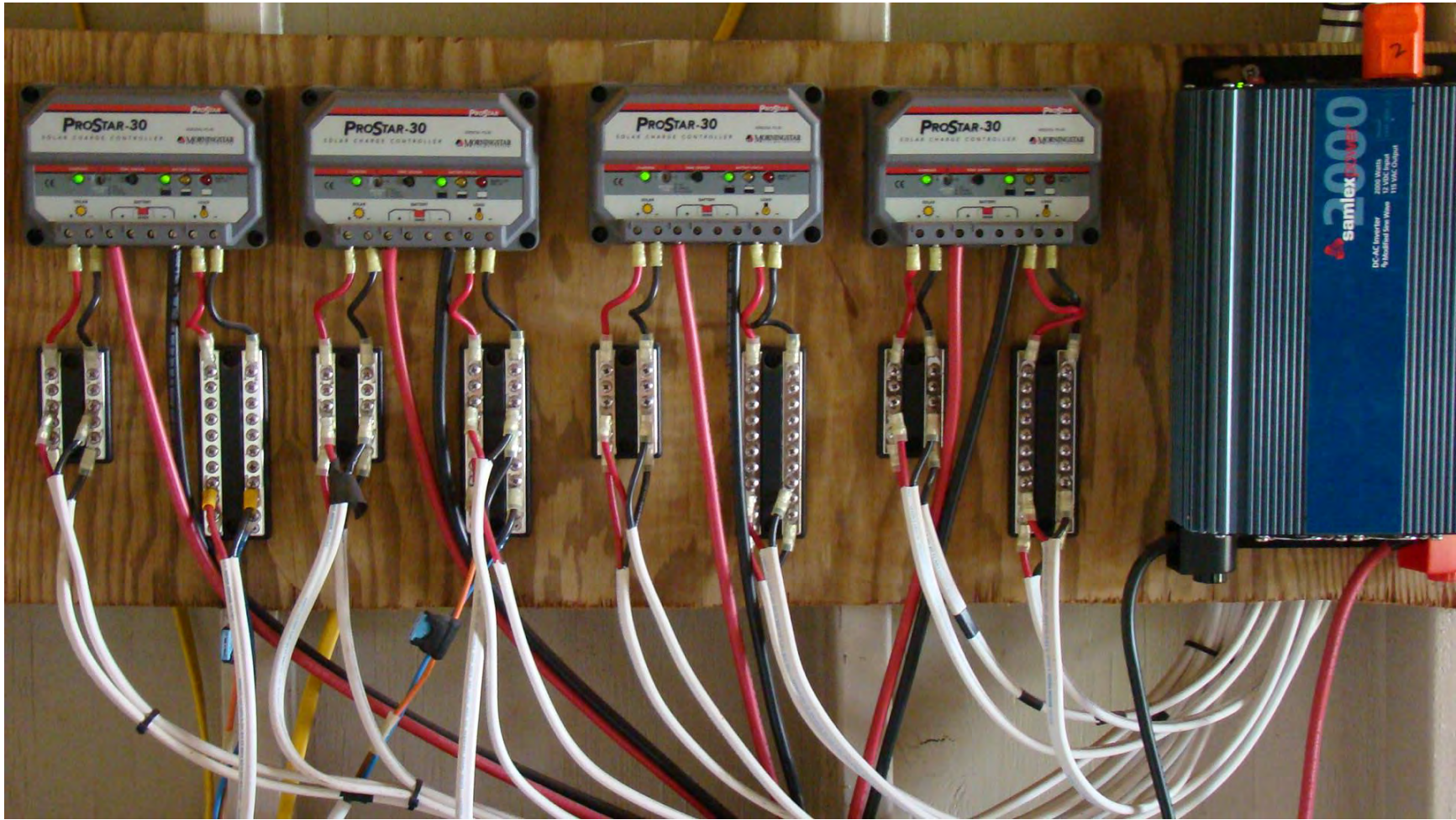
A stylized sun logo consisting of three concentric red circles with yellow rays emanating from the top right.

**PONCHO'S  
SOLAR SERVICE**

808-422-4266







**ProStar-30**  
SOLAR CHARGE CONTROLLER  
MORNINGSTAR

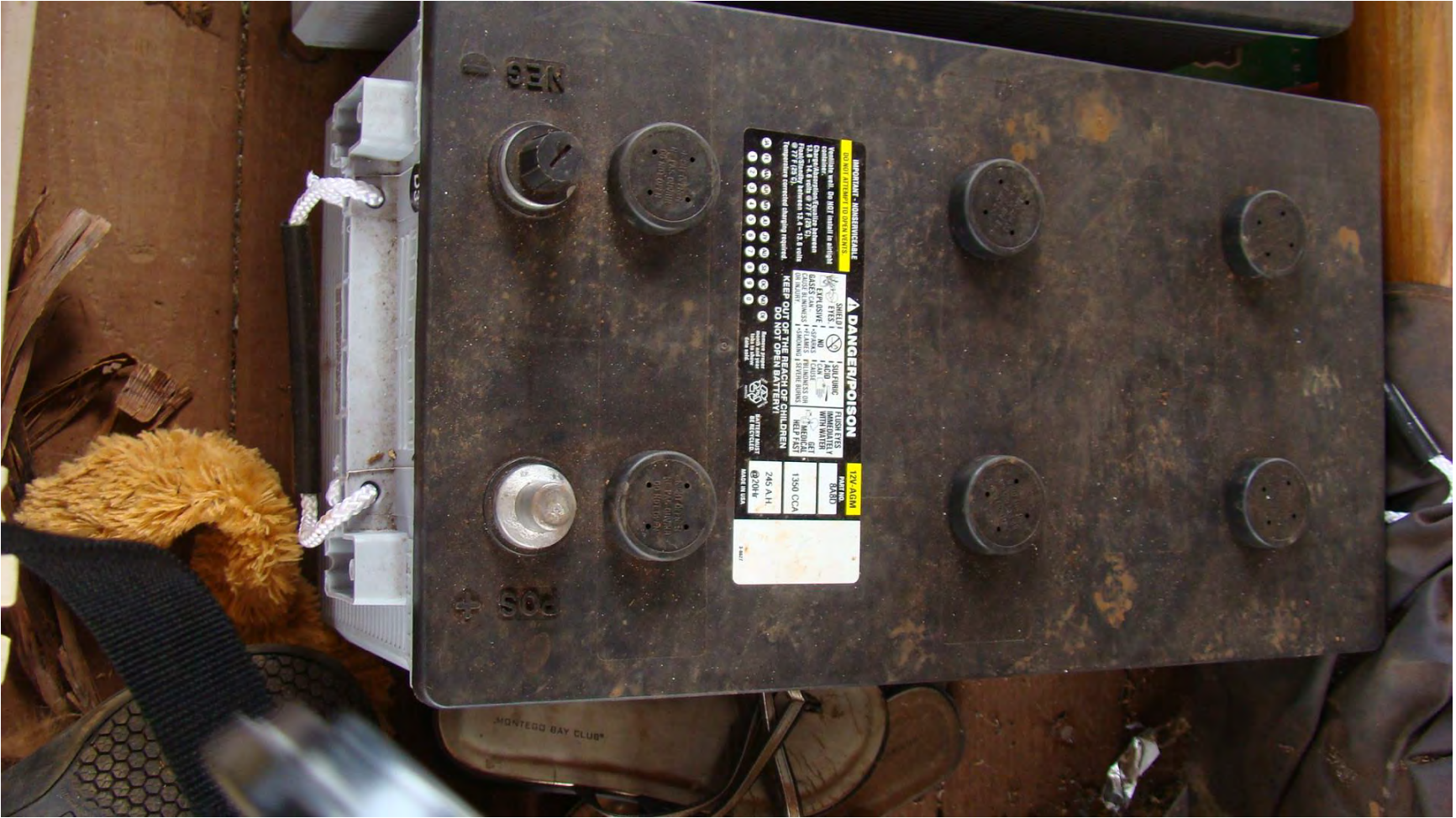
**ProStar-30**  
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**Samlex 2000**  
12V DC Input  
115V AC Output





**IMPORTANT - NONRECHARGEABLE**

DO NOT RECHARGE OR DISCONNECT

Maximum weight for best results in engine: 15.5 kg (34.2 lbs)

Charging voltage: 13.8V (Standard)  
 Recommended charging voltage: 13.8V (Standard)  
 Recommended charging current: 2.0A (Standard)

**DO NOT OPEN BATTERY**

KEEP OUT OF THE REACH OF CHILDREN

**AGM**  
 AGM: Absorbent Glass Mat  
 VRLA: Valve Regulated Lead Acid  
 Sealed: Sealed  
 Flooded: Flooded  
 Maintenance free: Maintenance free  
 Recombinant: Recombinant  
 Spill resistant: Spill resistant

**12V AGM**  
 Model no: 80407  
 1390 CCA  
 245 A/H  
 42024

MADE IN USA



NEG

POS

MONTGOMERY CLUB











**Thank you very Much!**