

# AS Maintenance Clinic II

## Solar

**“Not Professionals”**

**- Plain Language -**

- “Do I need Solar?”
- “I want Solar, how much do I need?”

- How much power are you using?

- How much power do you think you might use?

- Lights 1-2 amps
- Electronic controls 1 amp
- Fantastic fan 3.26 amps
- Furnace 5-10 amps

\* Examples only

- What is your battery capacity?
- What types of batteries do you have?

State of charge (SOC)  
or % of capacity remaining?

**Lead Acid, AGM, etc = 50%**

**Lithium = 80-90%**



# Volts vs Ah's

How are you measuring your power?

- 100w Solar panel?

- 20 amp Solar Controller?

$$100W/12V = 8.33 \text{ Amps}$$

I use 100w = 8 Amps (battery)

**100w panel = 8Ah in one hour  
of bright sunlight**

- 10 hours of bright sunlight to replace 80Ah's of power for every 100 watt panel

- Lights 1-2 amps
- Electronic controls 1 amp
- Fantastic fan 3.26 amps
- Furnace 5-10 amps

Add up to how many amps and for how long?

- How many panels do you need to replace your power?

- Is your battery tank large enough to make it through the night or rainy days?