



**Operations Manual**  
**&**  
**Reference Guide**

# Disclaimer

This document is published for informational purposes only. Green APU, LLC makes no representations or warranties, express or implied, with respect to the information, recommendations and descriptions contained in this manual and such information, recommendations and descriptions should not be regarded as all-inclusive or covering all contingencies. In the event you have any questions or require further information, please contact Green APU Technical Support at 877-751-0606, Option 3.

The procedures described herein should only be undertaken by suitably qualified personnel. Failure to implement these procedures correctly may cause damage to the Green APU unit or other property or personal injury.

Green APU, LLC and its affiliates shall have no liability in contract or tort (including negligence and/or strict liability) or otherwise to any person or entity for any personal injury, property damage or any other direct, indirect, special or consequential damage or liability whatsoever, arising out of or resulting from any actions by any person that are contrary to this manual or any of the information, recommendations or descriptions contained herein.



**Always ensure the unit is completely off and disconnected from batteries before servicing.**

# **IMPORTANT**

Your GREEN APU includes  
**LIFETIME**  
**24/7 Technical Support**

If you experience any issues with  
the performance of your APU,

**Please Call**  
**877-751-0686**  
**Option 3**

It is important to call Technical Support  
**WHILE** the issue is occurring.

This ensures the timeliest resolution  
and the most effective troubleshooting.



## July 1, 2012, Vehicle Weight Exemption Certification

Green APU LLC certified as follow:

Auxiliary power unit GREEN APU installed weighs is 530 pounds.

Section 127(a) was amended to add item 12 that States the following:

### **(12) HEAVY DUTY VEHICLES-**

(A) IN GENERAL- Subject to subparagraphs (B) and (C), in order to promote reduction of fuel use and emissions because of engine idling, the maximum gross vehicle weight limit and the axle weight limit for any heavy-duty vehicle equipped with an idle reduction technology shall be increased by a quantity necessary to compensate for the additional weight of the idle reduction system.

(B) MAXIMUM WEIGHT INCREASE- The weight increase under subparagraph (A) shall be not greater than 400 pounds.

(C) PROOF- On request by a regulatory agency or law enforcement agency, the vehicle operator shall provide proof (through demonstration or certification) that--

(i) the idle reduction technology is fully functional at all times; and

(ii) the 400-pound gross weight increase is not used for any purpose other than the use of idle reduction technology described in subparagraph (A).

### **Update:**

On June 6, 2012 President Barack Obama signed the Federal Highway Bill. As part of the bill the following updates were made in reference to idle reduction technologies to include APU's.

### **SEC. 1510. IDLE REDUCTION TECHNOLOGY.**

Section 127(a)(12) of title 23, United States Code, is amended—

(1) in subparagraph (B), by striking “400” and inserting “550”; and

(2) in subparagraph (C)(ii), by striking “400-pound” and inserting “550-pound”.

As a result of these changes the new federal weight exemption has been increased from 400 pounds to 550 pounds for an APU.

Best Regards,

Irek Panek

Direct 630 465 2602

Product Developer

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# SYSTEM OVERVIEW

Your Green APU performs two primary functions:

## CLIMATE CONTROL

Climate control mode maintains in-cab comfort.

The unit will alternate between AC and heat in accordance with the set temperature.

## BATTERY / TEMPERATURE MONITORING

For use when parking the truck unattended for any extended length of time.

The system will turn on the unit when:

**Battery Voltage** drops below **12.5 volts**

Or

**Coolant Temp** drops below **40 degrees**

## IMPORTANT:

Battery / Temp Monitoring must be  
**MANUALLY ACTIVATED**  
each time you wish to use it.

# CONTROLLER NAVIGATION

Your Green APU was designed with simplicity and ease of use in mind.

A single-knob control provides access to all features by rotating and clicking.



Rotate knob to choose menu item.

Push knob to select item.

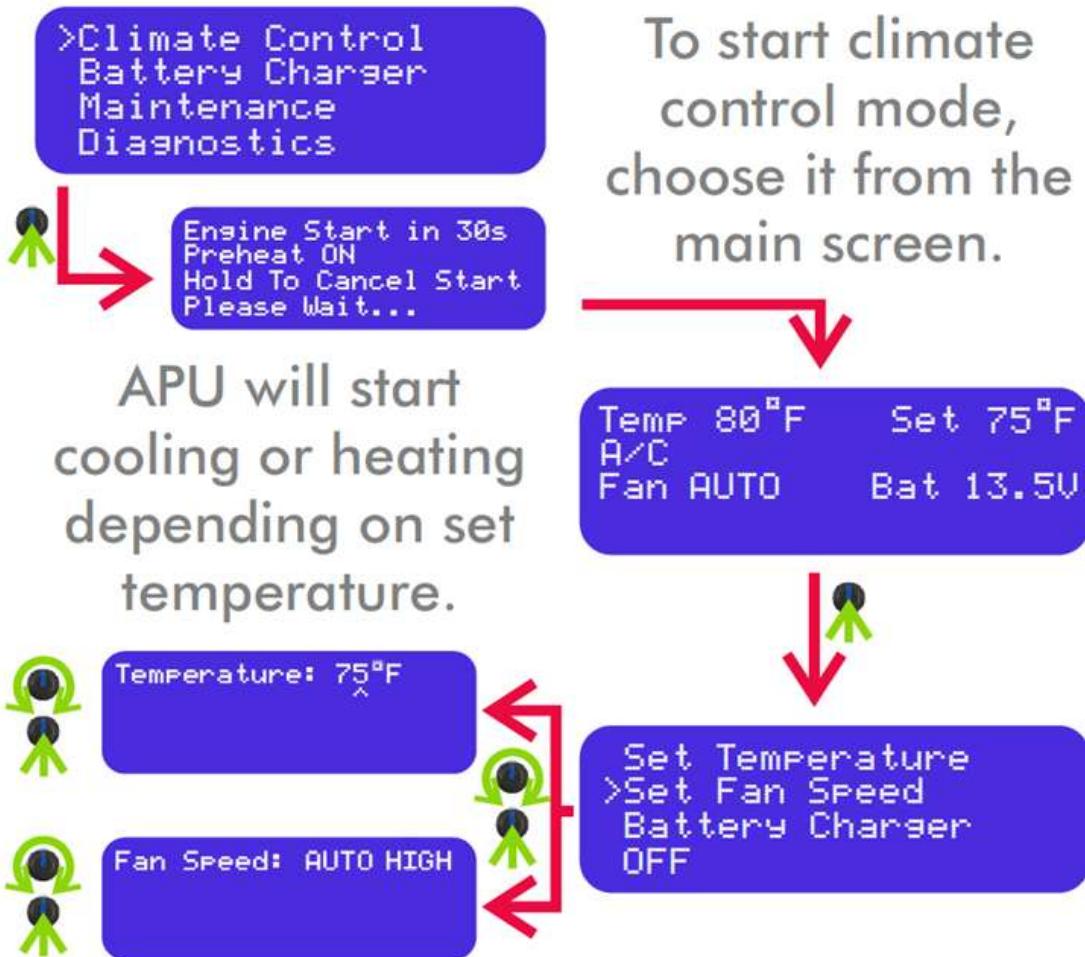
>Climate Control  
Battery Charger  
Maintenance  
Diagnostics



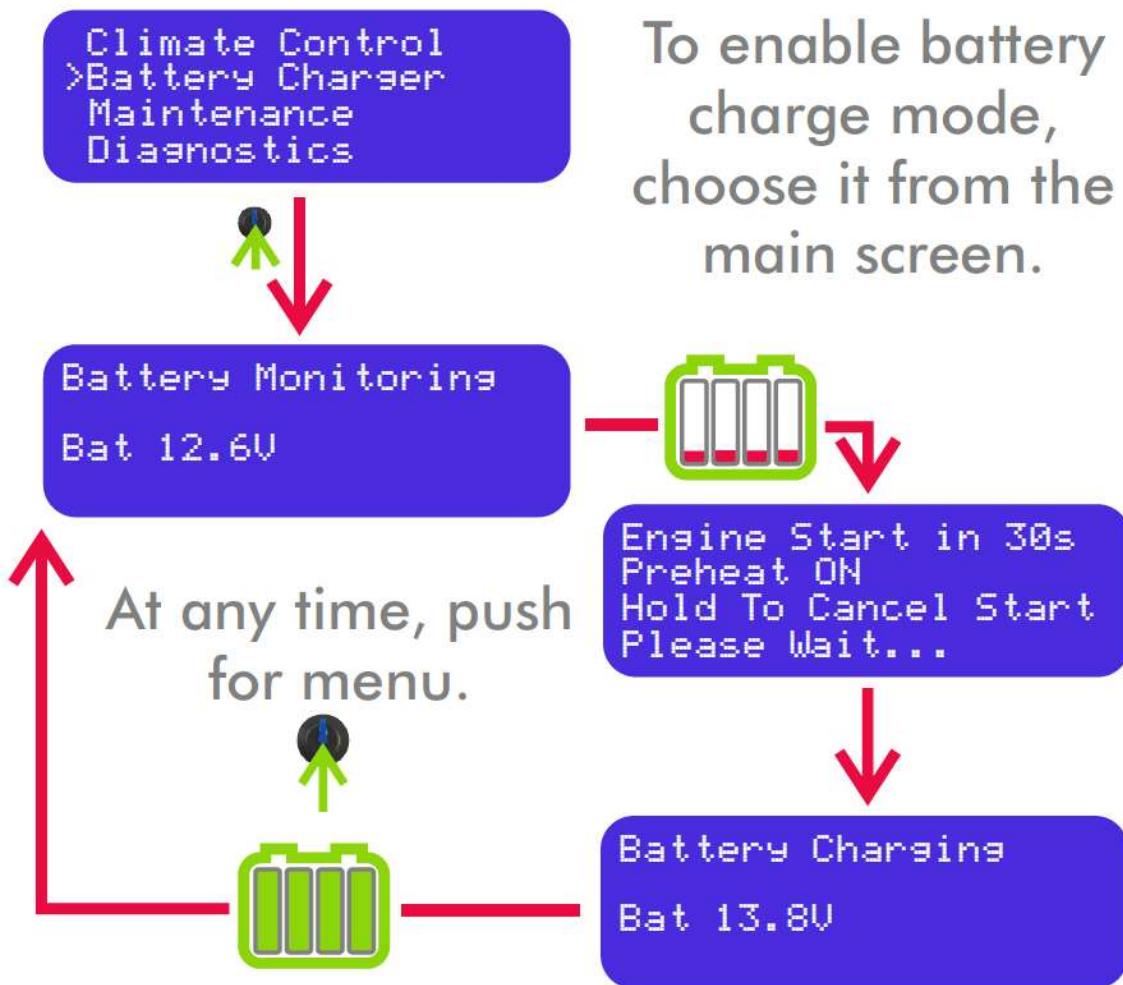
Keep scrolling for additional menu options.

# CLIMATE CONTROL

## Heat, AC, and Cab Power



# BATTERY / TEMPERATURE MONITORING



The system will run for approximately 2 hours to deep charge the battery and fully preheat the engine.

**IMPORTANT:**  
Battery / Temp Monitoring must be  
**MANUALLY ACTIVATED**  
each time you wish to use it.

# MAINTENANCE

The Green APU Star Edition requires Preventive Maintenance every **1000 Hours**.

A notification message will display upon startup when your unit is approaching the PM Service.

## Basic Maintenance Parts List

Oil Filter:	Fuel Filter:	Air Filter:
WIX 51344	WIX 33390	WIX 46449

Prepacked Filter Kits are available from Green APU

### **Kubota D722 Engine (KM Serial Numbers)**

**Oil Capacity: 3.50 Quarts**

### **Kubota D902 Engine (KS Serial Numbers)**

**Oil Capacity: 4.25 Quarts**

10W30 or 15W40 Diesel Motor Oil

Serpentine Belt:  
GATES K060635HD (preferred)

Additional Information:

**FREON CAPACITY: 1.7lbs - R134a**

**Always ensure the unit is completely off and disconnected from batteries before servicing.**

# MAINTENANCE

## Green APU Maintenance Schedule

Pretrip / Daily	1000 Hours	3000 Hours	
x	x	x	Visually inspect unit for fluid leaks
x	x	x	Visually inspect unit for loose or broken parts.
x	x	x	Check engine oil level
	x	x	Perform oil and filter change (Oil, Air, Fuel filters)
	x	x	Inspect HVAC air filter, clean if necessary
	x	x	Review all sensor output and verify readings
	x	x	Inspect serpentine belt
		x	Replace serpentine belt
	x	x	Inspect belt tensioner
	x	x	Inspect all hoses for rubbing or damage
	x	x	Inspect all wiring for rubbing or damage
	x	x	Verify Glow Plug operation
	x	x	Test condenser fan, verify proper operation
	x	x	Inspect condenser condition, clean if necessary
	x	x	Inspect fuse box, ensure pins are in good condition
	x	x	Verify alternator voltage
	x	x	Ensure proper alignment of the APU body panels
	x	x	Inspect Electrical Connections for fit and corrosion
	x	x	Grease Electrical Connections
	x	x	Verify water valve operation
	x	x	Ensure the heat is operational and blowing hot
	x	x	Ensure the AC is operational and blowing cold

Green APU reserves the right to deny warranty coverage on claims due to lack of maintenance, abuse or neglect.

# Viewing Service Hours

To View your current service hours, select  
*Maintenance > Service Hours*



## Resetting Service Hours

Once service is complete, you must reset the oil timer.

To reset the oil timer, select  
*Maintenance > Reset Oil Timer*



The Oil Timer will now be reset to zero.

**IMPORTANT:** Timely oil changes are critical to the lifespan of any engine.  
1000 hours is equivalent to 40,000 miles driven.

**NEVER** reset the oil timer unless the  
unit was actually serviced.

# **SERVICE**

**Green APU provides Lifetime 24/7  
Technical Support.**

**For support requests or technical inquiries  
please call:  
877-751-0686  
Option 3**

**A map of Green APU Distributors and  
Affiliated Service Locations can be  
found online at:  
[greenapu.com/locations](http://greenapu.com/locations)**

# PARTS

## Star Edition Parts List

PART	PART NUMBER
OIL FILTER	WIX 51344
FUEL FILTER	WIX 33390
AIR FILTER	WIX 46449 / DONALDSON P822686
AIR FILTER (Pre March 2024)	WIX 49913 / MANN C1140
SERPENTINE BELT	GATES K060635HD
DRYER	74R2546
CONDENSER	4730TY
CONDENSER FAN	30101510 SPAL
REAR SEAL	1G460-04460
FRONT SEAL	1J094-04140
GLOW PLUGS	1G679-65512 / NGK YE01
OIL P SENSOR	15841-39013
OH SWITCH	51601-37670
TEMP SENSOR	39220-21330
FUSE BOX TERMINAL	12176388
SMALL RELAY	303-1AH-C-R1-U1
BIG RELAY	PC785-1A-12S-R-X
EXPANSION VALVE	71R8321
ACTUATOR MOTOR	RD-5-12450-1
BINARY SWITCH(AC)	71R7075

To Order Parts Call Green APU's Parts Line at:

**877-751-0686 Option 2**

Or visit our online store at:

**greenapu.com/buy-parts**

# ADDITIONAL INFO

## COOLANT

Your Green APU is connected to your truck's coolant system. This allows the APU to perform its engine preheat functions.

### **Avoid Excessive Heat Transfer Upon Startup**

Modern trucks often run at high operating temperatures, particularly in extreme environments.

You should allow your truck to idle for at least 5 minutes before shutting down while initially using your APU.

This will allow the system to cool and prevent excessive heat transfer to the APU.

### **Utilize Shut-Off Valves If Necessary**

As your truck and APU coolant systems are connected, a coolant leak in the APU has the potential to drain coolant from the truck's main engine.

Green APU installations are equipped with manual shut-off valves.

In the event of a coolant leak within your APU system, closing both valves will allow the truck to operate without losing coolant from the APU.

These valves are located near the passenger-side firewall near the engine.

**Note:** It is important to not run your APU with the shut-off valves in the closed position.

This will cause the APU to overheat and shut down.



**GREEN APU**  
**AUXILIARY POWER UNIT**

**877-751-0686**

Option 1  
**Unit Sales**

Option 2  
**Parts Line**

Option 3  
**24/7 Tech Support**

Option 4  
**Service & Installation**

**Connect With Us**



**greenapu.com**