



Operations Manual & Reference Guide

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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 power 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 then 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 MONITORING / ENGINE PREHEAT

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

The system will turn on the unit when:

Or

Coolant Town drops below 22 degrees

Coolant Temp drops below 33 degrees

#### **IMPORTANT:**

Battery 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.

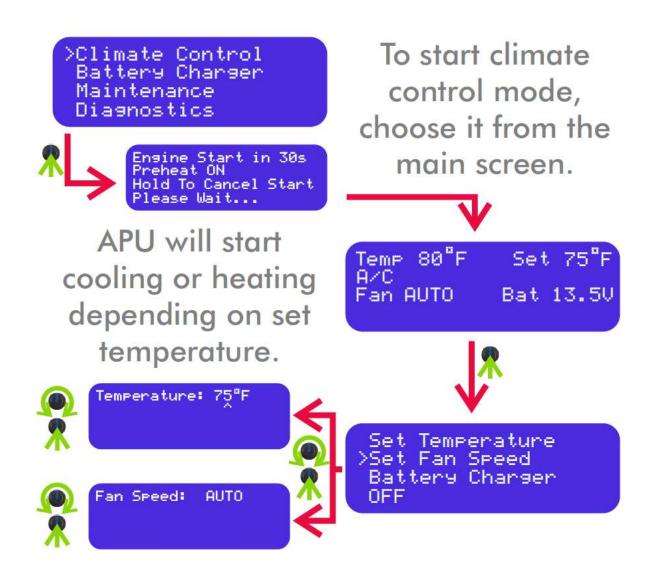
>Climate Control Battery Charger Maintenance Diagnostics



Keep scrolling for additional menu options.

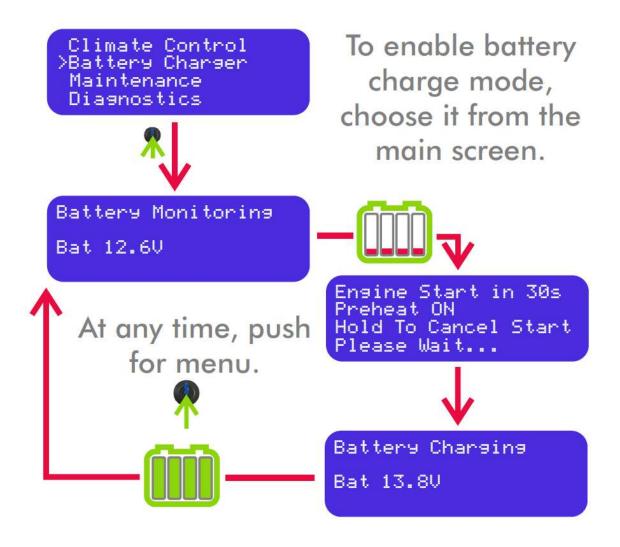
# **CLIMATE CONTROL**

Heat, AC, and Cab Power



For optimal performance, the recommended fan speed is AUTO

# BATTERY MONITORING / ENGINE PREHEAT



#### **IMPORTANT:**

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

# **MAINTENANCE**

Each Green APU requires PM Service every **1000 Hours (Star Edition)** 

- Or --

600 Hours (all previous generations)

#### PM Service consists of:

- Oil Change (10w-30 or 15w-40)
- Oil, Fuel, and Air Filter Replacement
  - Belt Inspection / Replacement
    - Cabin Filter Cleaning
      - Overall Inspection

Belts should be replaced at the first sign of wear or every other PM Service

The cabin filter is located within the cab under the bed.

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

The unit **may no longer start** once the PM Hour Limit has been reached.

# **MAINTENANCE**

#### **Basic Maintenance Parts List**

#### **KUBOTA** Units

(S/N's beginning in KB and KS)

#### **FILTERS**

Oil (Standard): WIX 51357

Oil (Oversized): WIX 51344

Fuel: WIX 33390

Air: WIX 49913

#### **BELTS**

STAR Edition (Serpentine)

K06025

K060625 (preferred)

Dual Belts (KB):

Compressor:

Alternator:

Bando

Continental

6PK775

15371

#### **Perkins** and **Cat** Units

#### **FILTERS**

Oil: WIX 163

Fuel: WIX 33262

Air: K&N RU-0160

#### **BELTS**

Compressor:

Bando 6PK775

Alternator

Bando RPF2310

Standard 11A0785

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

#### **Viewing Service Hours**

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

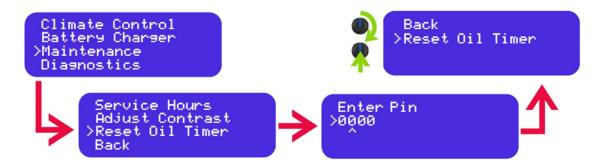


#### **Resetting Service Hours**

Once the Service is complete, you must **RESET** the oil timer.

To reset the oil timer, select

Maintenance > Reset Oil Timer



A passcode may be required to complete the reset.

The passcode can be obtained from the owner and can be optionally recorded here:

Once the code is entered, navigate to "Reset Oil Timer".

Click to reset hours.

The Oil Timer will now be reset to zero.

This can be confirmed by viewing the service hours as described above.

# **SERVICE**

Green APU's
The factory repair shop is located at:
13067 Main Street
Lemont, IL 60439

#### **HOURS OF OPERATION**

Monday – Friday Saturday 8 AM – 5 PM 8 AM – 12 PM

The Repair Shop can be reached at

877-751-0686 Option 4

A map of Green APU Distributors and Affiliated Service Locations can be found online at: greenapu.com/locations

# **PARTS**

#### Detailed Parts Listing, All Green APU Models

PART	KUBOTA	PERKINS/CAT	YANMAR
OIL FILTER	WIX 51344	WIX 163	WIX 51358
FUEL FILTER	WIX 33390	WIX 33262	WIX 33390
AIR FILTER	WIX 49913 / MANN C1140	K&N RU-0160	WIX 49913 / MANN C1141
SERPENTINE BELT (STAR EDITION)	K060625 K060625HD (preferred)		
COMPRESSOR BELT	Bando 6PK775	Bando 6PK775	Bando 6PK775
ALTERNATOR BELT	Continental 15371	Bando RPF2310	Bando RPF3360
COMPRESSOR	Sanden 4711 SD7H15	Sanden 4711 SD7H15	Sanden 4711 SD7H15
DRYER	74R2546	74R2546	74R2546
CONDENSER	4730TY	4730TY	4730TY
CONDENSER FAN	30101510 SPAL	30101510 SPAL	30101510 SPAL
REAR SEAL	1G460-04460	198636080	119734-02220
FRONT SEAL	1J094-04140	198636090	119717-01800
GLOW PLUGS	1G679-65512 NGK YE01	1G679-65512 NGK YE01	119717-77801
OIL P SENSOR	15841-39013	U85246210	114250-39450
OH SWITCH	51601-37670	385720500	121250-44901
TEMP SENSOR	39220-21330	39220-21330	39220-21330
<b>FUSE BOX TERMINAL</b>	12176388	12176388	12176388
SMALL RELAY	303-1AH-C-R1-U1	303-1AH-C-R1-U1	303-1AH-C-R1-U1
BIG RELAY	PC785-1A-12S-R-X	PC785-1A-12S-R-X	PC785-1A-12S-R-X
EXPANSION VALVE	71R8321	71R8321(Big) 71R8300(Small)	71R8321
ACTUATOR MOTOR	RD-5-12450-1	RD-5-12450-1	RD-5-12450-1
BINARY SWITCH(AC)	71R7075	71R7075	71R7075

To order, call the Green APU's Parts Line at:

877-751-0686 Option 2

## **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**

Today's modern trucks often run at high operating temperatures, particularly in extreme environments.

It is recommended that you allow your truck to idle for at least **5 mins** 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 from the APU has the potential to drain coolant from the truck's main engine.

Green APU installations performed after June 2019 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 essential to avoid running your APU with the shut-off valves in the closed position.

This will cause the APU to overheat and shut down.



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