

**1301 STAHLEY DRIVE
BUILDING #42
NAPPANEE, IN 46550**

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PRODUCT INFORMATION BULLETIN

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Using the Center A/C While Operating on Inverter Power

PRODUCT INFORMATION

Changes have been made to improve battery management when the center A/C operates on inverter power.

If a customer is using the center (2nd) air conditioner while driving, the auto-gen start (auto charger AGS function) must be enabled to manage battery power consumption. The system is not designed to be able to run the center A/C indefinitely on the batteries and alternator alone, due to the alternator's deficit while charging the batteries while the center A/C is operating.

The AGS must be enabled to ensure that the batteries are protected. When they fall below a preset value, the generator will start and begin charging the batteries. The batteries/inverter will operate the A/C using available alternator power while the generator is off. Once the battery voltage gets too low, the auto-gen start will run the generator periodically, as needed, to supplement the alternator power to keep the batteries charged.

If the customer is having issues using the center A/C while driving and operating on inverter power, the following updates will improve battery management when the center A/C operates on inverter power.

Step 1

Update the TM 250 module using version 1.19 (replaces 1.18). This version may be used in all current SilverLeaf systems, and adds a 12 Volt shed function to the center AC while operating on inverter power. This function will shed, or turn off, the A/C when the house battery voltage drops below the configured shed voltage setting for the preset time value. The function will restore the A/C when the house battery voltage rises above the restore voltage setting and is intended to help maintain the battery charge state when the AGS function is not in use and to prevent battery depletion and damage. This has been implemented on units in production after 7/13/2015.

The initial values are as follows:

BATT_SAVER_SHED_LEVEL	12.0 Volts
BATT_SAVER_RESTORE_LEVEL	12.5 Volts
BATT_SAVER_TIME_UNDER	300 Seconds

Step 2

Reset the Auto Gen Start (AGS) trigger value to 12.0 Volts in the TM 102 module in units with the SilverLeaf system. Set the A/C Shed trigger value to 11.8 Volts in the battery saver configuration using the TM 250 OmniScope tool.

The AGS will activate before the A/C shed function, which will be a last resort to manage battery power. When the center A/C uses the inverter, it also consumes battery power. If the AGS is enabled, the AGS will start the generator and charge the batteries at 12 Volts, assisting in battery management. It is recommended to have the AGS enabled when the unit is not in storage. This has been implemented on units in production after 1/22/16.

Step 3

On units equipped with the SilverLeaf system, update the VMS 350 module to version 2.08 firmware. In this version, the positive (+) and negative (-) Amp draw will be displayed with arrows to coincide with the power flow to and from the batteries, as shown in the DC Power page on the HMS 365 display. This version update has been implemented on units in production after 1/12/2016.

Note: All of the upgrades are in place for 2017 King Aire coaches.

If you have any questions regarding this P.I.B., please contact a Warranty Service Representative at Newmar Corporation.