

4700
4800
4900
5700

6900
> 47X
> 49X
> 57X

Description of Revisions: *This bulletin replaces the version dated 06/21/2022. The model applicability list and the general information have been updated.*

General Information

This service bulletin describes heating, ventilation, and air conditioning (HVAC) controller software updates released on January 4, 2022 that affect the 47X, 49X, and 57X HVAC system. This software update provides resolutions to the following three conditions.

- Sleeper vehicles with Battery Powered HVAC System (BPHS) do not turn on the engine fan when using the engine air conditioner compressor.
- Sleeper vehicles with optimized idle (O/I) blows hot air when parked.
- When running in full A/C mode, economy (ECO) mode automatically turns on after 45 minutes.

Only the front control unit (F01T) and rear control unit (R01T) software changes are affected. For reference, the parked control unit (P01T) software update is included in [Table 1](#). These software changes are available for service updates and are backwards compatible.

For vehicles experiencing any of the above mentioned symptoms, install the software listed below. If a newer version of the software listed is available, install that.

DiagnosticLink Software Updates			
Controller	Front (F01T)	Rear (R01T)	Parked (P01T)
SW Version	21.28.01	21.28.01	20.35.1
SW Part Number	001 448 09 28 ZGS 001	001 448 12 28 ZGS 001	000 448 70 28 ZGS 007

Table 1, DiagnosticLink Software Updates

This version of the HVAC controller software contains three changes that affect HVAC operation. See [Table 2](#).

HVAC Operation Changes			
Item	Symptom	Conditions of Occurrence	Resolution
Affected vehicles: 49X, 57X Sleeper vehicles with BPHS running under very specific conditions do not turn on the engine fan when using the engine A/C compressor.	A/C cooling is diminished when running in this condition.	Specific conditions when the engine fan does not engage include the following.* <ul style="list-style-type: none"> • Engine running in parked HVAC and A/C request coming from ACU • Not in Optimized Idle (O/I) • Parking brake is set • FCU not in A/C request mode (A/C or defrost) 	FCU and ACU software updates listed in Table 1 correct this issue and allows the engine fan to turn on with an ACU A/C request.

HVAC Operation Changes			
Item	Symptom	Conditions of Occurrence	Resolution
Affected vehicles: 49X, 57X Sleeper vehicles with O/I blows hot air when parked.	When the HVAC is running in O/I in comfort mode, if programmed for auto elevate feature and auto elevate activates, the HVAC blows hot air.	Engine is in auto elevate with CPC software version 20.1 or earlier and O/I is running in comfort mode.	FCU and ACU software updates described in Table 1 correct this issue and eliminates auto elevate from blowing hot air when running in O/I comfort mode.
Affected vehicles: 47X, 49X, and 57X LED display located in the FCU A/C button turns from blue to green after 45 minutes of operation. Figure 1 shows the LED in full A/C mode.	When selecting full A/C mode (maximum cooling), the system automatically reverts to ECO mode after 45 minutes, causing cabin temperature to possibly increase.	Occurs after the center A/C button is pressed.	With the release of the FCU software 21.28.01, parameter A0174479928-002 Manual ECO MODE allows the driver to maintain full A/C mode without the system automatically placing the controller back into ECO mode after 45 minutes.

* A/C logic provided by FCU software turns off the A/C clutch if pressure is too high

Table 2, HVAC Operation Changes

Figure 1 shows the A/C compressor LED illuminated in full A/C mode (blue). When ECO mode is engaged, the LED illuminates green.



Fig. 1, AC Compressor LED Display

Figure 2 shows the Par_HVAC_Controller_ECO_MODE parameter (A0174479928-002 Manual ECO Mode) used to turn off automatic ECO mode.

