

SS 3157-FTL New Cascadia with Cummins Engines and eViscous Fan with Communication Issues

Applicable Vehicles

This solution applies to New Cascadia vehicles using electronically controlled variable speed viscous fan drives used on Cummins engines built before 10/24/2023.

Symptoms

When the electronically controlled variable speed viscous fan is installed on Cummins engines, an Axiomatic controller is required to convert the messaging on J1939 500K network to control the engine fan. In some cases, failure of the controller due to loose mounting fasteners inside the module, can result in intermittent loss of J1939 communication or failure of the controller, resulting in the engine fan staying engaged.

Issue

As vehicles age, and the controller which is mounted on the engine, goes through many hot and cold cycles along with vibrations associated with the engine, the two mounting screws located in the module can become loose. Even though the screw portion is contained by the housing, the nut side can come off the screw and move within the module. If the nut contacts any of the components in the module, it can result in the module failing.

Solution

When encountering intermittent J1939 communication issues, or engine fans running constantly, check the Julian date on the Axiomatic controller. If the controller was built before 10/24/2023 (see figure 1), then remove the module and shake the module to see if any loose parts can be heard moving around within the controller. If loose parts are heard moving around within the module, replace the module.

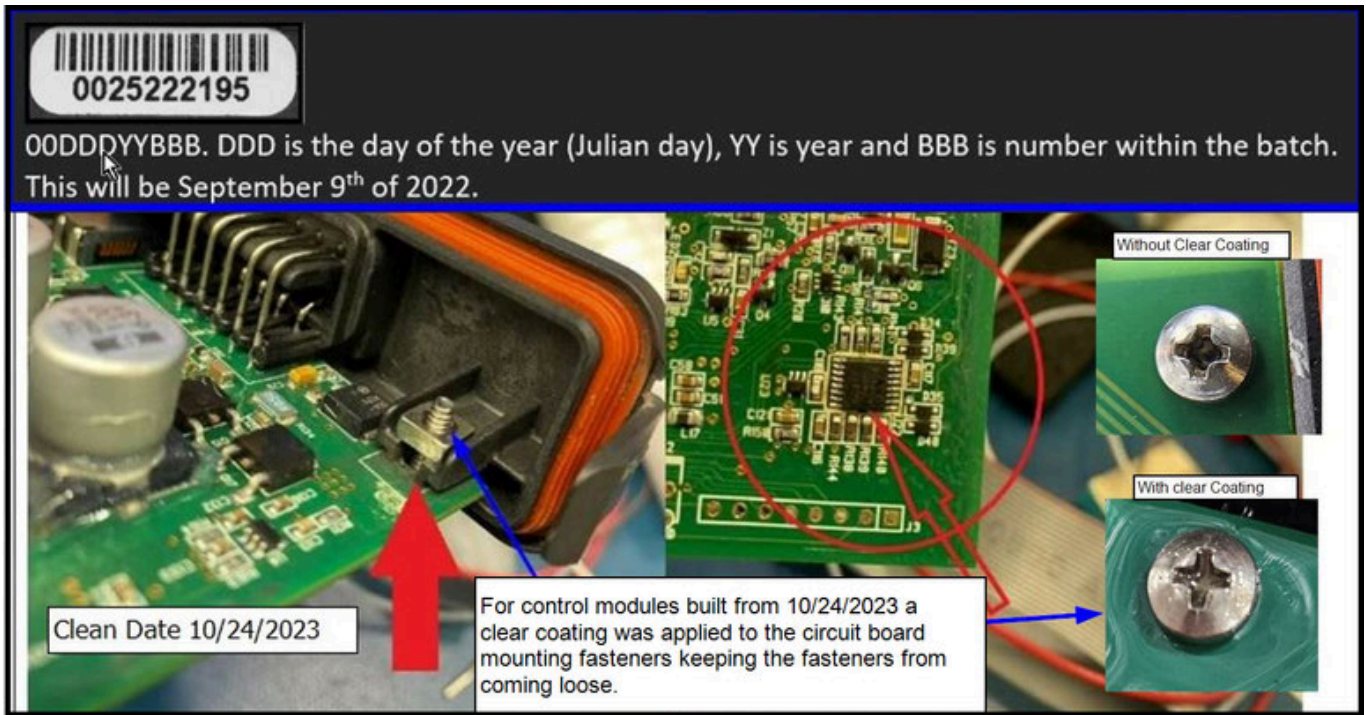


Figure 1

Labels :

- Electrical
- New Cascadia

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