

SS 3146 - FTL M2, 108SD, 114SD - Unable to Program Replacement Bulkhead Module - Certain Model Years



PLEASE NOTE: As of 8/7/2024 changes were made to the tools used to determine Bulkhead Module (BHM) migration and compatibilities. The solution that was being applied as a containment, is no longer required. If replacing a Bulkhead Module, refer to Excelerator for the latest hardware displayed in module 32A. Attached is a document "Bulkhead Module Programming Instructions" that should be used when programming the new BHM. If encountering any issues when programming the BHM, please capture screen prints of all error messages encountered, a log file with all ECUs connected and parameters read. Create a DTTS case with the logfile and screen prints attached. Please document in the description field the BHM hardware P/N (example P/N 06-75157-001) and software level being targeted (example of a software level U.r.2.A0.07.30).

Applicable Vehicles

M2, 108SD, and 114SD vehicles with:

- Model years 2016 and earlier
 - Most of these vehicles were built before 2016 OBD requirements went into effect
 - There may be *exceptions* for the following:
 - Export vehicles
 - Vehicles with engines not subject to 2016 OBD requirements (example: natural gas engine)
- Bulkhead Module (BHM) software versions prior to 7.30, including:
 - 6.10 software (initial M2 production)
 - 6.30 software
 - 6.40 software
 - 6.50 software
 - 6.60 software
 - 7.10 software

The software version may be visible on the part number label of the BHM installed in the vehicle (see picture for an example).

This solution *does not apply* to any vehicles with a 7.30 version BHM (part number 06-75157-001). Software version 7.30 was defined as the *last available hardware and software upgrade version* for all vehicles built with older software versions.

This solution *does not apply* to newer model year vehicles, with software versions 7.41, 7.43, 7.44, or 7.45 software.

Symptoms

When an older BHM is replaced, the module cannot be programmed with DiagnosticLink.

Technicians may report a BHM is in boot mode.

DiagnosticLink may report error VD00063E.

Issue

Mainframe computer systems were changed to work with DiagnosticLink before DiagnosticLink replaced ServiceLink as the service tool for the legacy M2 platform. These systems were further modified to work with the CHEC body builder tool.

These computer systems are not processing vehicle data correctly for a BHM migration from older software versions to the 7.30 software version. A large-scale investigation has been started to identify the root causes and to correct the issues.

With incorrect vehicle data, the program that builds per-serial configuration files (also called the Parameter Transformation Program, or PTP) will not build a valid configuration.

Although several manual work-arounds have been tried, there is *currently* no way to modify vehicle data to allow a migration to be performed correctly.

Solution

At the time this solution is being written, there is no effective solution for upgrading the BHM on an affected vehicle.

DTNA recommends that technicians re-use the existing BHM, *where practical*, and complete wiring diagnosis before replacing the BHM. For example, corrosion present on contact pins on the BHM can be cleaned in many cases. DTNA recognizes that there are certain hardware failures—such as a failure of the J1939 transceiver—that cannot be addressed in this manner.

Labels :

108SD

114SD

Electrical

M2

Add tags

Attachments



2 Kudos

Comment

Powered by



FREIGHTLINER - BHM

P/N: 06-75157-001



S/N: 504055 SW: 7.30

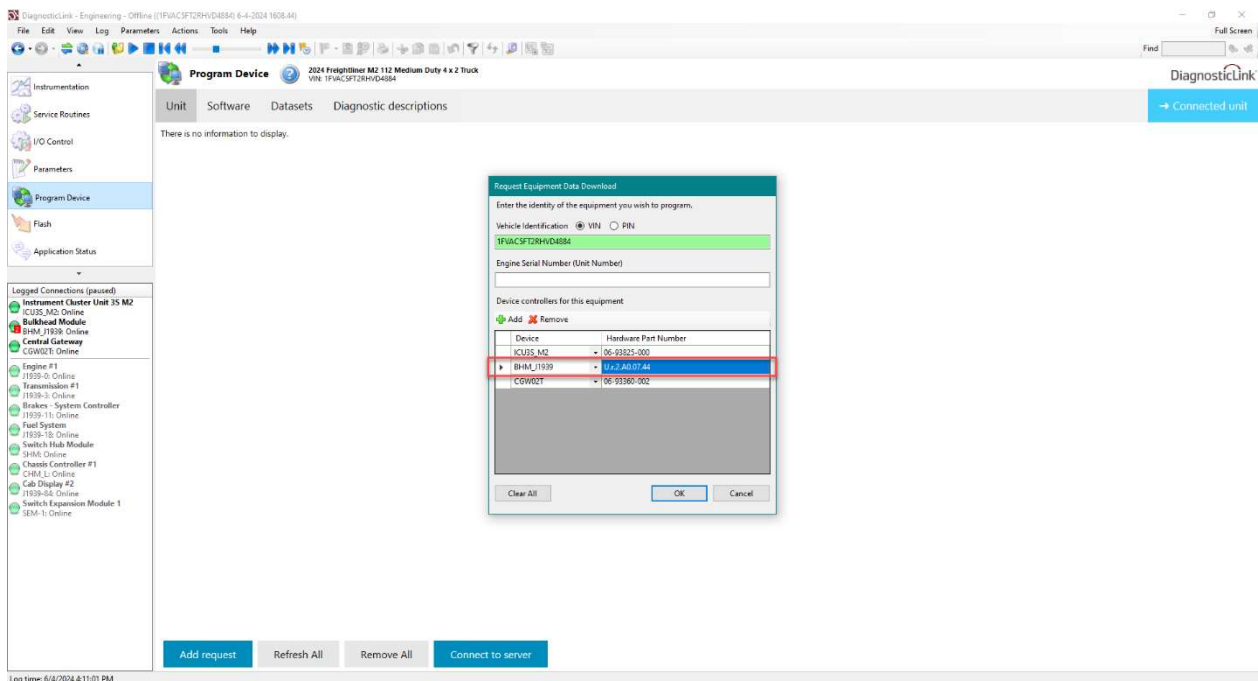
FULL



JOHN DEERE ELECTRONIC SOLUTIONS
ASSEMBLED IN MEXICO 10/27/22 PHT90218478

This is the same for any hardware change whether BHM or not, the server does not assume a hardware change is needed even if it's in standard supersession for standard ecu's. Downloading by VIN only will provide a NEWEST file from supersession if a new software is available. But if a hardware change is required, it has to be requested to the server to provide the files necessary for the hardware change.

- 1- The first screen shot is showing the add request screen when connected to the vehicle, this will auto populate the ecu list below for current connected hardware and software combinations. The tech would click on the BHM after confirming the hardware software combination is what they want to request from the server. Then when ok is selected, connect to server, this will trigger the migration and provide the newest file. Don't pay attention to the actual numbers in the screen shot it is just a reference, for the legacy migration it should be to the U.r.2.A0.07.30 as in screen shot 2.



- 2- The same migration can be requested offline as well, the tech would put the VIN in, then click the drop down for device. Select BHM_1939, then in the hardware part number type in the new number for the hardware change requested, U.r.2.A0.07.30 in this case. Click ok and connect to server, this will trigger the migration with the hardware change.

If they just download by VIN, they will receive the current files available, legacy, which do not match the current hardware hence the same error will be displayed, hardware required 'X'.

DiagnosticLink - Engineering

File Edit View Log Parameters Actions Tools Help

Full Screen

DiagnosticLink

→ Connected unit

Program Device

Unit Software Datasets Diagnostic descriptions

There is no information to display.

Request Equipment Data Download

Enter the identity of the equipment you wish to program.

Vehicle Identification VIN PIN

1FNAACW017HC6307

Engine Serial Number (Unit Number)

Device controllers for this equipment

+ Add - Remove

Device	Hardware Part Number
BHM_11930	UJ2_A09730

Clear All OK Cancel

11708 11930 DuP

Add request Refresh All Remove All Connect to server