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 > SS 1032728 Bulkhead Module Fault Codes 524280 thru...

SS 1032728 Bulkhead Module Fault Codes 524280 thru 524286 with FMI 7 Clarification

Applicable Vehicles

This solution only applies to vehicles that were built with a Bulkhead Module (BHM).

Issue

As of April of 2016 production vehicles using BHMs were updated with new SPN/FMI codes. As part of this release, 7 fault codes were duplicated and the SPN description does not match the actual problem. This only applies to SPNs 524280 thru 524286 with the FMI 7. If the SPN has an FMI other than 7, then the code is applicable and should be diagnosed per the fault code. If the Code is one of these SPNs 524280, 524281, 524282, 524283, 524284, 524285 or 524286 with an FMI 7 then the following chart should be used to diagnose the problem using the column labeled "Troubleshooting Per the Description" (forth Column).

SPN	FMI	Description showing in diagnostic Tool For SPN	Troubleshoot Per the Description Below With original SPN
524280	7	The component ID in the manufacturing area does not match the component ID that the parameter data was created to	BHM / CHM Ignition Mismatch (SPN 6985)
524281	7	Application to parameter compatibility fails	Wake up Hardware Fault (SPN 6922)
524282	7	Parameter Flash area fails checksum	Missing Smart Switch (SPN 6918)
524283	7	Application Flash area fails checksum	Duplicated Smart Switch (SPN 6919)
524284	7	Boot block Flash area fails checksum	Extra Smart Switch (SPN 6920)
524285	7	Boot hold line is active	Unknown Keep awake Fault (SPN 6921)
524286	7	RAM test fails	EOF Feedback Fault (SPN 6955)
524286	7	RAM test fails	EOF Feedback No Fault (SPN 6954)

Solution

As of the date that this solution was written, no resolution date has been established to resolve this SPN issue. In the future, the descriptions in the forth column will receive new SPN with an FMI7 that will more clearly distinguish each code.



Labels :

Business Class M2

Electronics | Controls | Configuration | Communication | and Diagnostics

Freightliner

108sd

114sd freightliner m2

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Comments



Kyle_Siebert

09-28-2016 11:40 AM

Good post. I've started to warn other techs in the shop.



Lee_Wilder

10-10-2016 08:43 AM

This is what I have found about the code 524282 FMI 7. If you replace the bulkhead module for this code and get a newer release version/level module, you will get the code 524289 or 524279 FMI 7, I can't remember which of the two it is, but this is what happened when I replaced the one in this truck. The description will read "undocumented code", no diagnostic information available. The root cause of any of these codes will be the switch expansion module connector on the smart switch side is either not fully seated or not plugged in at all. If the truck is equipped with a light test switch you will probably find that it is not working. That's because it uses smart switch connector #6. The smart switch connectors 1 through 5 are hard wired to the bulkhead module, switches 6 and above are connected to switch expansion modules and information is sent on the data bus. I had two identical trucks, compared the

configuration of both trucks Features, parameters and for missing or extra smart switches and they were identical. The only difference between the two trucks was the tight test switch worked on JD3511 and did not work on JD3510. When I pulled the center dash panel I found the switch was plugged into connector #6. When removing the dash the radio antenna lead had pulled out of the back of the radio and had fallen behind the dash structure. When I reached for it I heard a clunk that sounded like something larger than the antenna lead hitting the dash structure what I found was the switch expansion module connector for the smart switches had fallen out of the module and hit the bottom of the structure. I installed the connector and verified the locks snapped into place. I cycled the key and the code was gone. I verified that the light test switch functioned properly and then rechecked my configuration and missing/extra smart switches. The result was the same as before reconnecting the smart switch connector. It looks like when a smart switch that is connected to an expansion module, the module can report that something is wrong, in this case a missing smart switch, but may not be able to identify the exact switch that is having the problem. in this case the only switch that was connected to the expansion module was the light test switch. I worked with Paul and Gordon at Freightliner tech services and Steve from the Portland Freightliner Training Center to resolve this issue, and many thanks go out to them.



Lee_Wilder

10-10-2016 03:19 PM

I found my notes, the code that the replacement bulkhead module reported was 524249 fmi7



Dave_Hasselbach

10-21-2016 06:08 AM

Does anyone know what 524249/FMI7 is? Description, t/shooting? I am not finding information on it anywhere.



Phil_Mountain1

10-21-2016 11:14 AM

524280 31 Component ID

mismatch

The BHM is in a non-recoverable boot mode. Replace the BHM and contact the help desk to arrange for shipping this BHM to DTNA engineering.

--

524281 31 Application to

parameters fail

Reflash the BHM – disconnect ServiceLink and cycle the ignition switch. --

524282 12 Parameter data fails

checksum

Reflash the BHM – disconnect servicelink and cycle the ignition switch. --

524283 12 Application code fails

checksum

Reflash the BHM – disconnect servicelink and cycle the ignition switch. --

54.12 Bulkhead Module

Bulkhead Module Fault Code Information

410/14 Business Class M2 Workshop Manual, Supplement 29, March 2016

J1939 Fault Codes From Bulkhead Module (SA 33)

SPN FMI Fault Description Diagnosis Circuit

ECU

Conn/

Pin

524284 12 Boot block checksum

fail The BHM is in a non-recoverable boot mode. Replace the BHM. — —

524285 4 Boot hold line is active

The BHM is in a non-recoverable boot mode. Replace the BHM

and contact the help desk to arrange for shipping this BHM to

DTNA engineering.

— —

524286 12 RAM test fails The BHM is in a non-recoverable boot mode. Replace the BHM.

— —



Kyle_Siebert

10-21-2016 06:44 PM

Where is this code from, diagnostic link?

What ECU is broadcasting this?



Dave_Hasselbach

10-22-2016 04:45 AM

Bulkhead Module,

SA: 33 Bulkhead 1/1

SPN: 524249

FMI: 7

David Hasselbach

Warranty Dept.

Midway Inc.

Monroeville & Mansfield OH

419-465-2551 X217



Kyle_Siebert

10-22-2016 01:34 PM

is this from service link, diagnostic link or the ICU display?

Ive seen several times where the ICU shows a code with no description anywhere to be found. If I remember correctly, the truck also had a allison with no codes but oil life or filter life was at 0%



Dave_Hasselbach

10-28-2016 04:51 AM

The fault was being reported from local body builder. They have since resolved the issue, although I do not how or what was causing it.



Dave_Hasselbach

11-01-2016 08:08 AM

Kyle, we have another truck from same customer. JE5179. Here is screen shot from ServiceLink. Also it is displayed on the ICU.



Lee_Wilder

11-04-2016 11:24 AM

Steve Lepschat from the Freightliner training center and I did the latest updates to Servicelink when I was having the problem with this truck and had the same results. I will have to check and see what level of Servicelink we installed. I will have to try to duplicate issue since reconnecting the Switch Expansion Module to smart switch connectors #6 and above corrected the 33/524249/7 active fault code issue. Also I checked out the screen shot that was sent and mine did not say "mechanical system not responding", It read "no diagnostic information available", so I must have been running an older version of Servicelink at the time.

Lee



Joe_Youngblutt

11-28-2017 12:03 PM

524249/7 = Missing Smart Switch

