

Is DTC B148A:11 or B148A:12 present?

Yes	CHECK OASIS for any applicable Technical Service Bulletins (TSBs). If a TSB exists for this concern, DISCONTINUE this test and FOLLOW the TSB instructions. If no Technical Service Bulletins (TSBs) address this concern, INSTALL a new TBM. REFER to: Trailer Brake Control Module (TBM) .
No	The system is operating correctly at this time. The concern may have been caused by a loose or corroded connector. ADDRESS the root cause of any connector or pin issues.

**DIAGNOSIS AND TESTING > AUXILIARY BRAKE SYSTEM - VEHICLES WITH:
TRAILER BRAKE CONTROL > PINPOINT TESTS > PINPOINT TEST D : U3003:17**

Refer to TRAILER/CAMPER ADAPTER for schematic and connector information.

Normal Operations and Fault Conditions

The TBM requires an operating voltage between 9 and 16 volts. The TBM receives this voltage from the BJB. The TBM has a single ground circuit. An overcharging condition in the charging system results in the TBM setting a DTC. This DTC may also set in the TBM due to battery charging or vehicle jump starting events. If the voltage exceeds 19 volts the TBM disables the trailer brake output and shuts down.

DTC Fault Trigger Conditions

DTC	Description	Fault Trigger Conditions
U3003:17	Battery Voltage: Circuit Voltage Above Threshold	This DTC sets in continuous memory and on-demand if the voltage supplied to the TBM is above 16 volts for more than 5 seconds while not braking. This DTC may also set in the TBM due to battery charging or vehicle jump starting events.

Possible Sources

- Charging system concern
- TBM

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D1 CHECK FOR HIGH VOLTAGE DIAGNOSTIC TROUBLE CODES (DTCS) SET IN OTHER MODULES

Ignition ON.

Using a diagnostic scan tool, retrieve and record all Continuous Memory Diagnostic Trouble Codes (CMDTCs).

Is DTC B1317, B1318, B1676, U3003:16 or U3003:17 present in one or more modules AND are any charging system Diagnostic Trouble Codes (DTCs) present in the PCM?

Yes	DIAGNOSE the PCM Diagnostic Trouble Codes (DTCs). REFER to: ELECTRONIC ENGINE CONTROLS - 2.7L EcoBoost (238kW/324PS). REFER to: ELECTRONIC ENGINE CONTROLS - 3.5L EcoBoost (272kW/370PS). REFER to: ELECTRONIC ENGINE CONTROLS - 3.5L Duratec (209kW/284PS). REFER to: ELECTRONIC ENGINE CONTROLS - 5.0L 32V Ti-VCT.
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No	GO to D2
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D2 CHECK THE BATTERY VOLTAGE

Turn off all interior lights, exterior lights and accessories.



NOTE: Do not allow the engine speed to increase above 2,000 RPM while performing this step or the generator may self-excite and result in default charging system output voltage. If engine speed goes above 2,000 RPM, turn the vehicle off and restart the engine before performing this step.

Start and run the engine at approximately 1,500 RPM for 3 minutes while monitoring the battery voltage.

Is the battery voltage between 13 and 15.2 volts?

Yes	GO to D3
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No	DIAGNOSE the overcharging condition. REFER to: Charging System - 2.7L EcoBoost (238kW/324PS) . REFER to: Charging System - 3.5L Duratec (209kW/284PS)/3.5L EcoBoost (272kW/370PS)/5.0L 32V Ti-VCT .
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D3 RECHECK FOR TBM (TRAILER BRAKE CONTROL MODULE) DTC (DIAGNOSTIC TROUBLE CODE) U3003:17

Turn the engine off.

Ignition ON.

Using a diagnostic scan tool, carry out the TBM self-test.

Clear the TBM Diagnostic Trouble Codes (DTCs).

Ignition OFF.