QSB4.5 CM2350 B106

Fault Code: 3572 | SPN: 4334 | FMI: 4

Aftertreatment 1 Diesel Exhaust Fluid Pressure Sensor Circuit - Voltage Below Normal or Shorted to Low Source

1 Check for primary fault codes

2 Aftertreatment diesel exhaust fluid dosing unit connector is malfunctioning

3 Aftertreatment diesel exhaust fluid pressure sensor voltage check

3.1 Aftertreatment diesel exhaust fluid pressure sensor circuit check

4 Aftertreatment diesel exhaust fluid pressure sensor circuit response

5 Aftertreatment diesel exhaust fluid pressure sensor open circuit check

6 Aftertreatment diesel exhaust fluid pressure sensor circuit pin to ground short

7 Aftertreatment diesel exhaust fluid pressure sensor circuit pin to pin short

8 Aftertreatment diesel exhaust fluid dosing unit is malfunctioning

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1 Check for primary fault codes

Solution: S00000855

Verification

Conditions

- Turn keyswitch ON.
- Connect the recommended Cummins® electronic service tool or equivalent.

Action

- Use the recommended Cummins® electronic service tool or equivalent to read the fault codes.

Specification

Before troubleshooting this fault code, troubleshoot any fault code that is active or has more than one inactive count within the last 25 engine operating hours from the following list:

- Sensor supply 5: 1695, 1696

Linked Solutions

- None

Repair

- Perform a search on the appropriate fault codes.

Validation

- None

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2 Aftertreatment diesel exhaust fluid dosing unit connector is malfunctioning

Solution: S00003209

Verification

Conditions

- Turn keyswitch OFF.
- Disconnect the aftertreatment diesel exhaust fluid dosing unit from the OEM wiring harness.

Action

- Inspect the pins and connectors for damage.
- Inspect all connections for corrosion or loose connections.

Specification

- If the aftertreatment diesel exhaust fluid dosing unit connector or the aftertreatment diesel exhaust fluid dosing unit wiring harness connector show signs of diesel exhaust fluid, then a malfunctioning aftertreatment diesel exhaust fluid dosing unit connector has been detected.

Linked Solutions

- None

Repair

Repair or replace **only** the components that were found to be out of specification.
- Replace aftertreatment diesel exhaust fluid dosing unit. Refer to Procedure 011-058
- Repair or replace the OEM wiring harness.

Refer to OEM Service Manual

Validation

- Connect all components
- Connect the recommended Cummins® electronic service tool or equivalent.
- Disable the fault code.
- Operate the engine within the "Conditions for Clearing the Fault Code" found in the Overview section of the troubleshooting procedure.
- Verify that the fault code is no longer active.
- Check ECM Calibration Revision History
- Use the recommended Cummins® electronic service tool or equivalent to find the current ECM code and revision number in the ECM.
- Compare the ECM code and revision number in the ECM to the calibration revisions listed in the ECM Calibration Revision History Database for applicable changes related to this fault code.
- Refer to ECM Calibration Revision History Database.

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3 Aftertreatment diesel exhaust fluid pressure sensor voltage check

Solution: S00009257

Verification

Conditions

- Turn keyswitch OFF.
- Disconnect the aftertreatment diesel exhaust fluid dosing unit from the OEM wiring harness.

Action

- Inspect the pins and connectors for damage. Refer to Procedure 019-361
- Measure the voltage between the aftertreatment diesel exhaust fluid pressure sensor SUPPLY pin and the aftertreatment diesel exhaust fluid pressure sensor RETURN pin at the aftertreatment diesel exhaust fluid dosing unit connector of the OEM wiring harness.
- Refer to the circuit diagram or wiring diagram for connector pin identification.

Specification

- Proceed to the Linked Solutions section if voltage is **not** within the following specification: 4.75 - 5.25 VDC

Linked Solutions

- Aftertreatment diesel exhaust fluid pressure sensor circuit check (3.1 [S00009258])

Repair

- No additional action is required for this solution.

Validation

- None

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3.1 Aftertreatment diesel exhaust fluid pressure sensor circuit check

Solution: S00009258

Verification

Conditions

- Turn keyswitch OFF.
- Disconnect the aftertreatment diesel exhaust fluid dosing unit from the OEM wiring harness.
- Disconnect the OEM wiring harness connector from the ECM.

Action

- Inspect the pins and connectors for damage. Refer to Procedure 019-361
- Measure the resistance between the aftertreatment diesel exhaust fluid pressure sensor SUPPLY pin in the OEM wiring harness ECM connector and the aftertreatment diesel exhaust fluid pressure sensor SUPPLY pin in the OEM wiring harness aftertreatment diesel exhaust fluid dosing unit connector.
- Measure the resistance between the aftertreatment diesel exhaust fluid pressure sensor RETURN pin in the OEM wiring harness ECM connector and the aftertreatment diesel exhaust fluid pressure sensor RETURN pin in the OEM wiring harness aftertreatment diesel exhaust fluid dosing unit connector.
- Refer to the circuit diagram or wiring diagram for connector pin identification.

Specification

- A malfunctioning OEM wiring harness has been detected if the resistance is greater than the following specification: 10 Ω

Linked Solutions

- None

Repair

- Repair or replace the OEM wiring harness. Refer to Procedure 019-071

Validation

- Connect all components
- Connect the recommended Cummins® electronic service tool or equivalent.
- Disable the fault code.
- Operate the engine within the "Conditions for Clearing the Fault Code" found in the Overview section of the troubleshooting procedure.
- Verify that the fault code is no longer active.
- Check ECM Calibration Revision History
- Use the recommended Cummins® electronic service tool or equivalent to find the current ECM code and revision number in the ECM.
- Compare the ECM code and revision number in the ECM to the calibration revisions listed in the ECM Calibration Revision History Database for applicable changes related to this fault code.
- Refer to ECM Calibration Revision History Database.

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4 Aftertreatment diesel exhaust fluid pressure sensor circuit response

Solution: S00002920

Verification

Conditions

- Turn keyswitch OFF.
- Disconnect the aftertreatment diesel exhaust fluid dosing unit from the OEM wiring harness.

Action

- Inspect the pins and connectors for damage. Refer to Procedure 019-361
- Place a jumper wire between the aftertreatment diesel exhaust fluid pressure sensor SIGNAL pin and aftertreatment diesel exhaust fluid pressure sensor SUPPLY pin of the dosing unit OEM wiring harness connector.
- Refer to the circuit diagram or wiring diagram for connector pin identification.
- Turn keyswitch ON.
- Connect the recommended Cummins® electronic service tool or equivalent.
- Wait 30 seconds before checking the circuit response.
- Use the recommended Cummins® electronic service tool or equivalent to read the fault codes.

Specification

- A malfunctioning aftertreatment diesel exhaust fluid dosing unit has been detected if the following fault code became active with the jumper wire in place: 3571

Linked Solutions

- None

Repair

- Replace aftertreatment diesel exhaust fluid dosing unit. Refer to Procedure 011-058

Validation

- Connect all components
- Connect the recommended Cummins® electronic service tool or equivalent.
- Disable the fault code.
- Operate the engine within the "Conditions for Clearing the Fault Code" found in the Overview section of the troubleshooting procedure.
- Verify that the fault code is no longer active.
- Check ECM Calibration Revision History
- Use the recommended Cummins® electronic service tool or equivalent to find the current ECM code and revision number in the ECM.
- Compare the ECM code and revision number in the ECM to the calibration revisions listed in the ECM Calibration Revision History Database for applicable changes related to this fault code.
- Refer to ECM Calibration Revision History Database.

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5 Aftertreatment diesel exhaust fluid pressure sensor open circuit check

Solution: S00001906

Verification

Conditions

- Turn keyswitch OFF.
- Disconnect the OEM wiring harness connector from the ECM.
- Disconnect the aftertreatment diesel exhaust fluid dosing unit from the OEM wiring harness.

Action

- Inspect the pins and connectors for damage.
- Measure the resistance between the aftertreatment diesel exhaust fluid pressure sensor SUPPLY pin in the OEM wiring harness ECM connector and the aftertreatment diesel exhaust fluid pressure sensor SUPPLY pin in the OEM wiring harness aftertreatment diesel exhaust fluid dosing unit connector.
- Measure the resistance between the aftertreatment diesel exhaust fluid pressure sensor SIGNAL pin in the OEM wiring harness ECM connector and the aftertreatment diesel exhaust fluid pressure sensor SIGNAL pin in the OEM wiring harness aftertreatment diesel exhaust fluid dosing unit connector.
- Measure the resistance between the aftertreatment diesel exhaust fluid pressure sensor RETURN pin in the OEM wiring harness ECM connector and the aftertreatment diesel exhaust fluid pressure sensor RETURN pin in the OEM wiring harness aftertreatment diesel exhaust fluid dosing unit connector.
- Refer to the circuit diagram or wiring diagram for connector pin identification.

Specification

- A malfunctioning OEM wiring harness has been detected if the resistance is greater than the following specification: 10 Ω

Linked Solutions

- None

Repair

- Repair or replace the OEM wiring harness. Refer to Procedure 019-071

Validation

- Connect all components
- Connect the recommended Cummins® electronic service tool or equivalent.
- Disable the fault code.
- Operate the engine within the "Conditions for Clearing the Fault Code" found in the Overview section of the troubleshooting procedure.
- Verify that the fault code is no longer active.
- Check ECM Calibration Revision History
- Use the recommended Cummins® electronic service tool or equivalent to find the current ECM code and revision number in the ECM.
- Compare the ECM code and revision number in the ECM to the calibration revisions listed in the ECM Calibration Revision History Database for applicable changes related to this fault code.
- Refer to ECM Calibration Revision History Database.

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6 Aftertreatment diesel exhaust fluid pressure sensor circuit pin to ground short

Solution: S00001935

Verification

Conditions

- Turn keyswitch OFF.
- Disconnect the aftertreatment diesel exhaust fluid dosing unit from the OEM wiring harness.
- Disconnect the OEM wiring harness connector from the ECM.

Action

- Inspect the pins and connectors for damage. Refer to Procedure 019-361
- Measure the resistance between the aftertreatment diesel exhaust fluid pressure sensor SIGNAL pin at the OEM wiring harness ECM connector and ground.
- Refer to the circuit diagram or wiring diagram for connector pin identification.

Specification

- A malfunctioning OEM wiring harness has been detected if the resistance is less than the following specification: 100k Ω

Linked Solutions

- None

Repair

- Repair or replace the OEM wiring harness. Refer to Procedure 019-071

Validation

- Connect all components
- Connect the recommended Cummins® electronic service tool or equivalent.
- Disable the fault code.
- Operate the engine within the "Conditions for Clearing the Fault Code" found in the Overview section of the troubleshooting procedure.
- Verify that the fault code is no longer active.
- Check ECM Calibration Revision History
- Use the recommended Cummins® electronic service tool or equivalent to find the current ECM code and revision number in the ECM.
- Compare the ECM code and revision number in the ECM to the calibration revisions listed in the ECM Calibration Revision History Database for applicable changes related to this fault code.
- Refer to ECM Calibration Revision History Database.

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7 Aftertreatment diesel exhaust fluid pressure sensor circuit pin to pin short

Solution: S00001934

Verification

Conditions

- Turn keyswitch OFF.
- Disconnect the OEM wiring harness connector from the ECM.
- Disconnect the aftertreatment diesel exhaust fluid dosing unit from the OEM wiring harness.
- Disconnect all components on the wiring circuit being tested.

Action

- Inspect the pins and connectors for damage. Refer to Procedure 019-361
- Measure the resistance between the aftertreatment diesel exhaust fluid pressure sensor SUPPLY pin in the OEM wiring harness ECM connector and all other pins in that connector.
- Measure the resistance between the aftertreatment diesel exhaust fluid pressure sensor SIGNAL pin in the OEM wiring harness ECM connector and all other pins in that connector.
- Refer to the circuit diagram or wiring diagram for connector pin identification.

Specification

- A malfunctioning OEM wiring harness or engine wiring harness has been detected if the resistance is less than the following specification: 100k Ω

Linked Solutions

- None

Repair

- Repair or replace the OEM wiring harness. Refer to Procedure 019-071

Validation

- Connect all components
- Connect the recommended Cummins® electronic service tool or equivalent.
- Disable the fault code.
- Operate the engine within the "Conditions for Clearing the Fault Code" found in the Overview section of the troubleshooting procedure.
- Verify that the fault code is no longer active.
- Check ECM Calibration Revision History
- Use the recommended Cummins® electronic service tool or equivalent to find the current ECM code and revision number in the ECM.
- Compare the ECM code and revision number in the ECM to the calibration revisions listed in the ECM Calibration Revision History Database for applicable changes related to this fault code.
- Refer to ECM Calibration Revision History Database.

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8 Aftertreatment diesel exhaust fluid dosing unit is malfunctioning

Solution: S00001431

Verification

Conditions

- None

Action

- Verify all preceding solution verifications for this fault code have been performed.

Specification

- If the fault code is still active or inactive with more than one count within the last 25 engine hours and all the preceding solution verifications have been performed, then a malfunctioning aftertreatment diesel exhaust fluid dosing unit has been detected.

Linked Solutions

- None

Repair

- Replace aftertreatment diesel exhaust fluid dosing unit. Refer to Procedure 011-058

Validation

- Connect all components
- Connect the recommended Cummins® electronic service tool or equivalent.
- Disable the fault code.
- Operate the engine within the "Conditions for Clearing the Fault Code" found in the Overview section of the troubleshooting procedure.
- Verify that the fault code is no longer active.
- Check ECM Calibration Revision History
- Use the recommended Cummins® electronic service tool or equivalent to find the current ECM code and revision number in the ECM.
- Compare the ECM code and revision number in the ECM to the calibration revisions listed in the ECM Calibration Revision History Database for applicable changes related to this fault code.
- Refer to ECM Calibration Revision History Database.

If all steps have been completed and no root cause has been identified, then follow the technical escalation process.

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