Title: Cummins ISX 15L with Multiple ECM Faults

Applies To: 2013 LoneStar, ProStar, TranStar, and 9900i with Cummins ISX 15L

CHANGE LOG

Dealers: Please refer to the change log text box below for recent changes to this article:

5/20/2014 - Updated article format to include Symptom and Warranty Information sections, inserted new pictures and added connectors 9253 and 9260.

DESCRIPTION

If experiencing multiple faults related to the Aftertreament, DEF, or SCR on a vehicle with a Cummins ISX 15L, locate the ECM power and ground wires and inspect the connections.

1. For vehicles built before September 23, 2013, inspect connector 1027 - ECM Battery Feed, which is secured to the J-Tray Starter Bracket (IMPORTANT!). Also inspect connector 9253 - Batt ECM Positive and connector 9260 - Battery Negative, located in the battery box.

2. For vehicles built on or after September 23, 2013, the 1027 connector was removed. Inspect connector 9253 - Batt ECM Positive and connector 9260 - Battery Negative.

SYMPTOM

If three (3) or more of the fault codes listed below are active, continue to the repair procedure.

Fault Codes and Dashboard Indicator Lights:

<table>
<thead>
<tr>
<th>SPN</th>
<th>FMI</th>
<th>Cummins FC</th>
<th>Lamp</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>3216</td>
<td>2</td>
<td>3228</td>
<td>Amber</td>
<td>Aftertreatment Intake NOx Sensor - Data Erratic, Intermittent, or Incorrect</td>
</tr>
<tr>
<td>3361</td>
<td>2</td>
<td>2976</td>
<td>Amber</td>
<td>Aftertreatment Diesel Exhaust Fluid Dosing Unit Temperature - Data Erratic, Intermittent, or Incorrect</td>
</tr>
<tr>
<td>5848</td>
<td>9</td>
<td>3911</td>
<td>Amber</td>
<td>Aftertreatment 1 SCR Intermediate NH3 Sensor - Abnormal Update Rate</td>
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<tr>
<td>3216</td>
<td>9</td>
<td>3232</td>
<td>Amber</td>
<td>Aftertreatment 1 Intake NOx Sensor - Abnormal Update Rate</td>
</tr>
<tr>
<td>3226</td>
<td>9</td>
<td>2771</td>
<td>Amber</td>
<td>Aftertreatment 1 Outlet NOx Sensor - Abnormal Update Rate</td>
</tr>
<tr>
<td>5743</td>
<td>4</td>
<td>4165</td>
<td>Amber</td>
<td>Aftertreatment Selective Catalytic Reduction Temperature Sensor Module - Voltage Below Normal or Shorted to Low Source</td>
</tr>
</tbody>
</table>
**REPAIR PROCEDURE**

**IMPORTANT**

For vehicles built before September 23, 2013:

1. Locate connector 1027 - ECM Battery Feed on the J-Tray Starter Bracket, as shown in Figure 1 below
2. Disconnect connector 1027
3. Check the terminals for damage, bent pins, or corrosion
4. If damage is found, follow the repair procedure in iKNow Article [Proper Wire Repair](https://evalue.internationaldelivers.com/service_kb/DocTool/ArticleViewer.aspx?ControlID...) and remove the connector from both circuit
5. Make sure it is fully seated and the pins are not damaged

![Figure 1: Connector 1027 - ECM Battery Feed on Vehicle](https://evalue.internationaldelivers.com/service_kb/DocTool/ArticleViewer.aspx?ControlID...)

Clean power and ground connector 1027 is secured to the starter J-Tray Bracket for starter cables.
For ALL vehicles:

1. Locate connector 9253 - Batt ECM Positive and connector 9260 - Battery Negative in the battery box, shown in Figures 3 and 4 below
2. Disconnect connector 9253 and connector 9260
3. Check the terminals for damage, bent pins, or corrosion
4. If damage is found, follow the repair procedure in iKNow Article Proper Wire Repair and remove the connector from both circuits
5. Make sure it is fully seated and the pins are not damaged
Figure 4: Connectors 9253 and 9260 on Vehicle

Figure 5: Connector 9253 - Batt ECM Positive Schematic
WARRANTY INFORMATION

Warranty Claim Coding:

<table>
<thead>
<tr>
<th>Group:</th>
<th>08550 - Batteries</th>
</tr>
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<tbody>
<tr>
<td>Noun:</td>
<td>743 - Clean Power Cable (Battery to Engine Connection)</td>
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</tbody>
</table>

Standard Repair Time:

<table>
<thead>
<tr>
<th>Description</th>
<th>SRT Link</th>
<th>Hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Battery Ground Cable, Replace</td>
<td>A08-3150</td>
<td>0.4</td>
</tr>
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