### Subject:
Stop/Start System Inhibited with Malfunction Indicator Light (MIL) ON - DTC P16DC, P15FF, P305D, P305E, U01B0, U0284, U0285, U1345, U135A, U135E, U1501, U1510, U1511 Set

### Involved Region or Country
North America and N.A. Export Regions

### Additional Options (RPOs)
Equipped with Engine Control-Stop/Start System (RPO KL9)

### Condition
Some customers may comment on any of the following conditions:
- The Stop/Start system is inoperative.
- A "Stop/Start System Disabled" Message appears on the DIC.
- The Malfunction Indicator Lamp (MIL) is illuminated.

<table>
<thead>
<tr>
<th>Brand</th>
<th>Model</th>
<th>Model Year</th>
<th>VIN</th>
<th>Engine</th>
<th>Transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buick</td>
<td>Encore</td>
<td>2016 - 2016</td>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buick</td>
<td>Envision</td>
<td>2016 - 2018</td>
<td>2018</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Buick</td>
<td>LaCrosse</td>
<td>2017 - 2017</td>
<td>2017</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cadillac</td>
<td>ATS</td>
<td>2016 - 2018</td>
<td>2018</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Cadillac</td>
<td>CT6</td>
<td>2016 - 2017</td>
<td>2017</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Cadillac</td>
<td>CTS</td>
<td>2017</td>
<td>2017</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Cadillac</td>
<td>XT5</td>
<td>2017</td>
<td>2017</td>
<td>All</td>
<td>All</td>
</tr>
<tr>
<td>Chevrolet</td>
<td>Cruze</td>
<td>2016</td>
<td>2016</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chevrolet</td>
<td>Equinox</td>
<td>2016 - 2018</td>
<td>2018</td>
<td></td>
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<td>Chevrolet</td>
<td>Malibu</td>
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<tr>
<td>GMC</td>
<td>Acadia</td>
<td>2017</td>
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<tr>
<td>GMC</td>
<td>Terrain</td>
<td>2018</td>
<td>2018</td>
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</tbody>
</table>
Cause

The technician may observe on a scan tool one or more of the following DTCs set:

- **P15FF**: Battery Monitor Sensor Signal Message Counter Incorrect
- **P16DC**: Battery Sensor Monitor Timer Performance (DTC P16DC disables the Stop/Start System)
- **P305D**: DC/DC Converter Crank Control Circuit High Voltage
- **P305E**: DC/DC Converter Crank Control Circuit Low Voltage
- **U01B0**: Lost Communication with Battery Monitor Module
- **U0284**: Lost Communication with Active Grille Air Shutter 1 Motor Module
- **U0285**: Lost Communication with Active Grille Air Shutter 2 Motor Module
- **U1345**: Engine Control Module LIN Bus 1
- **U135A**: Lost Communication with Shift to Park Range Actuator
- **U135E**: Lost Communication with Transmission Control Module on Engine Control Module LIN Bus 1
- **U1501**: LIN Bus
- **U1510**: K20 Engine Control Module Lost Communication with M96 Active Grille Air Shutter Actuator / M60A Active Grille Air Shutter 1 Motor Module on LIN Bus (There are 7 other modules on the BUS that may set this DTC)
- **U1511**: K20 Engine Control Module Lost Communication with M60B Active Grille Air Shutter 2 Motor Module on LIN Bus (There are 3 other modules on the BUS that may set this DTC)

Intermittent Conditions and Poor Connections on the LIN Bus may also be a Cause.

Correction

Perform the Service Procedure.

Service Procedure

2016 Cadillac CT6 Reference Investigate Vehicle History

If a 2016 Cadillac CT6 is encountered with this Condition, reference Investigate Vehicle History (IVH) and verify that #43880-02: Service Update - Battery Monitor Module Timer has been performed before proceeding.

Lost Communication DTCs Overview

The Local Interconnect Network (LIN) Bus consists of a single wire with a transmission rate of 10.417 Kbit/s. The serial data is transmitted over a LIN circuit between a master control module and other LIN devices within a particular subsystem. If serial data communication is lost between any of the LIN devices on the LIN bus network, the master control module will set a Lost Communication DTC against the non-communicating LIN device.

Important: Depending on the Model Year, the vehicle and the information that the Service Personnel is referencing, the Battery Monitor Module is also identified as the Battery Sensor Module and the Battery Monitor Sensor in Service Information, the EPC and the Global Labor Time Guide.

1. Perform the Diagnostic System Check - Vehicle. Refer to Diagnostic System Check - Vehicle in SI.
2. Are any of the listed Diagnostic Trouble Codes (DTCs) Set?
   ⇒ If one or more of the listed DTCs are Set, Go to Step 3.

⇒ If none of the listed DTCs are Set, refer to Diagnostic Trouble Code (DTC) List - Vehicle. Refer to Diagnostic Trouble Code (DTC) List - Vehicle in SI.
3. Diagnose the DTCs in the order that is defined in the Diagnostic System Check - Vehicle.
4. Did you find and correct the Condition?
   ⇒ If you found and corrected the Condition, then perform the Diagnostic Repair Verification. Refer to Diagnostic Repair Verification in SI.
   ⇒ If you did not find and correct the Condition, Go to Step 5.
5. Perform the following:

   Note: You must use regionally required battery test equipment for warranty repairs.

   – Perform the Battery Inspection/Test procedure.
   – Inspect for water intrusion at the Active Grille Shutter Actuator in-line connector if equipped.
   – Verify that the connectors/connections are clean and secure for the Local Interconnect Network (LIN) circuit between the Battery Monitor Module, the Active Grille Shutter Actuators (if equipped), the Engine Control Module, the Default to Park Actuator and the Transmission Control Module. During the inspection, verify that any unused connector terminals/cavities have seals as needed. Refer to Testing for Intermittent Conditions and Poor Connections in SI.
   ⇒ If you found and corrected the Condition, then perform the Diagnostic Repair Verification. Refer to Diagnostic Repair Verification in SI.
   ⇒ If you did not find and correct the Condition, Go to Step 6.
6. Replace the Battery Monitor Module. Refer to
   *Battery Monitor Module Replacement (KL9)*
   in SI.
7. Perform the Diagnostic Repair Verification. Refer
to *Diagnostic Repair Verification* in SI.

**Parts Information**

<table>
<thead>
<tr>
<th>Causal Part</th>
<th>Description</th>
<th>Part Number</th>
<th>Qty</th>
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</thead>
<tbody>
<tr>
<td>X</td>
<td>Battery Sensor Module</td>
<td>Refer to EPC</td>
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</tbody>
</table>

**Warranty Information**

For vehicles repaired under warranty, use:

<table>
<thead>
<tr>
<th>Labor Operation</th>
<th>Description</th>
<th>Labor Time</th>
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<tbody>
<tr>
<td>4040070</td>
<td>Battery Monitor Module Replacement</td>
<td>Use Published Labor Operation Time</td>
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**Version Information**

<table>
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<th>Version</th>
<th>10</th>
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</table>
| Modified| February 29, 2016 – Added the 2016 Encore, CT6, Cruze, 2017 XT5 Models and removed an SI reference from Correction.  
March 16, 2016 – Removed the Malibu model.  
April 25, 2016 – Removed the Cadillac ATS/CTS models.  
February 21, 2017 – Added the 2017 LaCrosse to Model section.  
May 23, 2017 – Added DTCs, Updated the Model, Condition, Correction and Customer Information sections.  
August 10, 2018 – Added Battery Sensor Information and updated the Model Years.  
August 30, 2018 – Changed the Customer Information title to Service Procedure and updated the Labor Time under Warranty Information.  
December 12, 2018 – Added the Holden Equinox model and DTCs P305D and P305E.  
February 13, 2019 – Removed Holden Equinox, added Descriptors to the DTCs, inserted an Important that states the Battery Monitor Module may also be called the Battery Sensor Module and the Battery Monitor Sensor and created an updated Service Procedure. |