
OVERVIEW

This customer satisfaction program extends the warranty coverage of the reductant heater and sender assembly. If any Diagnostic trouble codes (DTC’s) remain after preforming this procedure, proceed with normal workshop manual diagnosis outside of this customer satisfaction program.

SERVICE PROCEDURE

Recommended Tool List:

<table>
<thead>
<tr>
<th>General Tools</th>
<th>General Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>1/2” Drive Ratchet (Power and Hand Tool)</td>
<td>Light</td>
</tr>
<tr>
<td>1/2” Drive Extension 10 in (25 cm)</td>
<td>Transmission Jack</td>
</tr>
<tr>
<td>1/2” Drive 13mm Shallow Socket</td>
<td>Special Tools</td>
</tr>
<tr>
<td>1/2” Drive Torque Wrench</td>
<td>310-069 Wrench, Fuel Tank Sender Unit</td>
</tr>
<tr>
<td>3/8” Drive Ratchet (Power and Hand Tool)</td>
<td>391-24226 Rotunda DEF Extractor or Equivalent</td>
</tr>
<tr>
<td>3/8” Drive Torque Wrench</td>
<td></td>
</tr>
<tr>
<td>3/8” Drive Extension 10 in (25 cm)</td>
<td></td>
</tr>
<tr>
<td>3/8” Drive 10mm Shallow Socket</td>
<td></td>
</tr>
<tr>
<td>1/4” Drive Ratchet (Power and Hand Tool)</td>
<td></td>
</tr>
<tr>
<td>1/4” Drive Torque Wrench</td>
<td></td>
</tr>
<tr>
<td>1/4” Drive 5.5 mm Shallow Socket</td>
<td></td>
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<tr>
<td>1/4” Drive 5/32 Hex Bit</td>
<td></td>
</tr>
<tr>
<td>Trim Tool</td>
<td></td>
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</tbody>
</table>

1. Using an Integrated Diagnostic Scan Tool (IDS) perform a key on engine off self test on the PCM. Are any DTC’s present related to the reductant heater and sender assembly?

   Yes - Proceed to Step 2.
   No - This program does not apply.

2. Determine the appropriate repair based on what DTC’s are present.

   • If DTC P2043 is the only DTC present related to the reductant heater and sender assembly, proceed to the PCM Reprogramming procedure on Page 2.

   • If DTC’s P205C, P205D, or any other DTC’s related to the reductant heater and sender assembly are present, replace the reductant heater and sender assembly. Please follow the Workshop Manual (WSM) procedures in Section 303-08 then proceed to the PCM Reprogramming procedure on Page 2.
PCM Reprogramming

NOTE: Reprogram appropriate vehicle modules before performing diagnostics and clear all DTCs after programming. For DTCs generated after reprogramming, follow normal diagnostic service procedures.

1. Connect a battery charger to the 12V battery.

2. Reprogram the PCM using Integrated Diagnostic Software (IDS) release 109.01 or higher.

NOTE: Calibration files may also be obtained at www.motorcraftservice.com.

NOTE: Follow the IDS on-screen instructions to complete the reprogramming procedure.

3. Disconnect the battery charger from the 12V battery once the reprogramming has completed.

Important Information for Module Programming

NOTE: When programming or reprogramming a module, use the following basic checks to ensure programming completes without errors.

- Make sure the 12V battery is fully charged before carrying out the programming steps and connect IDS/scan tool to a power source.
- Inspect Vehicle Communication Module (VCM) and cables for any damage. Make sure scan tool connections are not interrupted during programming.
- A hardwired connection is strongly recommended.
- Turn off all unnecessary accessories (radio, heated/cooled seats, headlamps, interior lamps, HVAC system, etc.) and close doors.
- Disconnect/depower any aftermarket accessories (remote start, alarm, power inverter, CB radio, etc.).
- Follow all scan tool on-screen instructions carefully.
- Disable IDS/scan tool sleep mode, screensaver, hibernation modes.
- Create all sessions key on engine off (KOEO). Starting the vehicle before creating a session will cause errors within the programming inhale process.

Recovering a module when programming has resulted in a blank module:

NEVER DELETE THE ORIGINAL SESSION!

a. Obtain the original IDS that was used when the programming error occurred during module reprogramming (MR) or programmable module installation (PMI).

b. Disconnect the VCM from the data link connector (DLC) and the IDS.

c. Reconnect the VCM to IDS and then connect to the DLC. Once reconnected, the VCM icon should appear in the corner of the IDS screen. If it does not, troubleshoot the IDS to VCM connection.

d. Locate the original vehicle session when programming failed. This should be the last session used in most cases. If not, use the session created on the date that the programming failed.
**NOTE:** If the original session is not listed in the previous session list, click the Recycle Bin icon at the lower right of the previous session screen. This loads any deleted sessions and allows you to look through them. Double-click the session to restore it.

e. Once the session is loaded, the failed process should resume automatically.

f. If programming does not resume automatically, proceed to the Module Programming menu and select the previously attempted process, PMI or MR.

g. Follow all on-screen prompts/instructions.

h. The last screen on the IDS may list additional steps required to complete the programming process. Make sure all applicable steps listed on the screen are followed in order.