



**Blue iQ Cummins B6.7L CNG
De-rate and Hours to Empty Calibrations
ENP-733
April 27, 2020**

1. Introduction

The Agility Fuel Solutions (Agility®) service team has identified two fuel system ECU (electronic control unit) calibration issues in Blue iQ CNG (compressed natural gas) fuel systems for the Cummins® 6.7L engine as follows:

Issue 1: Program incompatibility causes throttle response to drop to zero when an attempt is made to operate in economy (Eco) mode.

Issue 2: “Liters to Empty” Smart Gauge function is not programmed; at fuel levels less than 5-10%, zero throttle response results.

Agility® is coding a new ECU calibration to remedy these conditions which will be distributed through the Cummins INSITE customer online portal.

Effective immediately and continuing until affected units receive the new calibration, Agility® recommends the following precautionary measures:

- 1) Do not operate the vehicle in Eco mode, and
- 2) Do not rely on the Liters to Empty Smart Gauge function; always keep the vehicle well-fueled to avoid an unexpected empty condition.

2. Affected Units

Two Autocar (VINs 232122 and 232123) and 52 TICO yard tractors equipped with Agility® Blue iQ CNG fuel systems and Cummins® 6.7L engines.

3. Tools Required

1. Cummins® INLINE7™ or NEXIQ Technologies® USB-Link 2™
2. Cummins® Calterm™

4. Diagnostic Symptoms and Preventative Measures

Issue 1: Zero throttle response when Eco Mode is enabled. *Figure 1*



Figure 1.

Smart Gauge green LED (1) illuminated and “Eco Mode Enabled” message (2) displayed.

ACTION: Press and hold the right Smart Gauge function button until the display changes to “Eco Mode Disabled” and the red LED illuminates to disable Eco Mode. *Figure 2*



Figure 2.

Smart Gauge right function button (3), red LED (1) illuminated, and “Eco Mode Disabled” message (2) displayed.

The Smart Gauge should display “Eco Mode Disabled” during unit operation until the ECU calibration update is released. *Figure 2*

Issue 2: Zero throttle response at low fuel levels less than 5-10%.



Figure 3.

Smart Gauge red LED (1) illuminated and “Derate Active” message (2) displayed.

ACTION: Unit must refuel to disable the derate condition automatically.

ALTERNATIVE ACTION: Temporarily disable derate by holding down the Override button; this allows units to be operated on CNG pony tanks.

5. Corrective Action / Procedure

Issues 1 and 2: Install new Agility® ECU calibration, software version TBA via Cummins® INSITE using the following procedure:

Step 1: Using either a NEXIQ® USB-Link 2 or Cummins® INLINE7 tool, verify OBD-II connection is correctly selected. *Figure 4.*

NOTICE

NEXIQ tool programming screens (not shown throughout this procedure) are similar.

Step 2: Click “Connect to ECM” from the left tab menu. *Figure 4*

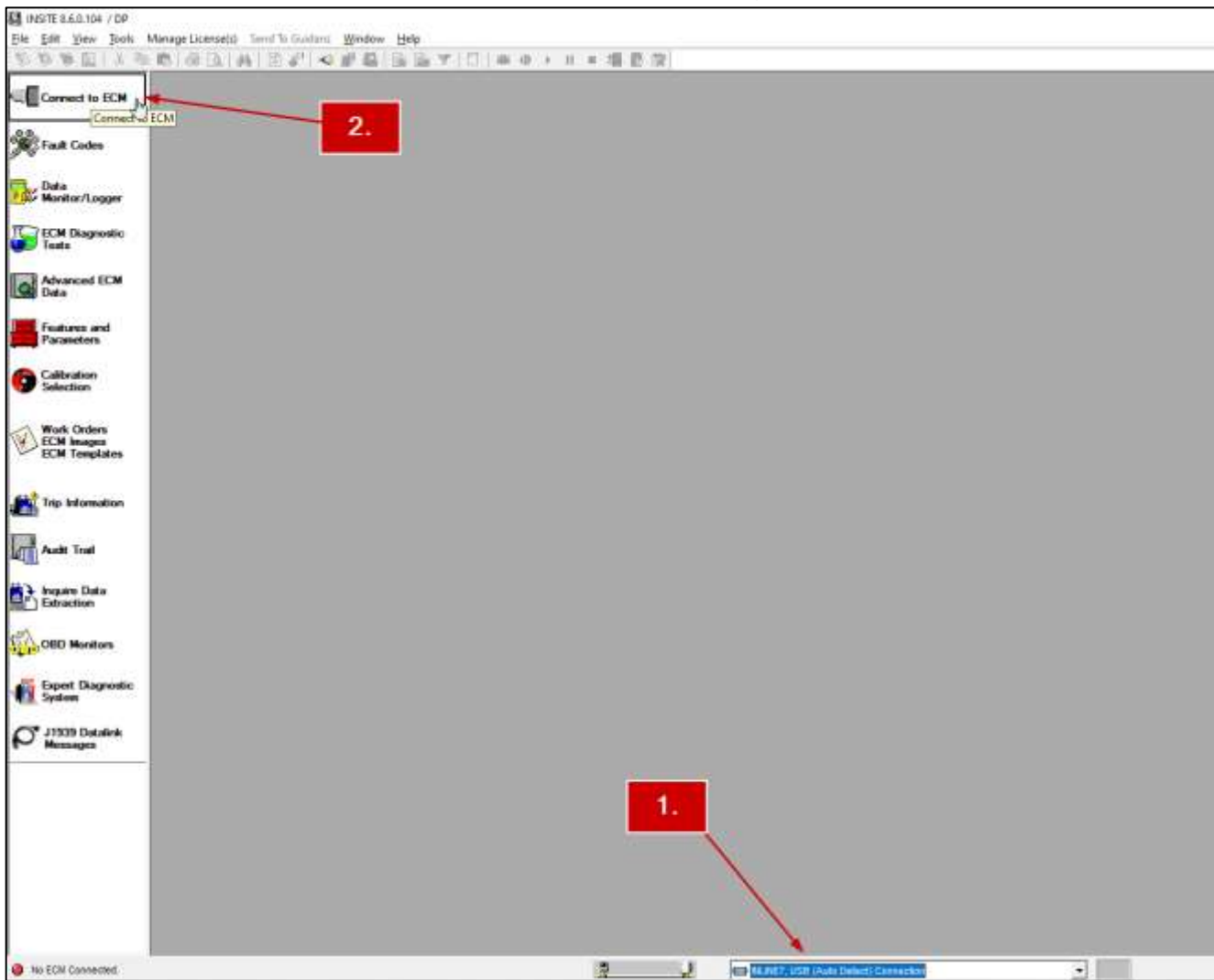


Figure 4.
Initial programming screen. INLINE7 tool connection verification (1) and Step 2 “Connect to ECM” (2).

Step 3a: Click “Connect.” NOTE: No security type or password credentials are required. *Figure 5*

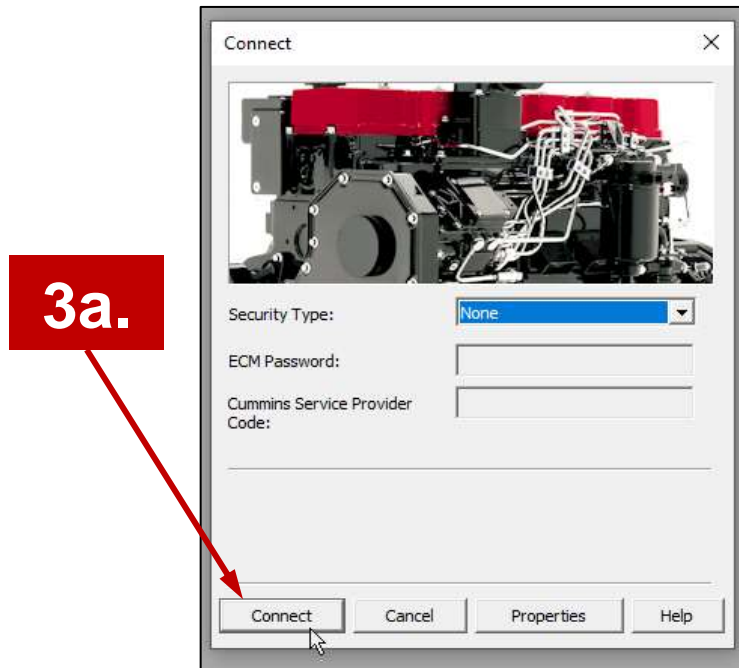


Figure 5.
Step 3a - "Connect" button.

Step 3b: Select "Agility Fuel Delivery System [18]" and click "Connect." Figure 6.

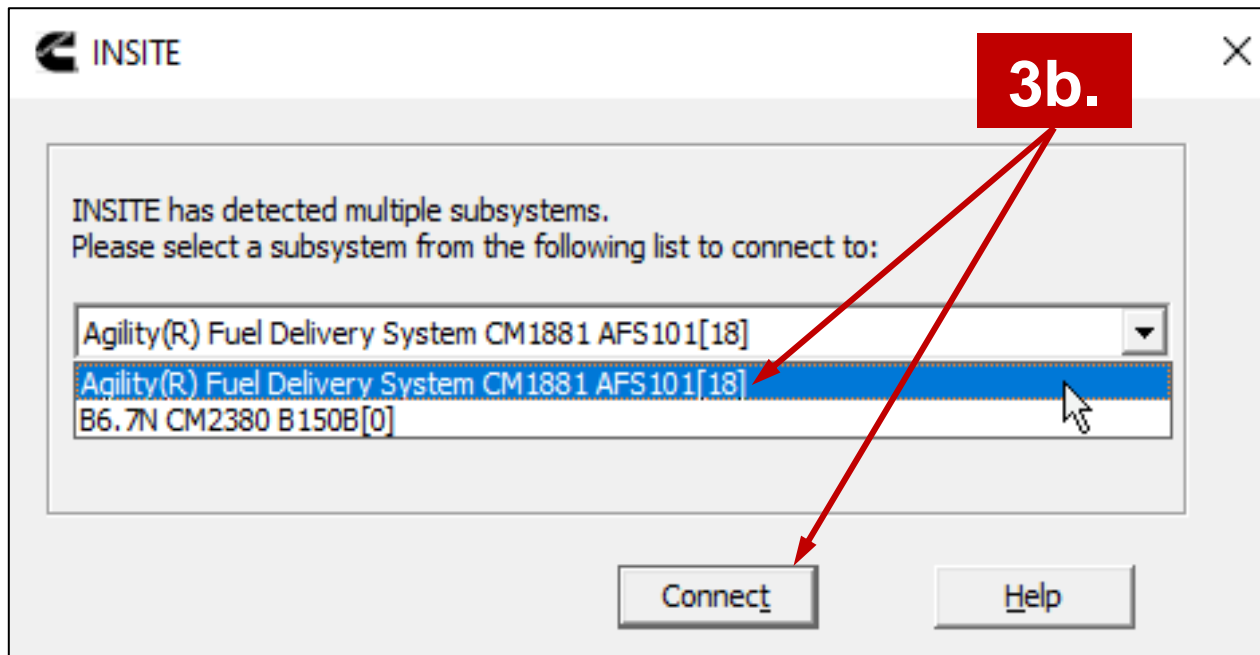


Figure 6.
Step 3b - "Agility Fuel Delivery System [18]" and "Connect" button.

Step 4: Click “New” and “OK” on the pop-up menus. *Figure 7*

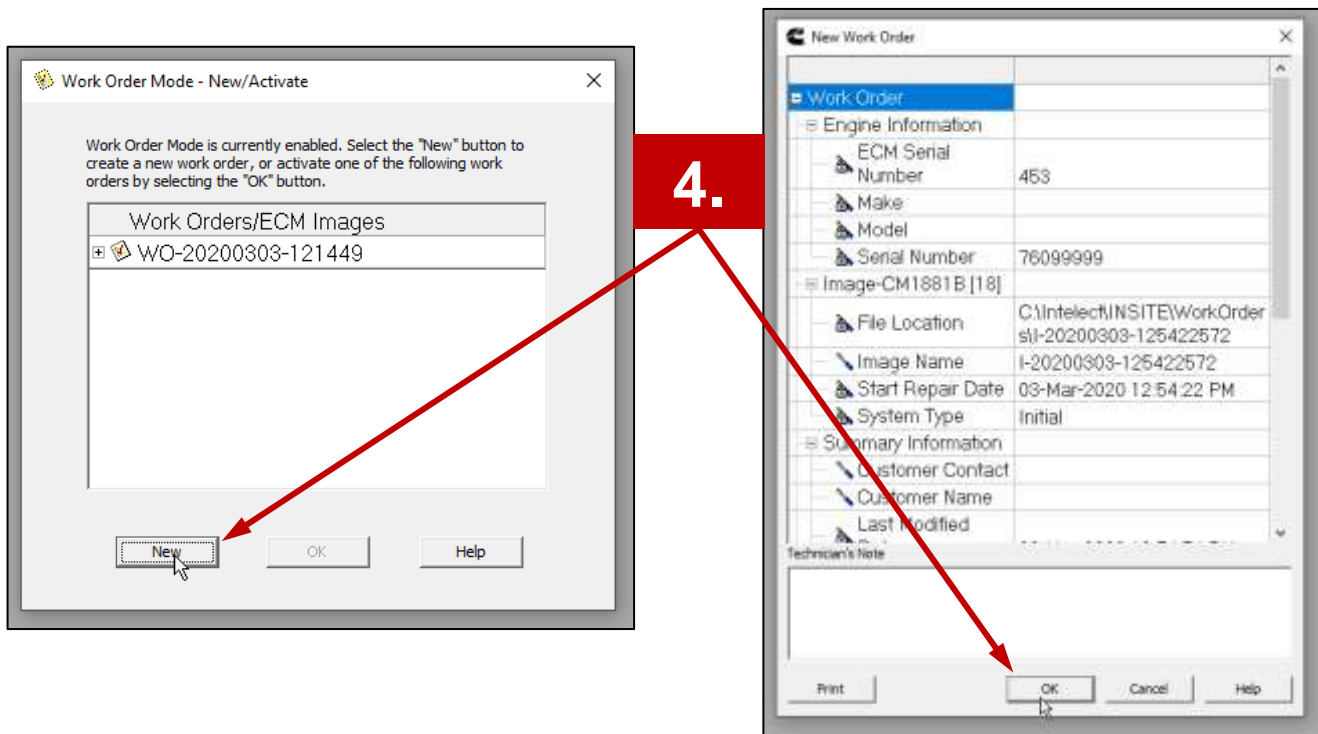


Figure 7.
Step 4 - “New” and “OK” buttons.

Step 5: Once connected, verify ECM connection at the bottom left of the window. *Figure 8*

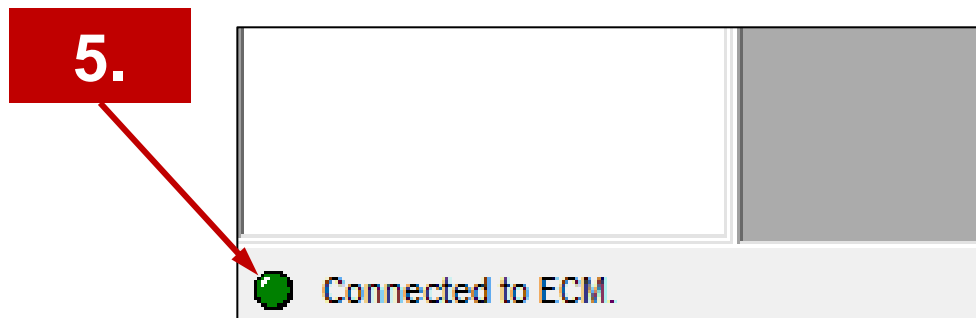


Figure 8.
Step 5 - Green circle indicates tool is connected to the ECM.

Step 6: Click “Calibration Selection” from the left tab menu. *Figure 9*

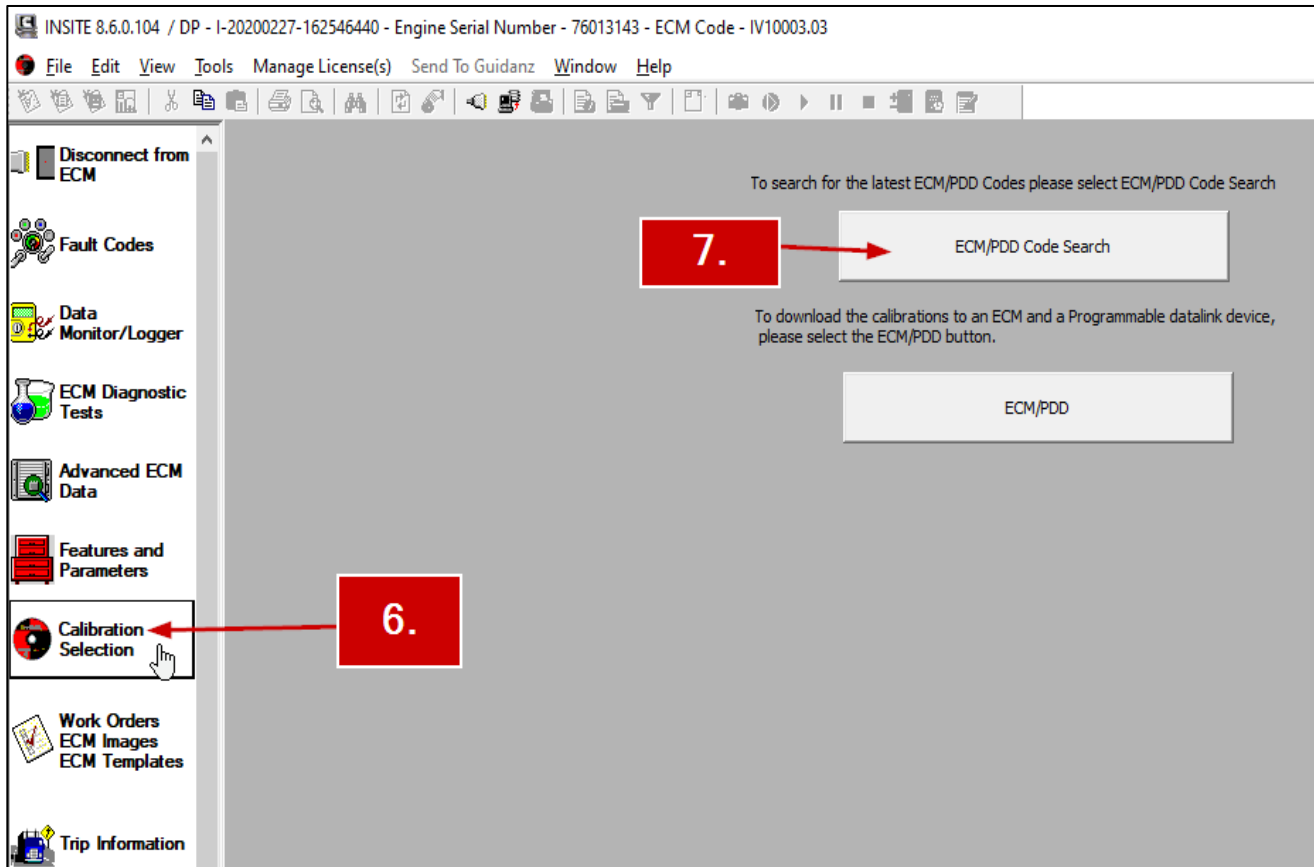


Figure 9.

Step 6 -“Calibration Selection” tab (6) and Step 7 “ECM/PDD Code Search” button (7).

Step 7: Click “ECM/PDD Code Search” button (*Figure 9*) and the “Checking for calibration updates” screen will appear. *Figure 10*

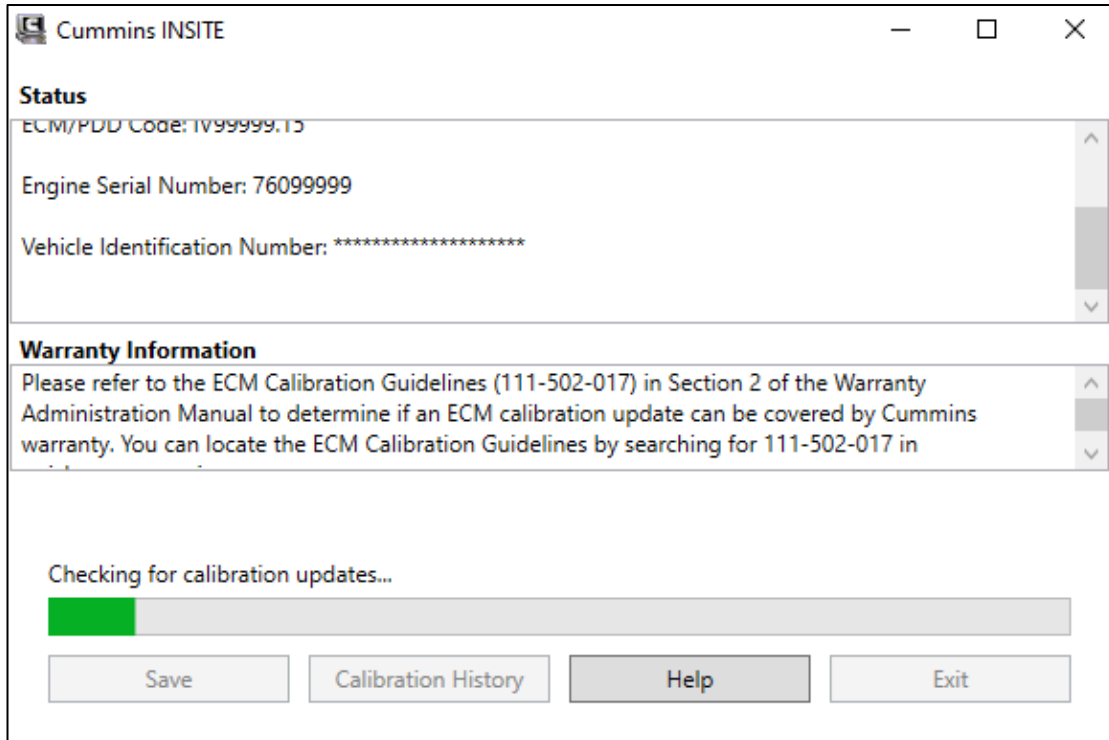


Figure 10.
Step 7 - Checking for calibration updates screen.

Step 8: Wait for a “Successfully found (CAL ID tba)” message to appear in the status box. When the desired calibration is found, click “Save” and proceed to Step 9. Figure 11

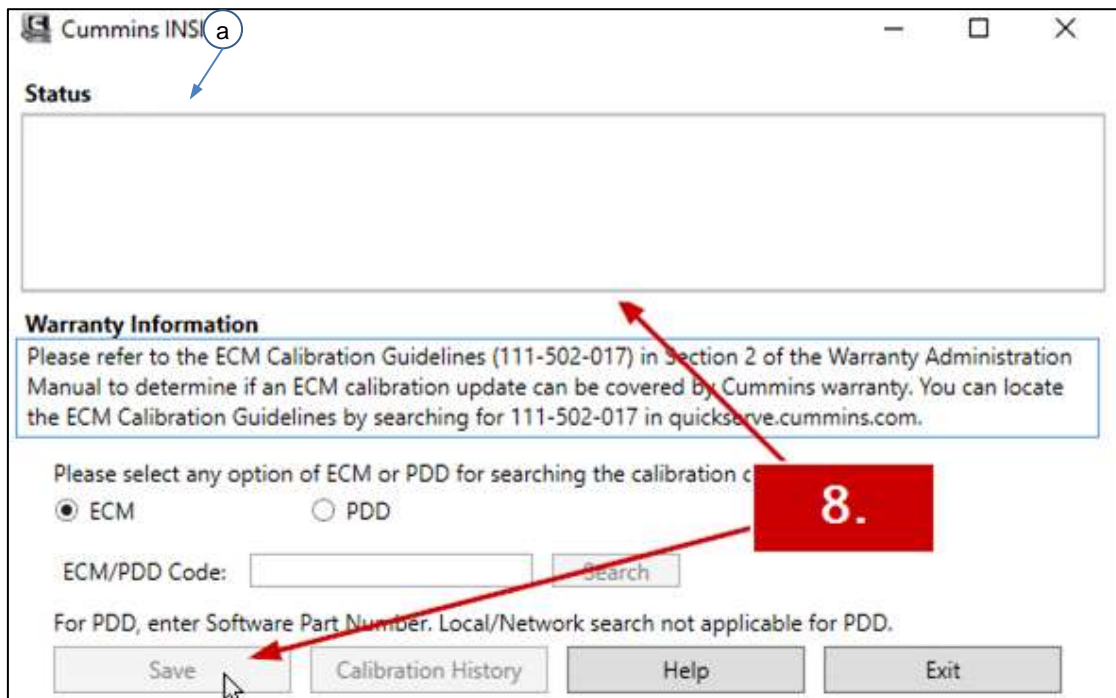


Figure 11.
Step 8 - “Successfully found (CAL ID tba)” message in Status box (a) and “Save” button (8).

The following screen will appear if the requested calibration is not found (*Figure 12*):

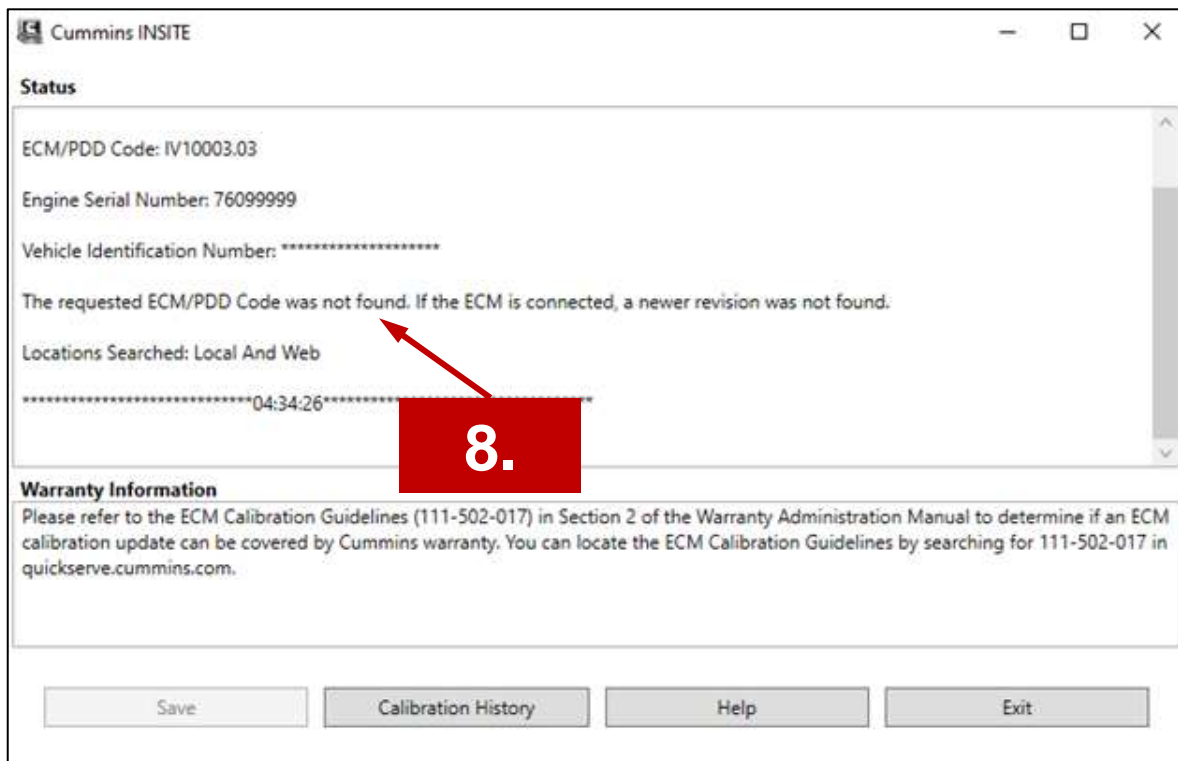


Figure 12. Step 8 - Calibration not found screen.

If the calibration was not found, double check the following connections:

- A. Verify stable Wi-Fi signal is present
- B. Confirm NEXIQ® USB-Link 2 or Cummins® INLINE7 tool is connected to OBD-II
- C. Confirm Agility ECU is connected properly to the fuel system chassis harness

Repeat Steps 6 through 8.

Step 9: Click the “Exit” button. *Figure 12*

Step 10: Click the “ECM/PDD” button, add all, and click on the “OK” button. *Figure 13*

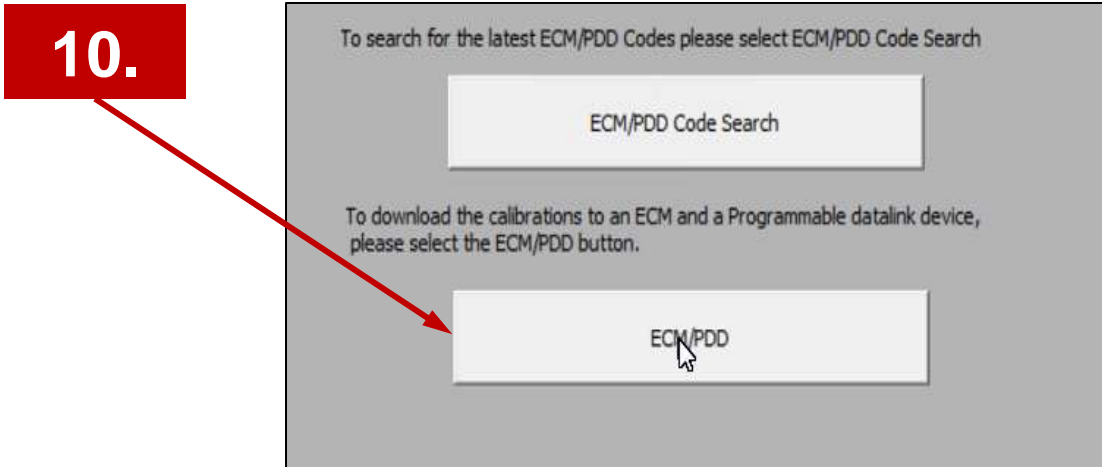


Figure 13.
Step 10 “ECM/PDD” button (10).

When these options appear, select “Add All,” and click on the “OK” button.

Step 11: Click/expand all folders (the + buttons), then click on “4354537.” Figure 14

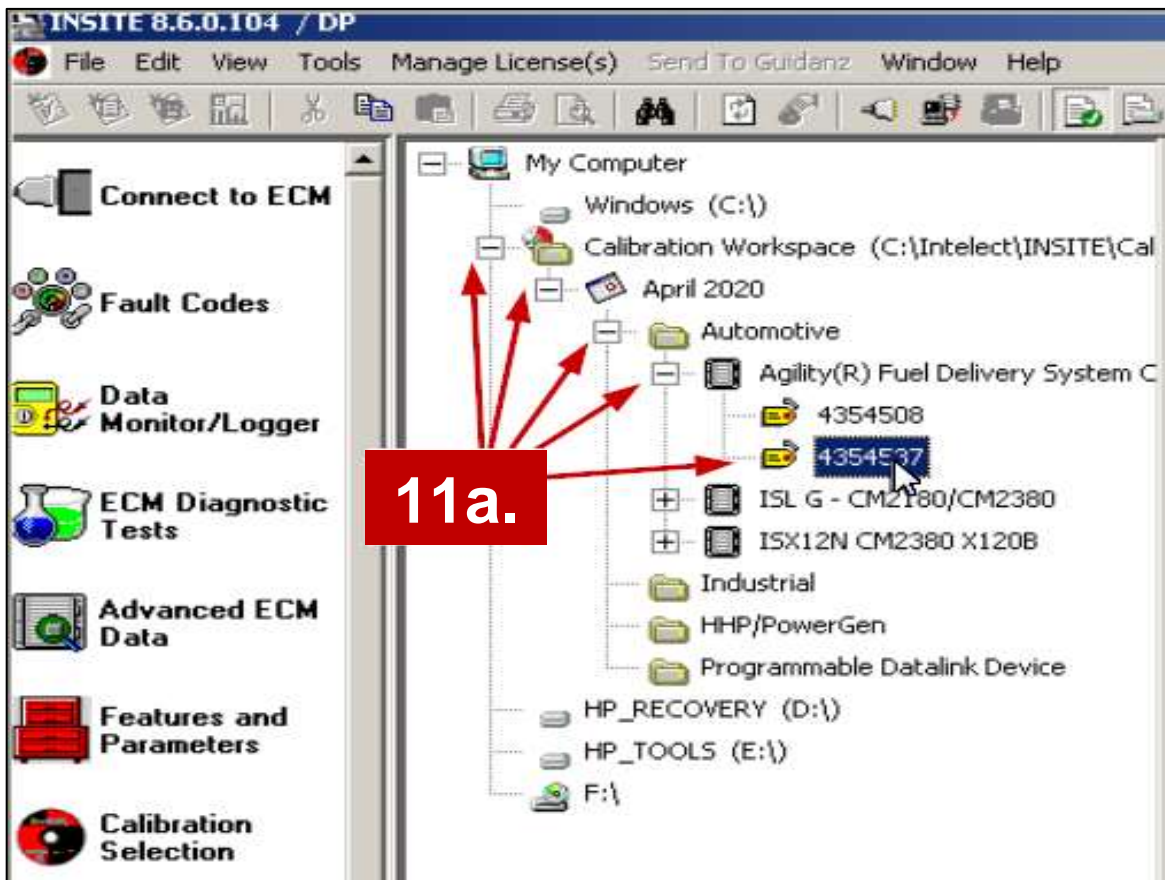


Figure 14.
Step 11a. Click to expand all folders (11a).

Select “Add All” and click “OK.” Figure 15

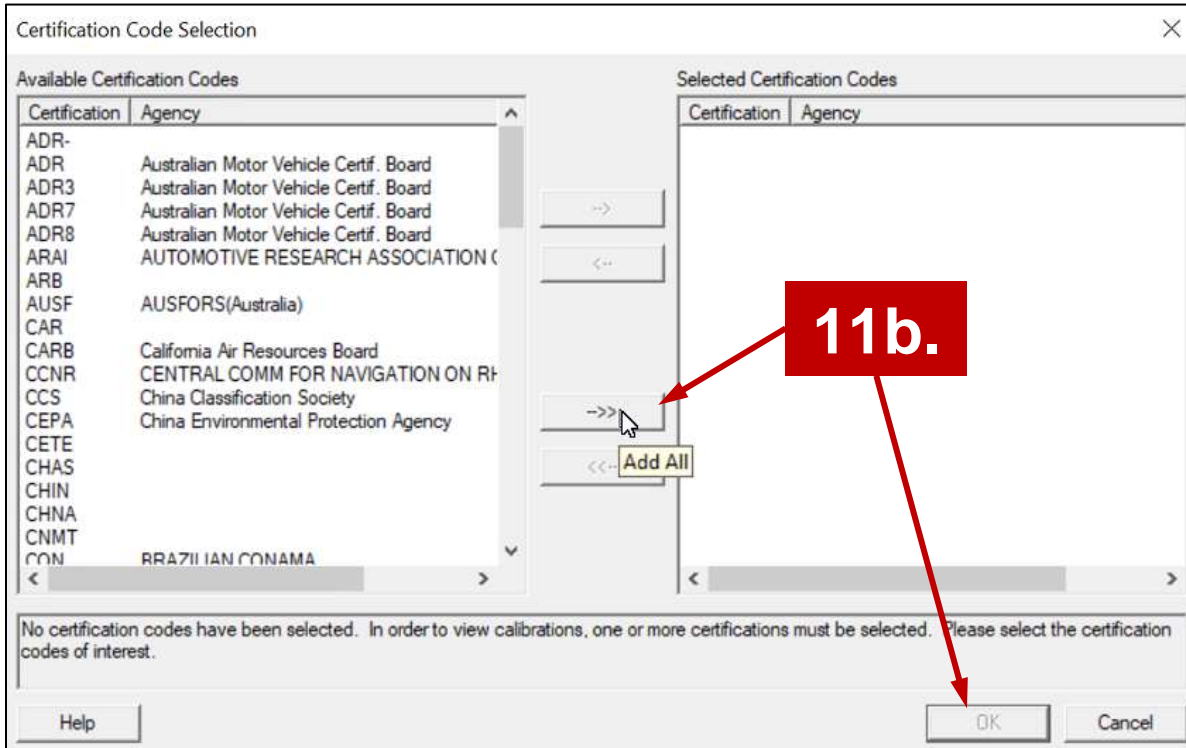


Figure 15.
Step 11b. “Add All” and “OK” buttons (11b).

Step 12: Right click on the calibration ID #, then click “Transfer to ECM” in the pull down menu. Figure 16

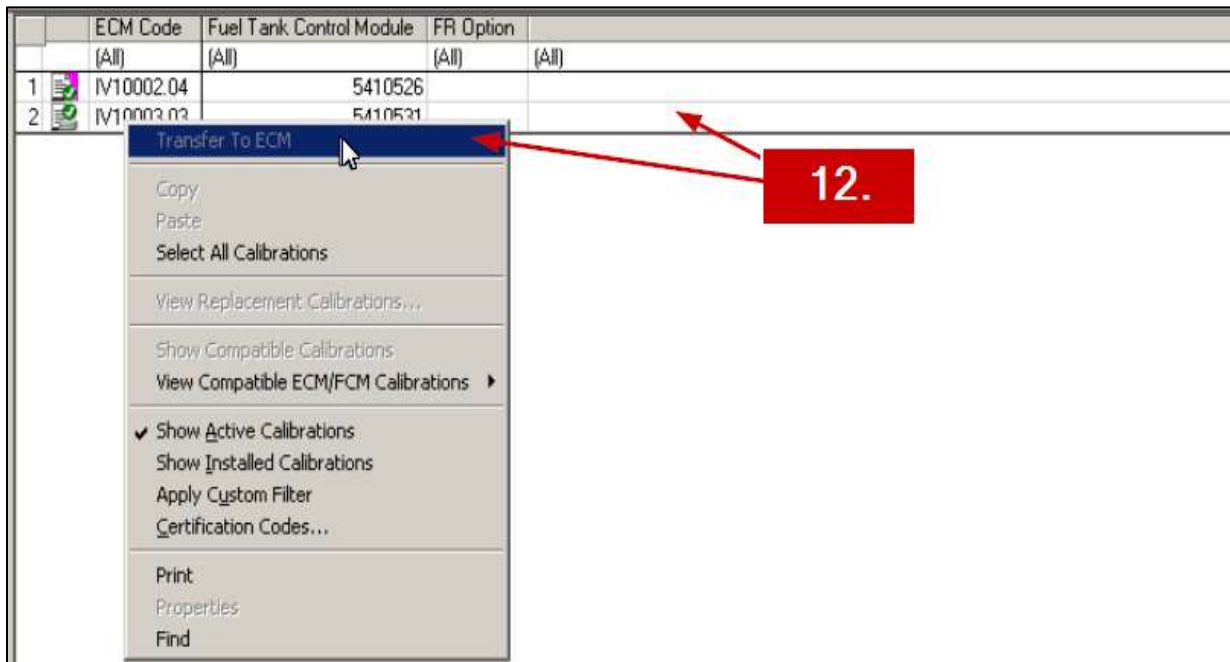


Figure 16.
Step 12. Select desired Cal ID # from the list, then click “Transfer to ECM” (12).

Step 13: Follow prompts until programming is successful/complete.

Step 14: When complete, click “Disconnect from ECM” tab at upper left menu and close out INSITE. *Figure 17*

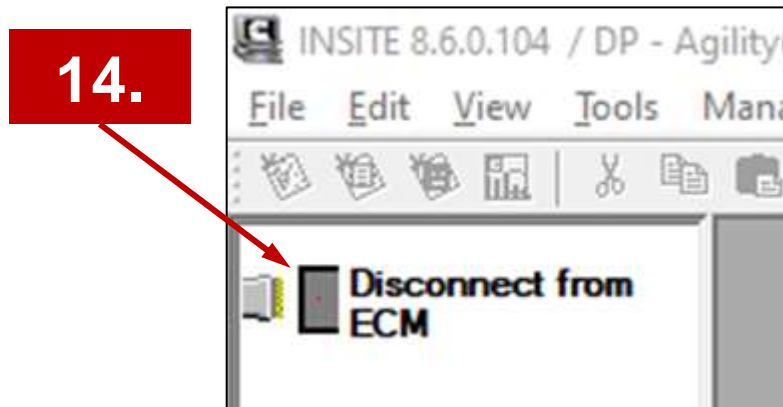


Figure 17. Step 14 Disconnect from ECM tab.

6. Warranty Information

This procedure is covered under warranty. Standard repair time (SRT) is 0.5 hours. Please refer to Warranty Manual, ENP-067, for warranty reimbursement procedures.

For parts and support, contact Agility® Customer Care: +1 949 267 7745, toll free: +1 855 500 2445 or parts@agilityfs.com

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