



Over-the-Air Programming User Guide

Version 1.1

TABLE OF CONTENTS

REVISION HISTORY	2
INTRODUCTION	3
OCC PORTAL	3
OVER-THE-AIR ENGINE CONTROL MODULE CALIBRATION UPDATES.....	3
Notifications.....	3
Calibration Status.....	3
Scheduling ECM Calibration Updates in the OCC Portal.....	4
Driver Interaction.....	4
OVER-THE-AIR CUSTOMER PROGRAMMABLE PARAMETER UPDATES.....	5
Parameter Profiles	5
Driver Interaction.....	5
ELECTRONIC GAUGE CLUSTER MESSAGES.....	6
CHANGE LOG.....	7
TECHNICAL SUPPORT	7

REVISION HISTORY

Version	Author	Date	Description of Change
0.1	Joe Edmonds	5/29/2019	Initial Draft
0.2	Joe Edmonds	7/17/2019	Review Draft
0.3	Linda Negele	7/18/2019	Scope and content revisions
0.4	Linda Negele	7/19/2019	Scope and content revisions from Joe Edmonds, Matt Milewski, Heidi Northrup
1.0	Linda Negele	7/19/2019	Final version
1.1	Joe Edmonds	10/20/2020	Added new cluster messages

INTRODUCTION

Some new International LT and RH Series trucks are equipped with an OnCommand® Connection (OCC) telematics module that supports remote, over-the-air (OTA) updates to engine calibrations and programmable parameters (the “OCC OTA Module”). OTA updates are performed using the OCC Portal.

The OCC OTA Module includes the following features:

- Collection of vehicle data used in health reports and other features in the OCC Portal,
- Over-the-air Engine Control Module (ECM) calibration updates, and
- Over-the-air customer programmable parameter updates.

All features are available from the OCC Portal at www.oncommandconnection.com and require user credentials to access them.

This User Guide describes how to use the OTA features of the OCC OTA Module. More information about OCC and how to use the OCC Portal can be found by selecting HELP on the left side of any page in the OCC Portal, or at <https://info.oncommandconnection.com/downloads>.

OCC PORTAL

When a new vehicle equipped with the OCC OTA Module is delivered to a customer, it is automatically added to the OCC Portal under the customer’s account. If no account exists for that customer, one is automatically created. To view information about vehicles in the OCC Portal, an OCC account is required.

New OCC Portal users can create a user ID and enroll by following the REGISTRATION steps in the instructions in the link below.

Purchased vehicles automatically added to the OCC Portal can be found in the PURCHASED WATCHLIST in the OCC Portal’s SELF SERVICE page.

Detailed instructions on enrolling in the OCC Portal and updating your account to include newly purchased vehicles can be found at:

https://www.oncommandconnection.com/Enrollment/enroll/pdf/OCCEnrollment_Registration.pdf

OVER-THE-AIR ENGINE CONTROL MODULE CALIBRATION UPDATES

The OCC OTA Module can remotely update the vehicle’s Engine Control Module (ECM) calibration to the latest software release required to assure the vehicle’s engine operates at peak efficiency.

Notifications

The OCC Portal monitors the vehicles in your fleet to determine if the ECM calibration is out-of-date. Vehicles with an out-of-date ECM calibration are labeled as NOT CURRENT wherever calibration status is displayed in the OCC Portal.

Calibration Status

The calibration update process involves a series of steps, represented by the CALIBRATION STATUS associated with a vehicle in the OCC Portal CALIBRATION page:

- **CURRENT:** The calibration is up-to-date and no further action is required.
- **NOT CURRENT:** The calibration is not current and requires an update. This status is displayed when the calibration is determined to be out-of-date, even if the vehicle is not equipped with an OCC OTA Module.
- **NOT AVAILABLE:** The status of this vehicle's ECM calibration cannot be determined. This status applies to non-International/IC Bus vehicles.
- **PENDING DOWNLOAD:** An ECM calibration update has been scheduled in the OCC Portal for this vehicle, and will be downloaded to the OCC OTA Module.
- **DOWNLOADED:** The ECM calibration update has been downloaded to the OCC OTA Module. A notification is sent to the vehicle driver that an update is available. The update is waiting for approval to proceed from the vehicle operator and the appropriate vehicle conditions.
- **IN PROGRESS:** The ECM calibration update is in progress. Updates complete in under 30 minutes.
- **FAILED:** The ECM calibration update failed, and the assistance of a service technician is required to complete the calibration update.
- **DRIVER REJECTED (X):** The driver has deferred or rejected the message that an ECM calibration update is available X times.

Scheduling ECM Calibration Updates in the OCC Portal

ECM calibration updates can be scheduled in the OCC Portal for one vehicle at a time, several vehicles at a time, or all eligible vehicles at once. Vehicles can also be set to automatically receive ECM calibration updates. All ECM calibration updates are scheduled from the CALIBRATIONS tab listed under VEHICLE SCANS in the left menu of the OCC Portal.

- **One at a time:** Select a vehicle, then click the DEPLOY button to update one vehicle at a time.
- **Several at a time:** Click the box next to each vehicle to receive an ECM calibration updates. Click the DEPLOY UPDATES button to update all selected vehicles.
- **All at once:** Without any vehicles selected, the CALIBRATION page displays the number of vehicles requiring a calibration update. Click the DEPLOY TO ALL button to update the calibrations on all vehicles with out-of-date ECM calibrations.
- **Auto Update:** The top of the CALIBRATION page displays whether the Calibration Auto Update feature is set to ON or OFF, along with a hyperlink to the page where this feature can set. When Calibration Auto Update is set to ON, all updates will automatically be sent to eligible vehicles as soon as they are available without additional interaction from the OCC Portal.

Driver Interaction

The full ECM calibration update process involves approval by the vehicle driver to proceed. Following are the steps involved and the messages displayed in the vehicle gauge cluster:

1. ECM calibration update is scheduled in the OCC Portal.
2. Update file is downloaded to the OCC OTA Module on the vehicle selected to receive the update.
3. Upon completion of the update download, a message is displayed on the vehicle cluster after key-on or application of the parking brake. The message states that a calibration update is pending and instructs the driver to begin the calibration update or defer it to a later time.

4. The driver approves the calibration update using the gauge cluster controls. For more information refer to the Electronic Gauge Cluster Manual included with the vehicle.
5. A message requests the driver to confirm that the vehicle is in a safe location and can allow sufficient time to perform the update.
6. When confirmed, the update begins and completes without the need for further interaction from the driver.

OVER-THE-AIR CUSTOMER PROGRAMMABLE PARAMETER UPDATES

Customer programmable parameter updates allow customers to customize their vehicle's performance to best suit the vehicle's application. There are many parameters that can be modified on Navistar engines using the Navistar Engine Diagnostics service tool. The OCC OTA Module allows users to adjust settings for a limited set of parameters from the OCC Portal and deploy the adjusted parameter settings to selected vehicles.

Parameter Profiles

The OCC Portal is used to build a profile of programmable parameter settings that can be deployed to specific vehicles. A profile must be created on the PARAMETERS page of the OCC Portal before programmable parameter updates can be deployed.

For more information on programmable parameters for Navistar engines, see the following engine feature documentation:

Idle Shutdown: http://bodybuilder.navistar.com/General/Engine/documents/A26_IST.pdf

Cruise Control: http://bodybuilder.navistar.com/General/Engine/documents/A26_CC.pdf

Vehicle Speed Limiter: http://bodybuilder.navistar.com/General/Engine/documents/A26_VSL.pdf

Profile settings can be edited by clicking MANAGE PROFILE on the PARAMETERS page. Profile settings can only be changed if the profile has not yet been assigned to a vehicle to maintain the integrity of a vehicle's programming history. To change the settings after a profile has been assigned, create a new profile.

Driver Interaction

Programmable parameter updates require no interaction from the driver and are deployed automatically when the engine is turned off. When necessary, a message will appear on the vehicle cluster to indicate that an update is being applied to inform the driver if the vehicle does not immediately respond to key inputs during the update process. Programmable parameter updates are deployed within several seconds.

ELECTRONIC GAUGE CLUSTER MESSAGES

Below is a list of the messages that are displayed on the vehicle's electronic gauge cluster by the OCC OTA Module.

Cluster Messages (Premium)	Driver prompt	Conditions
Vehicle Performance update available. xx minutes to complete	Later Update	Calibration update downloaded. Message prompted when Key ON or Park brake set.
Confirm vehicle is in safe location.	Cancel Ok	Message prompted after previous message accepted.
Battery voltage too low to continue update		Message prompted when voltage < 12.5 V is detected after update is started.
Please remove key		Message prompted after driver confirms safe location. In KOEO/KOER conditions.
Set parking brake		If park brake is disengaged after update is started.
Deactivate auto start stop mode		Auto start stop mode is found to be active. After update started.
Initiating Performance update...		All preconditions satisfied. After update started.
Could not initiate. Try Later.		Failed to gain grid controls/Secure mode with BCM. After update started.
xx% updated. Do not start the vehicle		Update initiated and xx% complete. After update started.
Performance update failed. Recovering...		Update initiated and failed. Trying to recover.
Update failed. Vehicle inoperable		Failed 3 attempts to recover. Vehicle inoperable.
Could not update. Try later.		Failed 3 attempts to recover. Vehicle operable. Keep OCC status as 'In Progress'.
Performance update successful		Calibration update successfully completed.
Key OFF the ON to resume update		Displayed during recovery when update failed.
Key ON to resume update		Displayed during recovery when update failed.
Set park brake to resume update		Displayed when park brake is not set during recovery.
Charge battery to 12.5 V to resume update		Displayed when voltage is too low during recovery.
Downloading file. Please wait.		When calibration file is re-downloaded during recover (if needed).
Please wait...Vehicle updating		A Parameter Profile is being applied. Message lasts approximately 10 seconds.

CHANGE LOG

The table below is a log of the major software releases for the OCC OTA module and the content of those releases.

Version	Date	Feature	Description
1.0	6/24/19	Initial Launch	Initial launch of Telematics Module
		Health Reports	Feature Ability to capture dynamic health reports
		Device Manager	Feature Ability to update telematics device remotely

TECHNICAL SUPPORT

For technical assistance with the features described in this User Guide, contact technical support:

Customers: 888-661-6272, Option 3

Dealers: 800-336-4500, Option 4