



SERVICE BULLETIN

ISSUE DATE:	1/11/2019
SERVICE BULLETIN SUBJECT:	Catalyst 40 FC Vehicle Software Update
VINs or MODELS AFFECTED:	Park City Catalyst 40 FC - Demo Buses Only
COMPLETE BY:	Next Available Service Opportunity
SERVICE BULLETIN #:	SB-19-07

NOTICE! This service bulletin requires the completion of SB-18-38 prior to beginning this work.

NOTICE! It is expected that this process will require 1 hour per bus. Please schedule appropriately to minimize vehicle downtime.

CATALYST 40 FC VEHICLE SOFTWARE UPDATE

Description

The reason for this software update is to update various controllers. All the included Proterra Catalyst Fast-Charge vehicles require a change to the software/configuration for the following items:

- BMC Software

Summary of Software changes:

This update is to expand the max number of vehicles that can dock on the Proterra overhead charging system.

Tools/Programs Required:

Tools Required:

- Laptop Computer
- Proterra/Logena USB License Key (Hardlock)
- Logena Diagnostics Interface Connector (HS Light)
- NexIQ USB-Link 2
- PCAN Dongle (Optional)
- K-line USB Adapter
- USB to Serial Adapter
- Proterra OBD Breakout cable “Octopus”
- Programming Harness
- Kvaser Programming Tool
- License Dongle
- PCAN Dongle (Optional)
- Fine point permanent marker

Programs Required:

- Proterra Diagnostic Tool
- MicroBoot (optional)
- MotoServerRuntime RELEASE 8.13.7.178
- MotoTune RELEASE 8.13.7.178
- Ride7 suite installed
- ESS_MotoTune_Settings.xml

Software Files Required:

- BMC_CatalystFC_Ver3_0_7.srz

Updating BMC Software

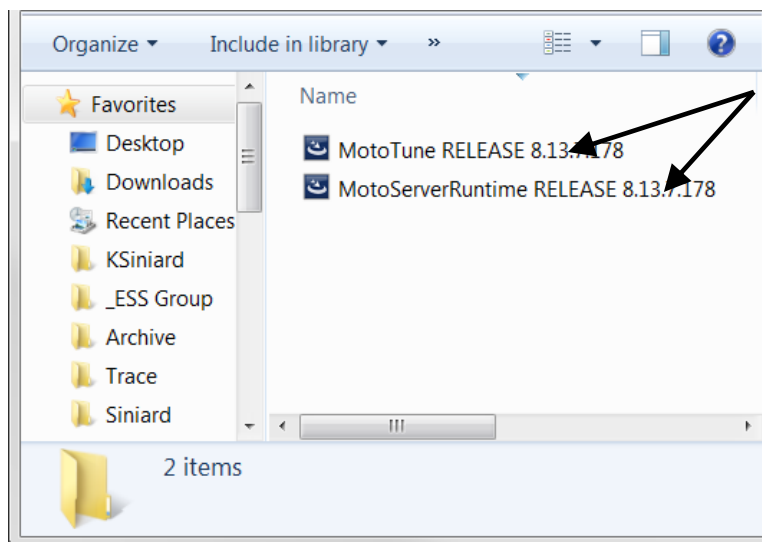
Perform the following to install the BMC Software.

Installing MotoTune Software

IMPORTANT: If software is already installed jump to BUS SETUP section.

This procedure will flash the Proterra BMC with the correct software.

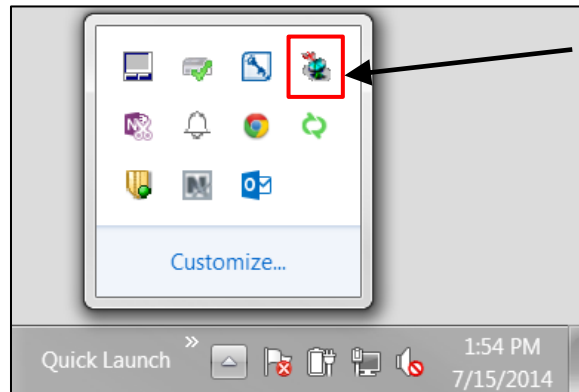
1. Navigate to: \\bus.local\files\Engineering_ESS Group\Software\MotoTune.
2. Download all files to your laptop desktop.
3. Install **MotoServerRuntime RELEASE 8.13.7.178**. Use default settings.
4. Install **MotoTune RELEASE 8.13.7.178**. Use default install settings.



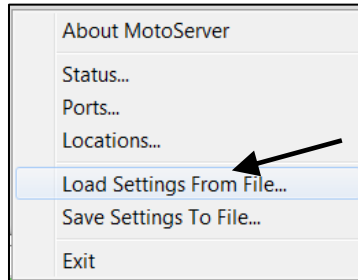
5. Navigate to: \\bus.local\files\Engineering_ESS Group\Software\MotoService.
6. Download all files to your laptop desktop.
7. Install MotoService RELEASE 10.0.0.244.exe

Initial Software Setup

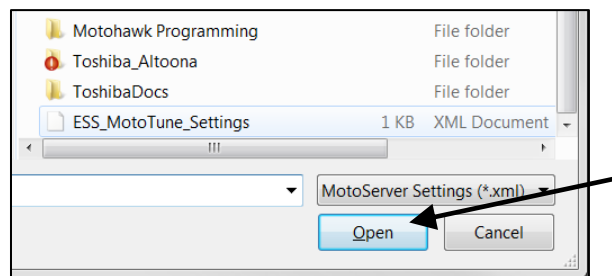
- 1) Open the MotoTune software.
- 2) Right click on the antenna icon in the system tray.



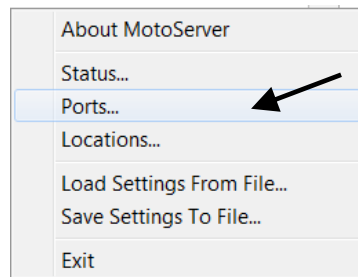
- 3) Select "Load Settings From File" from the menu.



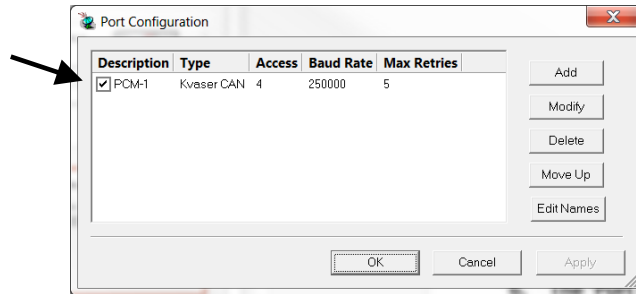
- 4) Locate the downloaded "**ESS_MotoTune_Settings.xml**" and then click Open.
NOTE: These settings will be active each session until changed by the user.



- 5) Right click on the MotoTune antenna icon and select 'Ports' from the menu.

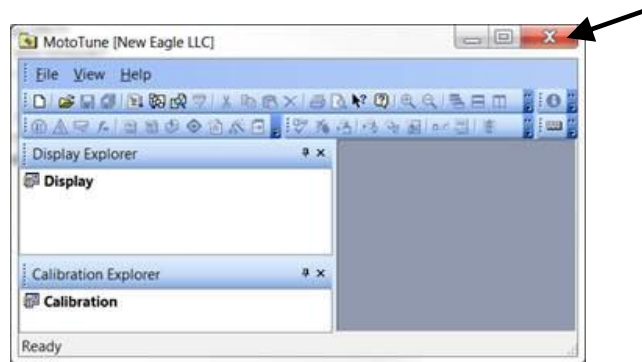


- 6) The 'Port Configuration' window should now display the settings shown below. Make sure PCM-1 is selected.



- 7) Click OK.

- 8) Exit the Moto Server Software by selecting the exit "X" from top menu. Moto Server Software appears on the system tray when MotoTune is open and will exit when the user exits MotoTune.



Bus Setup

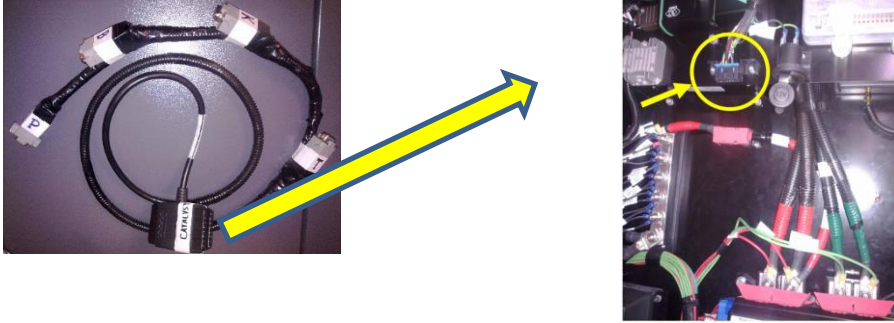
1. Equipment Needed: Kvaser programming tool, license dongle, CAN breakout cable.



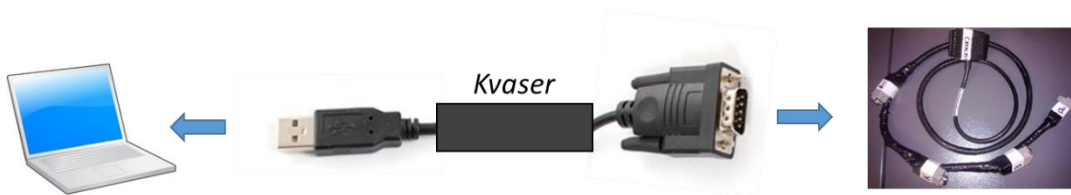
2. Power ON the bus at the Driver's Workplace (low voltage ON), and make sure the Master Disconnect Switch in the rear curbside access panel is ON.
3. Plug in license dongle to laptop USB port.



4. Plug in breakout cable to the bus port in the front access panel.



5. Connect DB9 side of Kvaser tool to 'PCAN' on the breakout cable, and the USB side to the laptop.

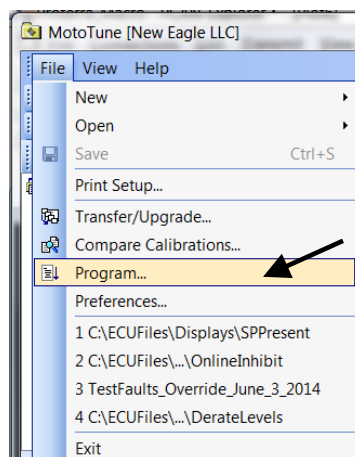


Programming

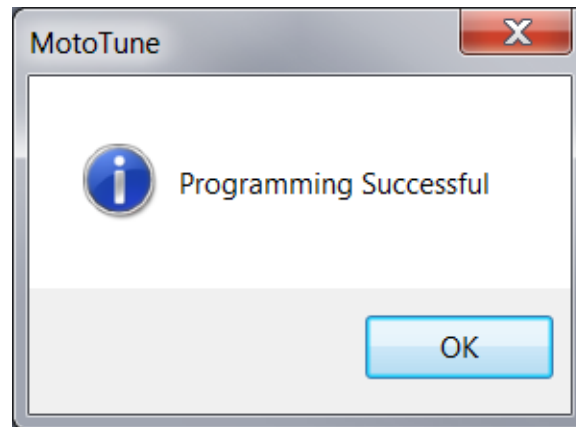
1. Open MotoTune software.



2. Under the 'File' menu select 'Program.'



3. In the bottom left corner, ensure that the Location selected is PCM-1. If not, select it from the drop down menu. See below.
4. Locate and select the downloaded .srz file you would like to flash to the controller (**BMC_CatalystFC_Ver3_0_7.srz**). Access the following folder for the new file and download it to your laptop desktop: <\\bus.local\files\Engineering\Service Bulletins\Service Bulletin Files for SB-19-07\BMC\>
5. With file selected from your desktop, click Open.
6. MotoTune will complete the software update, and a 'Programming Successful' dialog box should be displayed.



Set the bus Number EPROM:

NOTICE! This process is REQUIRED to correctly set the bus number. The vehicle will not function properly until this is completed.

1. Set the Bus Number EPROM using the Proterra Diagnostic Tool.
2. If necessary, use the Logena Tool to verify the bus number and change as needed.

Verification of Customer Configuration:

The purpose of this verification is to ensure that through this Service Bulletin the vehicle software has been properly configured for the customer.

PLEASE NOTE: This could be a liability concern if the Verification plan is not performed and documented completely, as the customer expects the vehicle to perform in a certain way which can only be guaranteed by following the configuration process.

IMPORTANT! After verifying customer configuration, ensure that the vehicle powers up with no faults and is capable of Fast Charging at the Charge Station.