## Global MX-5 Cup ND2 Bosch MS6 Cup ECU Update Instructions

## **Purpose:**

The purpose of this document is to provide instructions for Global MX-5 Cup ND.2 owners on how to update their Bosch MS6 Cup ECUs when updates are issued by Long Road Racing. Updates may be issued to correct or adjust the calibration file or tune, logging configuration or CAN output configuration. Updates will be announced through Technical Service Bulletins from Long Road Racing issued to all car owners and posted to the Long Road Racing Website.

To update you'll need to have Bosch's RaceCon Software installed on your computer, the RaceCon TEAM License file saved in the RaceCon installation folder on your computer, and the latest RaceCon .rlp TEAM Project and .psv Firmware files from the Long Road Racing Website. Detailed instructions follow.

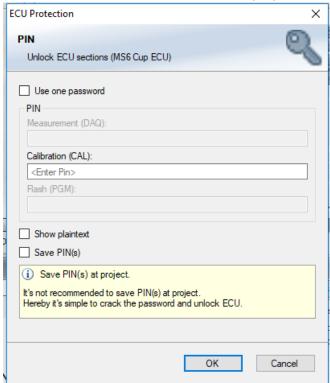
## **Preparation Requiring Internet Access:**

- 1. If you do not already have Bosch's RaceCon Software installed on your computer, download and install it now:
  - http://www.bosch-motorsport.de/content/downloads/Raceparts/en-GB/55253003119399179.html#/Tabs=55384715/
- 2. If you do not already have the RaceCon TEAM License file, <code>MazdaMX\_2019\_TEAM.lic</code>, saved on your computer, download it from the Long Road Racing Website: <a href="http://longroadracing.com/race-cars/gmx5-nd2/nd2documentation/">http://longroadracing.com/race-cars/gmx5-nd2/nd2documentation/</a>
  - a. Save this file on your computer in the RaceCon installation folder:C:\Program Files (x86)\Bosch Motorsport\RaceCon
- 3. Download the latest .rlp RaceCon TEAM project file from the Long Road Racing Website.
  - a. This file is encrypted by Bosch and includes the ECU Calibration, Logger and CAN setup files all in one file.
  - b. http://longroadracing.com/race-cars/gmx5-nd2/nd2documentation/
  - c. Suggest Saving in C:\Documents\RaceCon Project
- 4. Download the latest .psv RaceCon Firmware file from the Long Road Racing Website.
  - a. This file is encrypted by Bosch and is needed to complete the Firmware update for the ECU.
  - b. <a href="http://longroadracing.com/race-cars/gmx5-nd2/nd2documentation/">http://longroadracing.com/race-cars/gmx5-nd2/nd2documentation/</a>
  - c. Suggest Saving in C:\Documents\RaceCon Project
- 5. To connect to the ECU you will need a standard Cat5e Ethernet cable.

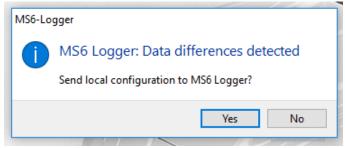
## **ECU Update:**

- 1. Open the Bosch RaceCon Software.
- 2. Click on the icon in the top left corner, select "Open Project" to open Open the Latest .rlp RaceCon TEAM project file.
- 3. Connect your computer to the ECU with an Ethernet cable through the Ethernet port in the Passenger side of the Dash.

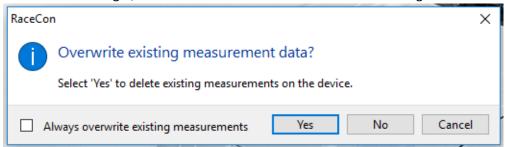
- 4. Turn power on in the car (1 click up to ACC is all that's needed).
- 5. Click "Cancel" on the "ECU Protection" Pop Up Window:

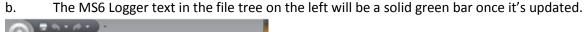


6. Click "Yes" to send the local configuration to the MS6 Logger if the MS6 Logger Data differences detected notification comes up. This will only come up if the Logging parameters have been updated in the latest project.



a. Click yes to overwrite existing measurement data. If you want to download this data before overwriting it, see instructions for how to download files using WinDarab.



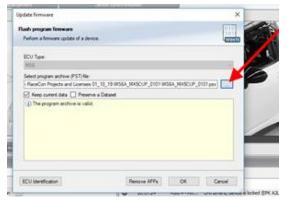




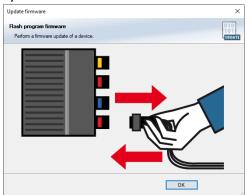
7. Next, Right click on "MS6 Cup ECU" in the project tree on the System tab, select Synchronize and Update Firmware.



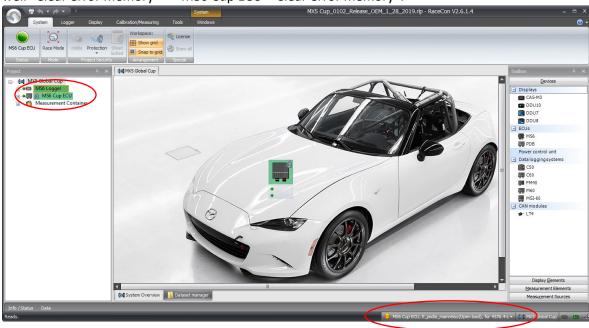
a. Select the Latest .psv file from the preparation step 4 in the Update Firmware Window and select OK.



8. When firmware update is complete, click ok, then turn Vehicle power off, then back on to power cycle the ECU.

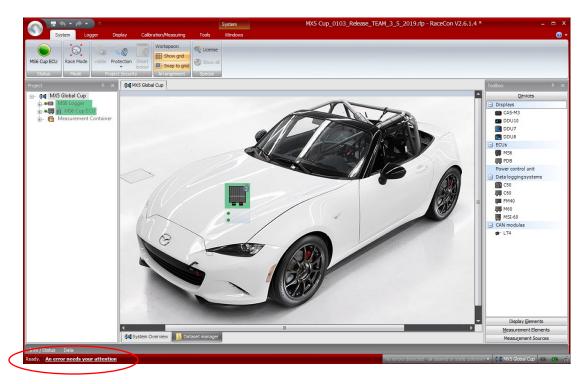


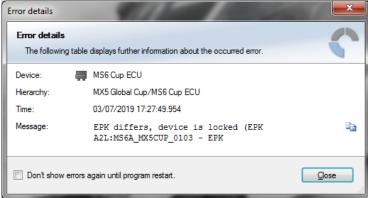
9. If the "MS6 Logger" or "MS6 Cup ECU" text is green with Orange Stripes, it means there is an error that needs to be cleared. To clear this error click on the Error Message in the Bottom Right Corner of the Screen and select "Clear error memory"-> "MS6 Logger – Clear error memory". If the MS6 CUP ECU text is also green with orange stripes you'll need to clear the error memory for the ECU as well "Clear error memory"-> "MS6 Cup ECU – Clear error memory".



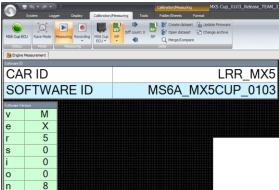


10. If the border of the RaceCon Software turns Red, this indicates a program error that can be cleared by clicking on the "An error needs your attention" text in the bottom left corner, and then selecting "Close" on the error box that pops up. These errors are alerts in the software program and are not related to the ECU functionality. They are generated when updates are made because the software program recognized that the ECU's firmware does not match the project file that is open.





11. Click on the Calibration/Measuring tab to confirm that the Software ID now matches the .psv file you just selected and the version matches the information in the Update TSB.



12. Make sure the MS6 Logger, and MS6 Cup ECU items in the project tree on the left side of the System tab are both Solid Green.



13. Review the MX5 RaceCon Overview-Team.pdf file available here: <a href="http://longroadracing.com/race-cars/gmx5-nd2/nd2documentation/">http://longroadracing.com/race-cars/gmx5-nd2/nd2documentation/</a> to get more detailed explanation of how to tell if there is a data mismatch, or firmware mismatch and about what various colors / icons mean in the software.