



Long Road Racing

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Global MX-5 Cup Car Technical Service Bulletin #2-28-17A

REQUIRED: 2017 Global MX-5 Update: ECU Firmware and Calibration File Update

2017 ECU Updates

1. Firmware update to version 01L30. (Required)
2. Calibration file update to Version 6.4 (Required)
3. AiM Configuration Update to use correct ECU driver for GEMS 01L30 ECU. (Required)

Cost for this update:

- For chassis 0 – 117 is \$400.00 plus shipping and handling
- 103, 104 & 118 and above, the cost was included in your original purchase price

New Features:

1. Error Reporting:

- a. On the previous ECU version 01L15 there was a combined Engine Error Warning that could have been an error associated to any one of, or combination of the following 9 issues.
 - i. Throttle Body
 - ii. AIT Sensor
 - iii. ECU calibration checksum
 - iv. Lambda Value
 - v. Lambda Heater
 - vi. MAP Sensor
 - vii. Throttle Pedal
 - viii. ABS System Error (ABS ERROR alarm display takes priority over Engine Error)
 - ix. Loss of CAN signal from ABS
- b. The new ECU Firmware version 01L30 reports all errors separately. Now the AiM Configuration can include separate error alarms for the following:
 - i. Error_Lambda1: O2 Sensor Error
 - ii. Error_MAP: MAP Sensor Error (Drivers Side Rear Engine)
 - iii. Error_Pedal: Throttle Pedal Error
 - iv. Error_EE_Checksum: ECU Calibration File Error
 - v. Error_O2: O2 Sensor Error
 - vi. Error_ABS: Wheel Speed Sensor, Ungrounded Yaw Sensor, ABS System Error, ABS CAN Signal Error.
 - vii. Error_THROTTLE_B: Throttle Body Error
 - viii. Error_AIT: Air Intake Temperature Sensor Error. (Commonly seen when car is heat soaked and temp is over 170 deg F.
 - ix. Error_LAMBDA_HEAT: Error where Lambda Sensor Heater is not getting power.
- c. The AiM MXL2 configuration will need to be updated to use the new GEMS 01L30 ECU driver to ensure all new error functions are being logged. A standard base configuration with updated basic alarms is available from Long Road Racing and Mazda Motorsports.



Installation:

ECU Firmware and Calibration File:

1. ECU's can only be updated through arrangement with Long Road Racing.
 - a. ECU's may be updated at Official Global MX-5 Cup track events by Long Road Racing. Payment of \$400 will be expected at the time that services are provided. Please notify Long Road Racing prior to the event for planning purposes.
 - OR -
 - b. ECU's may be shipped to Long Road Racing to be updated. Typical turn-around-time is 24 hours.
 - i. If returned to you via 2nd day UPS the total cost is \$440
 - ii. If returned to you via next day UPS the total cost is \$475

If you have any questions about this Technical Bulletin, please contact Glenn Long at:
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