



**Aftermarket Parts Procedures Modification Workgroup
Tuners, Programmers, and In-Line Modules**

DATE: Tuesday, October 9, 2018
TIME: 10:00 a.m. – 1:00 p.m. (PDT)
LOCATION: California Air Resources Board
Annex 4 Auditorium
9530 Telstar Avenue
El Monte, CA 91731

If you are unable to attend in person, the workshop will be available via webinar.
Visit the [webinar page](#), for details.

Agenda

Introductions and background

Discussion Topics

Current Process in Evaluating Tuners, Programmers, and In-Line Modules

- Manufacturer submits exemption application
 - With vehicle application list
 - Installation instructions
 - Part Numbers
 - What product does
 - Horsepower and torque gains
 - Mileage gains
 - Etc.
- Full disclosure of modifications being made
 - ECU/calibration tables
 - Signal modulation plots
 - Parameters Sensed vs. Controlled
 - Etc.

- Applications incomplete or missing information
 - Vehicle application list missing key information
 - Installation Instructions incomplete or missing, not specific to models
 - Part Numbers for each calibration and/or for each physical device
 - EO identification labels
 - Not all modifications disclosed
 - No technical explanation on what product does (i.e. ECU Questionnaire)
 - User adjustable options not listed
- Applications are too complex for one application
 - Multiple OEMs
 - Multiple Engine Technologies
 - Multiple Engine Configurations
 - Multiple OBD groups
 - Different Emission Standards
 - User adjustability
 - Product features (e.g. downloadable tunes)
- Application review includes:
 - Verify devices are production ready (requirement)
 - Review each installation instruction, cross reference OEM service manuals
 - Research out each vehicle on list for worst case test vehicle(s) selection
 - Research OBD interaction with device-modified parameters
 - Investigate device advertising claims, user reviews, online videos
 - Request sample devices for verification and anti-tampering resistance
- Application follow-up may include:
 - Send need info letter
 - Long response time for manufacturers
 - Incomplete manufacturer responses
 - Manufacturer debating/challenging/withholding requested information
 - Prepare a test memo
 - Complex applications require multiple vehicle/complex test letter
 - Worst-case vehicle(s) determination based on multiple criteria

Expectations for New Aftermarket Parts Regulation to Streamline the Process

- Smaller applications based on:
 - One OEM per application
 - One fuel type
 - One device type (programmer, in-line, or sensor-conditioning)
 - Same engine design - V8, V6, L4, Etc.
 - Same induction type - TC, SC, NA
 - Same device modification type
 - Horsepower
 - Towing
 - Mileage
 - Transmission
 - Speedometer calibrator
 - Throttle pedal adjustor
 - Cylinder deactivation
 - Etc.
- Display only devices (how to prove no software changes)
- Incorporate Executive Order into the product calibration
- Disclose Calibration Identification Number (Cal ID)
- Transparent application requirements
 - Detailed descriptions
 - Vehicle list requirements
 - Installation guide requirements
 - EO Label requirements

Goals for New Aftermarket Parts Regulation

- Make process flexible
 - Future vehicles are an unknown
 - New regulation should have longevity/flexibility
- Streamline issuance of EO; time will be reduced due to smaller applications
- Goal is to structure applications so that
 - One test is required for new parts/devices/vehicles
 - EO is issued quicker for “update” applications
 - Manufacturers are more clear on regulations and test requirements
- Electronic submissions
 - Online system
 - Automatically reject your application if anything is missing

OBD Concerns

- Verifying that the modifications do not harm the OBD system
- OBD must operate as designed by the OE

Other Ways to Evaluate

Any ideas?

CARB responsibility

Ensure that the aftermarket part continues to have no adverse emissions impact on the original certified engine/vehicle and any emission control systems/components for all covered engines/vehicles