

Regulation Analysis

Resolution: 94-67

Subject: Amendments to Regulations Regarding
On-Board Diagnostic Systems

Status: Approved by Air Resources Board

Deadline for Public Comment: February 3, 1995

Overview of Key Amendments:

TAMPERING PROTECTION:

This amendment states that computer coded operating parameters will not be changeable without the use of specialized tools and procedures. With the approval of an Executive Officer, manufacturers may be exempt from this requirement for specific products that are unlikely to require protection.

Manufacturers using reprogrammable computer code systems, i.e., EEPROM, must employ proven methods which deter unauthorized reprogramming. Beginning with the 1999 model year, manufacturers shall include enhanced tamper protection methods including data encryption using ways to secure the encryption algorithm, and write-protect features requiring electronic access to an off-site computer maintained by the manufacturer.

Potential Impact on ASC Members:

The main concern to ASC members would be the possibility of aftermarket manufacturers from having reduced access to information necessary to build tools and aftermarket parts to diagnose and repair automobiles. ARB staff confirmed that this amendment does not further limit the access of independent repair facilities to necessary reprogramming information.

With respect to "unauthorized reprogramming," as long as the programming software used by the independent dealer meets ARB emission standards, they will in no way be restricted access. This provision only prohibits the use of emissions programs not certified by the ARB. However, the difficulty arises with respect to the manufacturing of non-OE parts and tools which allow the independent to compete with the dealer-owned repair facility in two ways: (1) by developing universal tools such as scan tools which minimize the need for independents to buy a complete set of tools for each make and model of car, and (2) by developing competitively priced non-OE parts that are more rapidly obtained in some cases.

The reference to "off-site" computer refers to a 'Host' computer of the manufacturer which acts as a link between the reprogramming software and the vehicle computer. All software would be encrypted and a security system would be in place to make sure that the algorithms are not tampered with. More importantly, however, efforts should be taken to ensure that no independent can be denied access to reprogramming software and the host computers, and an appeals process through ARB should be established for such denials.

Policy/Position Recommendation:

- (1) Language such as "on a contractual basis" and "at reasonable cost" should be included.
- (2) "All independents" should be included if dealers get it.
- (3) Develop an appeals process for EEPROM denial.

Comments:

Some issues between OEMs and the aftermarket industry may require discussion to resolve concerns. The ARB is holding a series of workshops beginning February 7 in El Monte to discuss strategies for dealing with these issues (see attached). If you are interested in attending, contact the ARB in El Monte at (818) 575-6800.