

U. S. Environmental Protection Agency
Office of Mobile Sources

December 14, 1998

VPCD-98-14

(LDV)

Subject: On-Board Diagnostic Guidance - Diagnostic Link Connector Location and Accessibility

Regulatory Requirements

This letter serves to address an apparent misunderstanding by several manufacturers over the required location of the on-board diagnostic (OBD) data link connector (DLC). The OBD section of the Code of Federal Regulations (CFR) (40 CFR §86.094-17(h) and revisions for subsequent model years) states, "The emission control diagnostic system shall provide for standardized access and conform with the following Society of Automotive Engineering (SAE) standards." In particular, §86.094-17(h)(4) states, "The connection interface between the OBD system and test equipment and diagnostic tools shall meet the functional requirements of SAE J1962 "Diagnostic Connector," (June 1992)." This SAE standard contains the following requirements:

3. Vehicle Connector Location/Access

3.1 Consistency of Location - The vehicle connector shall be located in the passenger compartment in the area bounded by the driver's end of the instrument panel to 300mm beyond the vehicle centerline, attached to the instrument panel, and accessible from the driver's seat. The preferred location is between the steering column and the vehicle centerline. The vehicle connector shall be mounted to facilitate mating and unmating.

3.2 Ease of Access - Access to the vehicle connector shall not require a tool for the removal of an instrument panel cover, connector cover, or any barriers. The vehicle connector should be fastened and located as to permit a one-handed/blind insertion of the mating test equipment connector.

3.3 Visibility - The vehicle connector should be out of the occupant's (front and rear seat) normal line of sight but easily visible to a "crouched" technician."

Importance of the Connector Location

EPA has recently promulgated a regulation that requires incorporation of OBD checks into Basic and Enhanced Inspection/Maintenance (I/M) programs in calendar year 2001. In anticipation of this requirement, some states have opted to voluntarily conduct OBD checks and participate in test programs to evaluate implementation issues. From these programs, we have learned that several automotive manufacturers have misunderstood the guidelines set forth in SAE J1962 which is likely to cause confusion in I/M programs.

Specifically, DLC locations have deviated from the requirements in the following ways:

- DLCs in rear passenger seat locations;
- DLCs with cover panels that require special tools or are not clearly identified as DLC locations;
- DLCs that are in an allowable location but not clearly indicated in the preferred location, such as:
 - + on center consoles and on instrument panels in “the occupant’s normal line of sight”;
 - + on the passenger side of vehicles (i.e. passenger side of the vehicle centerline);
 - + and/or located behind ashtrays/coin holders and fuse panels.

Future Model Year Guidance and Certification

We are issuing this letter to provide guidance on DLC location for future model year certification. We will expect that 2000 model year and later vehicles have DLCs in the preferred location indicated on the attached schematic. Manufacturers should include information on DLC location and accessibility in certification documentation for 2000MY and beyond. Understanding that this letter may be late for some 2000MY vehicles, I recommend discussion with my staff if a manufacturer is using an alternate DLC location. Manufacturers must include a justification and full details of the alternate DLC location. Lack of compliance with the data link connector requirements, like any OBD requirement, may impact current and future model year certification.

We will conduct an independent determination of compliance with OBD Regulations regarding DLC location. Therefore, optional certification to California Air Resources Board (CARB) OBDII regulations or CARB staff approval of your connector location does not supersede our determination or the guidance provided in this letter.

Past Model Year Vehicles

EPA is currently gathering data regarding possible violations by manufacturers with previous model year vehicles. A determination on appropriate action regarding these vehicles will be made based on this data.

Questions or concerns with regard to this guidance may be directed to Arvon L. Mitcham at (734) 214-4522.

Sincerely,

Jane Armstrong, Director
Vehicle Programs and Compliance Division

Attachment

Attachment: Schematic for Required DLC Location

