

the California Air Resources Board (CARB), it was proposed that OEMs make available a general description of their OBD systems which includes a general description of the operation of each monitor and the parameters that are being monitored. CARB also proposed that additional information be made available such as diagnostic codes associated with each monitor; typical enable conditions for the monitors; a general sequence of events, execution frequency and duration; and typical malfunction thresholds. The Alliance and AIAM commented that this type of information is sufficient to service OBD related problems and to go beyond what CARB has proposed is unnecessary. The Alliance and AIAM commented that EPA should adopt requirements consistent with those proposed by CARB.

The Westchester/Putnam chapter of the Service Technicians Society commented that information such as system logic, including monitor strategies, related components by each monitor and range/response times for sensor inputs need to be made available to aftermarket service providers. Additionally, they commented that information on parameters for all sensors and actuators is also needed by aftermarket service providers.

The Speciality Equipment Manufacturers Association (SEMA) commented that they would support a provision that would require OEMs to provide general information on each significant component of the OBD system. SEMA further commented that a description of typical values under operating conditions is feasible and that it is reasonable for OEMs to consolidate this type of information in a generic manner to assist technicians in identifying a malfunctioning component without having to purchase an OEM specific scan tool. SEMA also commented that they support the availability of system diagrams and basic descriptions of OBD system monitoring.

BMW submitted written comments supporting the comments of the Alliance and AIAM on requiring OBD system operational information. BMW commented that they would support provisions that mirror those proposed by the California Air Resources Board (CARB) which require OEMs to make available general descriptions of OBD system information rather than the specific list proposed by EPA.

A consortium of aftermarket groups (the "Aftermarket Consortium") stated its support for a provision that would require OEMs to make available OBD system operational information,

regardless of whether or not they currently make this information available to their dealerships. They further commented that the Clean Air Act does not limit the information which must be provided to that which is furnished to dealers. The Associations also commented that this type of information needs to be made available to the aftermarket from all OEMs to ensure the proper diagnosis and repair of OBD equipped vehicles. Finally, the Associations commented that independents often fix used part or replace a malfunctioning part with a used or rebuilt part in making repairs. In doing so, they may have to adjust the functioning of such parts to meet OBD parameters. Therefore, OBD system information is needed in these circumstances.

The Service Technicians Society (STS) commented in their written submission that generic drive cycles, component operating ranges and system logic flow diagrams are important pieces of information for the emissions repair process. STS further commented that current availability of this type of information varies among OEMs and is not easily available in some cases. Without this type of information, technicians must use their best judgement, or sometimes even guess at the appropriate solution, which increases the time and cost of repairs. STS is concerned that access to this level of information is necessary to avoid customer frustration and to increase the perception of automotive aftermarket service providers as competent professionals.

In their written submission, ETI commented that OEM repair information can sometimes be inadequate despite the claims of the Alliance and AIAM. Many OEM repair procedures call for the temporary substitution of a known good part which can only be purchased from a dealer. However, simply replacing the part may not solve the problem. If it is an electrical part, the dealer may not take it back. ETI states that this type of repair information is not adequate by anybody's standards. Therefore, the aftermarket technician must have the information requested in order to conduct pinpoint tests and determine whether the part in question is working without using the substitution process.

**EPA Decision:** EPA agrees with comments that it is appropriate to more specifically define the "OBD Generic Drive Cycle" information. Therefore, EPA is finalizing a provision that requires OEMs to make available monitor-specific drive cycles for all major OBD monitors as equipped

including, but not limited to catalyst, catalyst heater, oxygen sensor, oxygen sensor heater, evaporative system, exhaust gas re-circulation (EGR) secondary air, and a/c system. Additionally, for diesel vehicles under 14,000 pounds GVWR which also perform misfire, fuel system and comprehensive component monitoring under specific driving conditions (*i.e.*, non-continuous monitoring; as opposed to spark ignition engines that monitor these systems under all conditions or continuous monitoring), the OEM shall make available monitor-specific drive cycles for these monitors. We will also finalize a provision that will require any OEMs who develop generic drive cycles, either in addition to, or instead of, monitor-specific drive cycles to also make these available in full-text on OEM Web sites.

With regard to OBD system operational information, EPA disagrees with the Alliance and AIAM comments that EPA has not substantiated that some OEMs do not make adequate information available to the aftermarket. While EPA agrees that it would seem that OEMs have a "huge motivation" to ensure that sufficient information is available to both dealership and aftermarket technicians, we believe that there are numerous examples of information gaps of which the OEMs are aware. Aside from the analysis of OEM service manuals conducted by EPA which can be found in the docket (Air Docket A-2000-49, item II-B-01, "Memo from Shannon Elliot to Holly Pugliese and Arvon Mitcham—Analysis of OEM Service Manuals", March 10, 2000), EPA has participated in numerous meetings and conferences with aftermarket service providers and OEMs for discussions solely focused on acknowledged gaps in OEM information. Additionally, sources such as the International Automotive Technicians Network (iATN) and the Service Technicians Society (STS) have provided numerous examples of both dealership and aftermarket technician difficulties in finding enough information to service some particular OEM makes and models. A compilation of some of the complaints that have been documented can be found in EPA Air Docket A-2000-49, Item #IV-H-03.

EPA also disagrees that it does not have the authority under the Clean Air Act to compel the distribution of relevant service information. EPA agrees with the comments submitted by MEMA, *et al.* that the Clean Air Act does not limit the information that must be provided to that which is made available to dealerships. While it is clear that under section 202(m)(5), the