Saab commented that EPA's definition of indirect information is too broad to protect manufacturers and franchised dealers from unfair competition by aftermarket tool and equipment manufacturers and independent service providers, respectively. Saab does not agree that parts and equipment supplied to dealers contain supplementary information which is necessary to repair the emission control systems of a vehicle.

The aftermarket commenters asserted that functional control strategies, waveforms and bi-directional control are critical in the repair of emissionrelated problems. The commenters argued that many times there is no cause and effect relationship between a symptom and a failed part. According to the commenters, technicians rely on this type of information or the tools that utilize such information as the best method of pinpointing parts that have either failed or require adjustment. Independent technicians commented that having tools that perform bidirectional control would reduce diagnostic and repair times, as well as repair costs. The commenters asserted that unlike dealers with enhanced tools, independent technicians with generic tools only receive malfunction codes which are insufficient to diagnose the fault.

Analysis of Comments: Regarding the definition of data stream information, EPA agrees that for purposes of this rule, data stream information should include only emission-related information, since this rule is not intended to cover all vehicle operations. However, EPA's definition of emission-related (as discussed above) is broader than that requested by the manufacturers.

EPA also agrees that data stream information does not include recalibration and reprogramming information. However, as discussed below, recalibration and reprogramming information is subject to certain disclosure requirements. Manufacturers are required to provide reprogramming capabilities, but they are not required to make directly available actual calibration information, such as algorithms or values. Data steam information will obviously need to be provided indirectly to the aftermarket (as it is provided to dealers) in order to provide reprogramming capabilities, among other reasons.

If data stream information is made available to dealers, whether directly or indirectly, and is emission-related, then it must be made available to the aftermarket service industry, regardless of whether a manufacturer believes it is of any value to a technician. Data stream information will probably be utilized by the aftermarket diagnostic tool industry to build generic diagnostic tools. If the aftermarket tool manufacturers determine that certain information is of no value, they won't have any incentive to use it. Manufacturers may provide such information to the aftermarket in the same indirect fashion they provide it to their dealers via the sale of tools so long as these tools are available at a reasonable cost, or they may provide it to aftermarket tool companies so that these companies can make tools.

Regarding bi-directional diagnostic control strategies, EPA agrees that safeguards which protect against potential damage or safety problems from bi-directional control are important and encourages all manufacturers to implement them into their diagnostic systems. EPA believes that requiring manufacturers to supply bi-directional control information to the aftermarket, including Equipment and Tool Institute (ETI) members, without adequate safeguards could create liability concerns for manufacturers regarding the safety of consumers and technicians who would be responsible for the diagnosing and repair of vehicles.

The liability issues are a concern because there is no requirement that an ETI member company must add safeguards to the tools that they build. Manufacturers also have no reasonable means by which they can ensure that safeguards would be correctly incorporated into aftermarket tools. EPA believes that manufacturers have an incentive to ensure that safeguards are properly incorporated and are perhaps better equipped to verify the functionality of these safeguards.

Since bi-directional control is an important part of vehicle diagnosis and repair, it is imperative that this capability be made available to the independent service industry as soon as possible. This means providing bi-directional information to ETI members so that they can make generic tools for the aftermarket.

Manufacturers assert that most bidirectional control safeguards exist in manufacturer diagnostic tools rather than in vehicle on-board computers. The manufacturers claim that by 1999, all vehicles will have safeguards designed into the on-board computer, thus eliminating any concerns regarding safety and liability issues that could arise from the use of aftermarket diagnostic tools with bi-directional capability. EPA agrees with the manufacturers that it is preferable to have safeguards in the on-board

computer, rather than in the diagnostic tool, especially if there is no requirement that generic tool manufacturers incorporate such safeguards in their tools. However, EPA does not believe it is reasonable or necessary to delay this requirement until 1999. Several manufacturers have indicated that they will have safeguards designed into their vehicles' on-board computers by 1997. EPA believes it is providing sufficient leadtime for other manufacturers to make any hardware changes that may be necessary. Therefore, beginning on January 1, 1997, a manufacturer can only provide bidirectional control to its dealerships if it has provided aftermarket companies with information to make tools that have the same bi-directional capabilities available to dealerships, or provided such capabilities directly to aftermarket technicians through provision of their own tools. Manufacturers will be required to make bi-directional information available for all model years beginning with 1994. However, for model years 1994-1996, where a manufacturer can prove that safeguards for bi-directional controls were only installed in tools, not in vehicle onboard computers, then that manufacturer may receive a waiver from producing bi-directional controls prior to the 1997 model year. However, no such waiver is available for other data stream information. If a manufacturer does not use bi-directional control or has certain bi-directional control capabilities that it does not supply to its dealers, the manufacturer will not be required to provide this capability to the aftermarket.

Regarding GM's comments that release of information needed to perform bi-directional control should be restricted since product damage could result if the control is improperly applied, such concerns should be equally true for providing such information to dealerships. If manufacturers are not concerned regarding possible damage by dealership technicians, they should not be concerned regarding damage from aftermarket technicians.

EPA disagrees with manufacturer comments that "indirect information" should not include calibration, recalibration or reprogramming information and that the definition should be modified by deleting the phrase "contained in items such as parts or other equipment." Section 202(m)(5) makes clear that any relevant information that is provided *directly or indirectly* to a dealership cannot be shielded from disclosure under section 208. Even if recalibration related