State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-452-2

Relating to Exemptions Under Section 27156
of the California Vehicle Code

Howell Engine Developments, Inc.
Throttle Body Fuel Injection Kit

Pursuant to the authority vested in the Air Resources Board by Section 27156 of the Vehicle Code; and

Pursuant to the authority vested in the undersigned by Section 39515 and Section 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the installation of the Throttle Body Fuel Injection Kit, manufactured and marketed by Howell Engine Developments, Inc., 6201 Industrial Way, Marine City, Michigan 48039, has been found not to reduce the effectiveness of the applicable vehicle pollution control systems and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for the 1972 to 1993 model year American Motors (AMC) vehicles equipped with a carbureted 304, 360, or 401 cubic inch displacement engine.

The Throttle Body Fuel Injection Kit, Model No. JP-V8, includes the following main components: Two barrel General Motors (GM) throttlebody with integral throttle position sensor and idle air controller, Open Element Air Cleaner, Electronic Control Module (ECM GM P/N 1227747), wiring harness, MAP sensor, engine coolant sensor, heated oxygen sensor, electronic fuel pump, fuel filter, fuel pump relay, and vehicle speed sensor. Ignition timing is set at 6-8 degrees BTDC at idle. No changes are made to the stock carbon canister except for the vacuum line that was connected to the carburetor float bowl vent; it is plugged at the canister. The new heated oxygen sensor is installed in the stock location on vehicles currently equipped with an oxygen sensor. On vehicles, which do not have an oxygen sensor, the sensor must be placed 3 inches down stream of the exhaust manifold flange.

The installation of the kit requires the removal of the following components that are located within the engine compartment: Air cleaner assembly with heat stove, idle solenoid vacuum line, transmission controlled spark solenoid, distributor CTO vacuum control, carburetor/throttle body, fuel pump, ECM, oxygen sensor, air injection system (air tubes plugged), and other related vacuum valves and lines.

This Executive Order is valid provided that the installation instructions for the Throttle Body Fuel Injection Kit will not recommend tuning the vehicle to specifications different from those submitted by the device manufacturer.

Changes made to the design or operating conditions of the Throttle Body Fuel Injection Kit, as exempt by the Air Resources Board, which adversely affect the performance of the vehicle's pollution control system shall invalidate this Executive Order.

Marketing of the Throttle Body Fuel Injection Kit using any identification other than that shown in this Executive Order or marketing of the Throttle Body Fuel Injection Kit for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board.

This Executive Order does not constitute any opinion as to the effect the use of the Throttle Body Fuel Injection Kit may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on prior evaluation, which determined that Throttle Body Fuel Injection Kit did not cause an adverse effect on emissions of AMC vehicles with 4.2L engines (D-452). The same effect on emissions is expected from use of the Throttle Body Fuel Injection Kit on the vehicles listed in this Executive Order.

The Air Resources Board reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

THIS EXECUTIVE ORDER DOES NOT CONSTITUTE A CERTIFICATION, ACCREDITATION, APPROVAL, OR ANY OTHER TYPE OF ENDORSEMENT BY THE AIR RESOURCES BOARD OF ANY CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF THE THROTTLE BODY FUEL INJECTION KIT.

No claim of any kind, such as "Approved by the Air Resources Board", may be made with respect to the action taken herein in any advertising or other oral or written communication.

Violation of any of the above conditions shall be grounds for revocation of this order. The order may be revoked only after a ten-day written notice of intention to revoke the order, in which period the holder of the order may request in writing a hearing to contest the proposed revocation. If a hearing is requested, it shall be held within ten days of receipt of the request and the order may not be revoked until a determination is made after the hearing that grounds for revocation exist.

Executed at El Monte, California, this 21 day of July, 2008

Annette Herbert, Chief
Mobile Source Operations Division