

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-231-19

Relating to Exemptions Under Section 27156  
of the Vehicle Code

Whipple Industries, Inc.  
Whipplecharger

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-45-9;

IT IS ORDERED AND RESOLVED: That the installation of the WhippleCharger, manufactured and marketed by Whipple Industries, Inc., 3292 N. Weber Avenue, Fresno, California, 93722 has been found not to reduce the effectiveness of the applicable vehicle pollution control system and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for the following vehicle applications, **excluding any Ford or General Motors vehicle certified to the Ultra Low Emission Vehicle (ULEV) emission standards:**

**General Motors Trucks**

| <u>Year</u> | <u>Engine</u> | <u>Kit #s</u>    | <u>Pulley Dia.</u><br><u>Supercharger/Crankshaft</u> | <u>Compressor Size</u> |
|-------------|---------------|------------------|------------------------------------------------------|------------------------|
| 1999-2002   | 4.8L          | WIK-LR4-4.8LA    | 3.995"/7.50"                                         | 2.1L                   |
| 1999-2002   | 4.8L          | WIK-LR4-4.8LB    | 3.647"/6.25"                                         | 2.3L                   |
| 1999-2002   | 4.8L          | WIK-LR4-4.8LC    | 4.376"/7.50"                                         | 2.3L                   |
| 1999-2002   | 5.3L          | WIK-LM7-5.3LA    | 3.698"/7.50"                                         | 2.1L                   |
| 1999-2002   | 5.3L          | WIK-LM7-5.3LB    | 3.375"/6.25"                                         | 2.3L                   |
| 1999-2002   | 5.3L          | WIK-LM7-5.3LC    | 4.050"/7.50"                                         | 2.3L                   |
| 1996-2000   | 5.7L          | WIK-L31-5.7L     | 2.875"/7.50"                                         | 1.6L                   |
| 1999-2002   | 6.0L          | WIK-LQ4-6.0LA    | 2.976"/7.50"                                         | 2.1L                   |
| 1999-2002   | 6.0L          | WIK-LQ4-6.0LB    | 2.716"/6.25"                                         | 2.3L                   |
| 1999-2002   | 6.0L          | WIK-LQ4-6.0LC    | 3.259"/7.50"                                         | 2.3L                   |
| 1996-2000   | 7.4L          | WIK-L29-7.4LA    | 2.750"/7.50"                                         | 2.1L                   |
| 1996-2000   | 7.4L          | WIK-L29-7.4LB    | 3.125"/7.50"                                         | 2.3L                   |
| 2001-2002   | 8.1L          | WIK-L18-8.1LA    | 2.291"/6.25"                                         | 2.3L                   |
| 2001-2002   | 8.1L          | WIK-L18-8.1LB    | 2.750"/7.50"                                         | 2.3L                   |
| 2001-2002   | 8.1L          | WIK-L18-8.1LA-IC | 2.083"/6.25"                                         | 2.3L                   |
| 2001-2002   | 8.1L          | WIK-L18-8.1LB-IC | 2.500"/7.50"                                         | 2.3L                   |

**Ford Trucks**

| <u>Year</u> | <u>Engine</u> | <u>Kit #s</u>   | <u>Pulley Dia.</u><br><u>Supercharger/Crankshaft</u> | <u>Compressor Size</u> |
|-------------|---------------|-----------------|------------------------------------------------------|------------------------|
| 2001-2002   | 6.8L          | WIK-FT-6.8LA    | 3.485"/7.50"                                         | 2.3L                   |
| 2001-2002   | 6.8L          | WIK-FT-6.8LA-IC | 3.485"/7.50"                                         | 2.3L                   |

### Chrysler PT-Cruiser

| <u>Year</u> | <u>Engine</u> | <u>Kit #s</u>   | <u>Pulley Dia.</u><br><u>Supercharger/Crankshaft</u> | <u>Compressor Size</u> |
|-------------|---------------|-----------------|------------------------------------------------------|------------------------|
| 2001-2002   | 2.4L          | WIK-PT-2.4      | 2.875"/6.30"                                         | 1.2L                   |
| 2001-2002   | 2.4L          | WIK-PT-ULEV-2.4 | 3.000"/6.30"                                         | 1.2L                   |

The WhippleCharger is a supercharger consisting of the following main components: Twin Screw Whipple supercharger, two auxiliary fuel injectors (one injector on the PT-Cruiser) with a stand alone computer, air bypass valve, a low temperature thermostat to replace stock thermostat, and a new air cleaner element for use in the stock air cleaner housing. Intercooler is included on selected kits and denoted as IC in the part number. The maximum boost is 8 psi. on the Ford and General Motors vehicles and 9.2 psi. on the Chrysler PT-Cruisers.

This Executive Order is valid provided that the installation instructions for the supercharger will not recommend tuning the vehicle to specifications different from those of the vehicle manufacturer. Whipple Industries, Inc. recommends that only premium fuel be used.

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

This Executive Order shall not apply to any Whipple Industries WhippleCharger advertised, offered for sale, sold with, or installed on a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

Marketing of the supercharger using any identification other than that shown in this Executive Order or marketing of the supercharger for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of the supercharger shall not be construed as exemption to sell, offer for sale, or advertise any component of the kit as an individual device.

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

This Executive Order is granted based on emissions test data generated on the following test vehicles using the Cold Start CVS-75 Federal Test Procedures. Emission levels of the modified vehicles met the applicable emission standards. The following test results are in grams per mile:

|               | 2001 2.4L (LEV) Chrysler<br>PT-Cruiser |     |     |       | 2002 2.4L (ULEV) Chrysler<br>PT-Cruiser |     |     |       |
|---------------|----------------------------------------|-----|-----|-------|-----------------------------------------|-----|-----|-------|
|               | NMOG                                   | CO  | NOx | HCHO  | NMOG                                    | CO  | NOx | HCHO  |
| Standards     | 0.075                                  | 3.4 | 0.2 | 0.015 | 0.040                                   | 1.7 | 0.2 | 0.008 |
| device w/ dfs | 0.042                                  | 0.9 | 0.1 | 0.001 | 0.035                                   | 1.3 | 0.1 | 0.000 |

|               | 2001 6.8L (LEV) Ford<br>Excursion |     |     |       | 1999 5.3L (LEV) General Motors<br>C1500 |     |     |       |
|---------------|-----------------------------------|-----|-----|-------|-----------------------------------------|-----|-----|-------|
|               | NMOG                              | CO  | NOx | HCHO  | NMOG                                    | CO  | NOx | HCHO  |
| Standards     | 0.195                             | 5.0 | 0.6 | 0.022 | 0.160                                   | 4.4 | 0.4 | 0.018 |
| device w/ dfs | 0.118                             | 1.5 | 0.2 | 0.002 | 0.105                                   | 1.3 | 0.4 | 0.002 |

This Executive Order is also based on On-Board Diagnostic II (OBD II) tests conducted on the same test vehicles. Test data showed that the supercharger when installed on the vehicles did not affect the vehicle's ability to perform its OBD II monitoring.

This Executive Order is granted based on submitted emissions test data which show that emissions are not affected during the Cold-Start CVS-75 Federal Test Procedures. However, the ARB finds that reasonable grounds exist to believe that use of the WhippleCharger may adversely affect emissions of motor vehicles when operating under conditions outside the parameters of the previously prescribed test procedures. Accordingly, the ARB reserves the right to conduct additional emission tests, in the future, as such tests are developed, that will more adequately measure emissions from all cycle phases. If such test results demonstrate that the WhippleCharger adversely affects emissions during off-cycle conditions (defined as those conditions which are beyond the parameters of the Cold-Start CVS-75 Federal Test Procedures), this Executive Order shall be effectively rescinded as of the date the test results are validated.

Further, if such test results or other evidence provides the ARB with reason to suspect that the WhippleCharger will affect the durability of the emission control system, Whipple shall be required to submit durability data to show that the durability of the vehicle emission control system is not, in fact, affected and/or that the add-on or modified part demonstrates adequate durability.

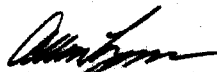
In addition to the foregoing, the ARB reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of Title 13, California Code of Regulations, Section 2222, et seq.

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 WHIPPLE INDUSTRIES, INC.'S WHIPPLECHARGER.

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 has been made after the hearing that grounds for revocation exist.

Executed at El Monte, California, this 2<sup>ND</sup> day of July 2002.

  
Allen Lyons, Chief  
Mobile Source Operations Division