

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-705

Relating to Exemptions Under Section 27156  
of the California Vehicle Code

RAND Solutions, Inc.  
RIPP Supercharger Gen-2 Stage 2

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 RIPP Supercharger Gen-2 Stage 2, manufactured and marketed by RAND Solutions, Inc., 148 Lynhurst Ave., Staten Island, NY 10305, 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 2007 to 2011 model year Jeep vehicles with a 3.8L engine.

The RIPP Supercharger Gen-2 Stage 2 consists of the following main components: Vortech V3-SCI centrifugal supercharger with a 3.5 inch diameter pulley and a stock 6.0 inch diameter crankshaft pulley, intercooler, supercharger by-pass valve, air intake tubing, open element air filter, ECU upgrade without user adjustments, mass air flow sensor housing, MAP sensor, replacement fuel injectors, and new spark plugs. The stock radiator thermostat is retained and no changes are made to any fuel hose. The PCV breather hose may be replaced or modified with an SAE30R9 rated hose or a Chrysler replacement equivalent. **Maximum boost is 8 psi.**

This Executive Order is valid provided that the installation instructions for the RIPP Supercharger Gen-2 Stage 2 will not recommend tuning the vehicle to specifications different from those of the kit manufacturer.

Changes made to the design or operating conditions of the RIPP Supercharger Gen-2 Stage 2, 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 is granted based on submitted emission test data generated on one test vehicle modified with the RIPP Supercharger Gen-2 Stage 2. Test results showed that emission levels, with the supercharger kit installed, met the applicable emission standards when tested using the Cold-Start CVS-75 Federal Test Procedure (FTP) test cycle and the Supplemental Federal Test Procedure (SFTP US06/SC03) test cycle. Examination of the OBD II system showed that the supercharger kit did not affect OBD II system operation.

Results from emissions testing conducted at Automotive Testing and Development Services, Inc., located in Ontario, California, are shown below (in grams per mile with deterioration factors applied).

| 2010 model year Jeep Wrangler | CVS-75 FTP |     |          |       |
|-------------------------------|------------|-----|----------|-------|
|                               | NMOG       | CO  | NOx      | HCHO  |
| Standards, 50k                | 0.040      | 1.7 | 0.05     | 0.008 |
| Device Test w/df              | 0.037      | 1.3 | 0.01     | 0.000 |
|                               | US06/SC03  |     |          |       |
|                               | NMHC+NOx   |     | CO       |       |
| Standards 4k                  | 0.25/0.27  |     | 10.5/3.5 |       |
| Device                        | 0.09/0.12  |     | 2.0/1.2  |       |

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 RIPP SUPERCHARGER GEN-2 STAGE 2.


This Executive Order shall not apply to any RIPP Supercharger Gen-2 Stage 2 advertised, offered for sale, sold with, or installed on a new motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

Marketing of the RIPP Supercharger Gen-2 Stage 2 using any identification other than that shown in this Executive Order or marketing of the RIPP Supercharger Gen-2 Stage 2 for an application other than those listed in this Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board.

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 20<sup>th</sup> day of March 2013.

  
Annette Hebert, Chief  
Mobile Source Operations Division