

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-749

Relating to Exemptions Under Section 27156
of the California Vehicle Code

Kraftwerks
BRZ/FRS/FT86 Supercharger System

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-14-012;

IT IS ORDERED AND RESOLVED: That the installation of the BRZ/FRS/FT86 Supercharger System, manufactured and marketed by Kraftwerks, 2050 5th Street, Norco, California 92860, 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 2013 to 2016 model year Subaru BRZ and Scion FR-S, equipped with a 2.0L engine.

The Supercharger Kit for the Subaru BRZ and Scion FR-S includes the following main parts: Rotrex supercharger, model no. C30-94, with a 95 mm diameter pulley, 127.5 mm diameter crankshaft pulley, intercooler, supercharger by-pass valve, air intake tubing with open element air filter, ECU upgrade without user adjustments, and a MAP sensor. The stock radiator thermostat, fuel injectors, and fuel pump are retained. The PCV breather hose may be replaced or modified with an SAE30R9 rated hose or a Subaru or Scion replacement equivalent. **Maximum boost is 9 psi.**

This Executive Order is valid provided that the installation instructions for the BRZ/FRS/FT86 Supercharger System will not recommend tuning the vehicle to specifications different from those of Kraftwerks

Changes made to the design or operating conditions of the BRZ/FRS/FT86 Supercharger System, as exempt by the Air Resources Board, which adversely affect the performance of the vehicle's pollution control system shall invalidate 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 is granted based on submitted emission test data generated on one test vehicle modified with the BRZ/FRS/FT86 Supercharger System. Test results showed that emission levels, with the BRZ/FRS/FT86 Supercharger System 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 BRZ/FRS/FT86 Supercharger System did not affect OBD II system operation. Results from emission testing conducted at Automotive Testing and Development Services, Inc., located in Ontario, California, are shown below, in grams per mile, with deterioration factors (df) applied to Cold-Start CVS-75 Federal Test Procedure modified test results.

2013 model year Subaru BRZ	CVS-75 FTP			
	NMOG	CO	NOx	HCHO
Standards, 50K*	0.075	3.4	0.05	0.015
Device Test	0.039	0.8	0.03	0.001

	US06/SC03	
	NMHC+NOx	CO
Standards 4k	0.14/0.20	8.0/2.7
Device	0.06/0.05	6.6/1.5

*LEV II LEV CVS-75 FTP emissions standards.

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 BRZ/FRS/FT86 SUPERCHARGER SYSTEM.

Marketing of the BRZ/FRS/FT86 Supercharger System using any identification other than that shown in this Executive Order or marketing of the BRZ/FRS/FT86 Supercharger System 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.

This Executive Order shall not apply to any BRZ/FRS/FT86 Supercharger System advertised, offered for sale, sold with, or installed on a new motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

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 10 day of July 2015.



Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division