

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-140-20  
Relating to Exemptions under Section 27156  
of the Vehicle Code

SPEARCO PERFORMANCE PRODUCTS, INC.  
RAPIDO GROUP AIR-TO-AIR INTERCOOLER KIT NO. 07-0102

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 Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-5;

IT IS ORDERED AND RESOLVED: That the installation of the Rapido Group air-to-air intercooler kit number 07-0102 manufactured by Spearco Performance Products, Inc. has been found not to reduce the effectiveness of required motor vehicle pollution control devices and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for 1985-1987 2.3 liter Ford Merkur vehicles with OEM turbochargers.

This Executive Order is valid provided that installation instructions for this kit will not recommend tuning the vehicle to specifications different from those submitted by the kit manufacturer.

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

Marketing of this kit using an identification other than that shown in this Executive Order or marketing of this 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. Exemption of a kit shall not be construed as an exemption to sell, offer for sale, or advertise any component of a kit as an individual device.

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

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 SPEARCO PERFORMANCE PRODUCTS, INC. RAPIDO GROUP AIR-TO-AIR INTERCOOLER KIT NO. 07-0102.

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


Section 17500 of the Business and Professions Code makes untrue or misleading advertising unlawful, and Section 17534 makes violation punishable as a misdemeanor.

Section 43644 of the Health and Safety Code provides as follows:

"43644. (a) No person shall install, sell, offer for sale, or advertise, or, except in an application to the state board for certification of a device, represent, any device as a motor vehicle pollution control device for use on any used motor vehicle unless that device has been certified by the state board. No person shall sell, offer for sale, advertise, or represent any motor vehicle pollution control device as a certified device which, in fact, is not a certified device. Any violation of this subdivision is a misdemeanor."

Any apparent violation of the conditions of this Executive Order will be submitted to the Attorney General of California for such action as he deems advisable.

Executed at El Monte, California, this 22<sup>nd</sup> day of May, 1987.



K. D. Drachand, Chief  
Mobile Source Division

State of California  
AIR RESOURCES BOARD

Evaluation of Spearco Performance Products, Inc.'s Rapido Group Air-To-Air Intercooler Kit No. 07-0102 for Exemption from the Prohibitions in Vehicle Code Section 27156 in Accordance with Section 2222, Title 13, of the California Administrative Code.

May, 1987

Evaluation of Spearco Performance Products, Inc.'s Rapido Group Air-To-Air Intercooler Kit No. 07-0102 for Exemption from the Prohibitions in Vehicle Code Section 27156 in Accordance with Section 2222, Title 13, of the California Administrative Code.

by

Mobile Source Division

State of California  
Air Resources Board  
9528 Telstar Avenue  
El Monte, CA 91731

(This report has been reviewed by the staff of the California Air Resources Board and approved for publication. Approval does not signify that the contents necessarily reflect the views and policies of the Air Resources Board, nor does mention of trade names or commercial products constitute endorsement or recommendation for use.)

## SUMMARY

Spearco Performance Products, Inc. (Spearco) has requested an update to the existing Air Resources Board Executive Order D-140-18. Request is to include in the exemption the Rapido Group air-to-air intercooler kit number 07-0102 designed for 1985-1987 2.3 liter Ford Merkur vehicles with an OEM turbocharger.

The Rapido Group air-to-air intercooler kit number 07-0102 is manufactured by Spearco Performance Products, Inc. exclusively for Rapido Group. It is identical to the Spearco Performance Products, Inc. air-to-air intercooler kit number 07-0102 which was exempted under Executive Order D-140-18 on January 12, 1987.

Based on the fact that Spearco was previously granted exemption for their intercooler kit number 07-0102 and the only difference between the Spearco and Rapido Group air-to-air intercooler kits is the product name, the staff recommends that Spearco be granted their request and that Executive Order D-140-20 be issued.

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Evaluation of Spearco Performance Products, Inc.'s Rapido Group Air-to-Air Intercooler Kit No. 07-0102 for Exemption from the Prohibitions in Vehicle Code Section 27156 in Accordance with Section 2222, Title 13, of the California Administrative Code.

## I. INTRODUCTION

Spearco Performance Products, Inc. (Spearco), of 7541 Woodman Place, Van Nuys, California 91405, has requested an update to the existing Air Resources Board (ARB) Executive Order (E.O.) D-140-18. Under E.O. D-140-18 several of their air-to-air intercooler kits are exempted from the prohibitions of Vehicle Code Section 27156 for use on the following OEM turbocharged vehicles:

1. 1984-1987 3.0L Nissan 300ZX;
2. 1984-1986 1.8L Nissan 200SX;
3. 1984-1987 2.2L Chrysler Laser, Dodge Daytona, Lebaron, and Dodge 600;
4. 1984-1985 2.6L Mitsubishi Plymouth and Dodge Conquest;
5. 1983-1985 2.6L Mitsubishi Starion;
6. 1983-1986 2.3L Ford Thunderbird, Mustang, and Cougar;
7. 1986 2.2L Omni GLH/Shelby Charger; and
8. 1985-1987 2.3L Ford Merkur.

Request is to include in the exemption the Rapido Group air-to-air intercooler kit number 07-0102 for installation on 1985-1987 2.3 liter Ford Merkur vehicles with an OEM turbocharger.

## II. CONCLUSION

E.O. D-140-18 was granted to Spearco on the basis that their add-on air-to-air intercooler kits do not have an adverse effect on the exhaust emissions when the kits are installed on the requested 1983-1987 OEM turbocharged vehicles. Since the Rapido Group air-to-air intercooler kit number 07-0102 is identical to Spearco's intercooler kit number 07-0102, except for the product name, which has already been exempted under

E.O. D-140-18, the staff concludes that the Rapido Group air-to-air intercooler kit no. 07-0102 will not adversely affect exhaust emissions from vehicles requested for update.

### III. RECOMMENDATIONS

The staff recommends that Spearco be granted an exemption updated as requested and that Executive Order D-140-20 be issued.

### IV. INTERCOOLER SYSTEM DESCRIPTION AND OPERATION

The purpose of the intercooler is to reduce the temperature of the intake air/fuel charge going into the turbocharged engine. This reduction in the intake charge temperature allows a higher charge density (more amount of air per minute flowing through the engine) which means more fuel into the engine at a given intake manifold vacuum/pressure.

The major components of the Spearco Rapido Group air-to-air intercooler kit are a heat exchanger and inter-connecting mandrel bent tubes. They are packaged with installation hardware and instructions and sold as a kit. The kit is designed using different design concepts, including tubing lengths, diameter and bends, to suit the requirements of the individual vehicle.

The air-to-air heat exchanger is located in such a way that the heated charge air flow goes through one section and ambient air flows through the other section, cooling the heated, compressed charge air. The cooled compressed air is then passed out of the heat exchanger to the intake manifold. The location for the installation of the heat exchanger varies with each vehicle model.

### V. DISCUSSION

Spearco's air-to-air intercooler kit is exempted from the prohibitions of California Vehicle Code Section 27156 by the E.O. D-140-18 on the basis that the use of the intercooler would not adversely affect the



vehicle's emissions or degrade the vehicle's driveability. The applicant requested an update to the exemption to include the Rapido Group air-to-air intercooler kit number 07-0102, which is identical to Spearco's 07-0102 kit except for the product name, in the exemption.

Since Spearco's and Rapido Group's intercooler kits number 07-0102 are identical, except for product name, the staff is of the opinion that the Rapido Group air-to-air intercooler kit will not have an adverse effect on the exhaust emissions from vehicles requested for update.