

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-315-2  
Relating to Exemptions Under Section 27156  
of the Vehicle Code.

AMERICAN GAS EQUIPMENT, INC.  
TESCOM HIGH PRESSURE NATURAL GAS ENGINE FUEL REGULATOR  
(P/N 20-1032-2915)

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-45-5;

IT IS ORDERED AND RESOLVED: That the installation of the TESCOM high pressure natural gas engine fuel regulator, P/N 20-1032-2915, manufactured by TESCOM Corporation, 12616 Industrial Boulevard, Elk River, Minnesota 55330 and marketed by American Gas Equipment, Inc., 1111 Green Island Road, American Canyon, California 94589, 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 1993 and older model-year passenger cars, light-duty trucks, medium-duty vehicles and heavy-duty engines operating on compressed natural gas and utilizing an Impco conversion system.

This exemption shall not apply to any device, apparatus, or mechanism advertised, offered for sale or sold with, or installed on, a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

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

Changes made to the design or operating conditions of the device, 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 device using an identification other than that shown in this Executive Order or marketing of this device 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 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 device 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 AMERICAN GAS EQUIPMENT, INC.'S TESCOM HIGH PRESSURE NATURAL GAS ENGINE FUEL REGULATOR.

No claims 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.

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 violations 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 7th day of December, 1993.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

State of California  
AIR RESOURCES BOARD

EVALUATION OF AMERICAN GAS EQUIPMENT, INC.'S  
COMPRESSED NATURAL GAS ENGINE FUEL REGULATOR  
FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE  
CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222,  
TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

December 1993

State of California  
AIR RESOURCES BOARD

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by

Mobile Source Division  
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(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

American Gas Equipment, Inc. of 1111 Green Island Road, American Canyon, California 94589 has applied for an exemption from the prohibitions in Section 27156 of the California Vehicle Code (VC) for the TESCOM high pressure natural gas engine fuel regulator, P/N 20-1032-2915. The TESCOM high pressure natural gas engine fuel regulator, P/N 20-1032-2915, is designed for installation on 1993 and older model-year passenger cars, light-duty trucks, medium-duty vehicles and heavy-duty engines operating on compressed natural gas and utilizing an Impco conversion system.

Based on an engineering evaluation of the TESCOM high pressure natural gas engine fuel regulator, P/N 20-1032-2915, the staff concludes that the TESCOM high pressure natural gas engine fuel regulator, P/N 20-1032-2915, will not adversely affect exhaust emissions from vehicles for which an exemption is requested.

The staff recommends that American Gas Equipment, Inc. be granted an exemption as requested and that Executive Order D-315 be issued.

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EVALUATION OF AMERICAN GAS EQUIPMENT, INC.'S NATURAL GAS ENGINE FUEL REGULATOR  
FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE  
CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE  
CALIFORNIA CODE OF REGULATIONS

I. INTRODUCTION

American Gas Equipment, Inc. of 1111 Green Island Road, American Canyon, California 94589 has applied for an exemption from the prohibitions in Section 27156 of the California Vehicle Code for the TESCO high pressure natural gas engine fuel regulator, P/N 20-1032-2915. The TESCO high pressure natural gas engine fuel regulator, P/N 20-1032-2915, is designed for installation on 1993 and older model-year passenger cars, light-duty trucks, medium-duty vehicles and heavy-duty engines operating on compressed natural gas and utilizing an Impco conversion system.

American Gas Equipment, Inc. has submitted a sample and specifications of the device for evaluation.

II. CONCLUSION

Based on an engineering evaluation of the TESCO high pressure natural gas engine fuel regulator, P/N 20-1032-2915, the staff concludes that the TESCO high pressure natural gas engine fuel regulator, P/N 20-1032-2915, will not adversely affect exhaust emissions from vehicles for which an exemption is requested.

III. RECOMMENDATION

The staff recommends that American Gas Equipment, Inc. be granted an exemption for the TESCO high pressure natural gas engine fuel regulator, P/N 20-1032-2915, for 1993 and older model-year passenger cars, light-duty trucks, medium-duty vehicles and heavy-duty engines operating on compressed natural gas and utilizing an Impco conversion system. The staff also recommends that Executive Order D-315 be issued.

#### IV. DEVICE DESCRIPTION

The TESCOM high pressure natural gas engine fuel regulator, P/N 20-1032-2915, is designed for installation on 1993 and older model-year passenger cars, light-duty trucks, medium-duty vehicles and heavy-duty engines operating on compressed natural gas (CNG) and utilizing an Impco conversion system. As with the Impco high pressure regulator, the function of the TESCOM high pressure natural gas engine fuel regulator is to reduce the CNG tank pressure to 100 psi. The 100 psi outlet pressure is required by the Impco brand second stage regulator. The functional difference between the two regulators is the TESCOM's ability to operate with a maximum tank pressure of 3600 psi compared to 3000 psi of the Impco system.

The regulator operates in conjunction with the OEM computer controlled electronic port fuel injection or carburetor, and emission control systems already certified with the stock engine. The tune-up specifications also remain the same.

#### V. EVALUATION AND DISCUSSION

An engineering evaluation was conducted to evaluate the impact of the TESCOM high pressure natural gas engine fuel regulator on emissions. The TESCOM high pressure natural gas engine fuel regulator functions the same as the Impco regulator it replaces. It reduces the pressure from 3600 psi to 100 psi. American Gas Equipment claims the only difference between the two regulators is the Tescom's ability to withstand an increased maximum tank pressure.



Therefore, since the device functions the same as the Impco's high pressure regulator, the staff concludes that the installation of the TESCO high pressure natural gas engine fuel regulator, P/N 20-1032-2915, will not have an adverse effect on exhaust emissions of 1993 and older model-year passenger cars, light-duty trucks, medium-duty vehicles and heavy-duty engines operating on compressed natural gas and utilizing an Impco conversion system. American Gas Equipment, Inc. submitted all the required information and fulfilled the requirements for exemption.