(Page 1 of 3)

## State of California AIR RESOURCES BOARD

# EXECUTIVE ORDER D-508 Relating to Exemptions Under Section 27156 of the Vehicle Code

## BANSHEE PERFORMANCE RAM JET COLD AIR INDUCTION 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-45-9;

IT IS ORDERED AND RESOLVED: That the installation of the Ram Jet Cold Air Induction System, produced and marketed by Banshee Performance, 1212 E. Walnut Ave., Orange, California 92867, 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 the 1986 to 1993 model-year 5.0 liter V-8 Ford Mustang.

The Ram Jet Cold Air Induction System consists of a hood scoop, airbox, an openelement reusable air filter, assorted brackets, tubing, and hardware.

This Executive Order is valid provided that the installation instructions for the Ram Jet Cold Air Induction System will not recommend tuning the vehicle to specifications different from those of the vehicle manufacturer.

Changes made to the design or operating conditions of the Ram Jet Cold Air Induction 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.

This Executive Order shall not apply to any Ram Jet Cold Air Induction System advertised, offered for sale, sold with, or installed on, a motor vehicle prior to or concurrent with transfer to an ultimate purchaser.

## BANSHEE PERFORMANCE RAM JET COLD AIR INDUCTION SYSTEM

EXECUTIVE ORDER D-508 (Page 2 of 3)

Marketing of the Ram Jet Cold Air Induction System using any identification other than that shown in this Executive Order or marketing of the Ram Jet Cold Air Induction 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.

This Executive Order does not constitute any opinion as to the effect the use of the Ram Jet Cold Air Induction System may have on any warranty either expressed or implied by the vehicle manufacturer.

This Executive Order is granted based on a determination that the Ram Jet Cold Air Induction System will not adversely affect tailpipe emissions when tested under the Cold Start CVS-75 Federal Test Procedure. No systems that affect the Cold Start CVS-75 or running loss emissions are bypassed in installing the Ram Jet Cold Air Induction System. However, the ARB finds that reasonable grounds exist to believe that use of the Ram Jet Cold Air Induction System may adversely affect emissions of motor vehicles when operating under conditions outside the parameters of the CVS-75 Federal Test Procedure. 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 Ram Jet Cold Air Induction System adversely affects emissions during off-cycle conditions (defined as those conditions which are beyond the parameters of the Cold-Start CVS-75 Federal Test Procedure), 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 Ram Jet Cold Air Induction System will affect the durability of the emission control system, Banshee Performance, 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 BANSHEE PERFORMANCE'S RAM JET COLD AIR INDUCTION SYSTEM.

# BANSHEE PERFORMANCE RAM JET COLD AIR INDUCTION SYSTEM

EXECUTIVE ORDER D-508 (Page 3 of 3)

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 \_// day of October 2000.

R. B. Summerfield, Chief Mobile Source Operations Division State of California AIR RESOURCES BOARD

# EVALUATION OF BANSHEE PERFORMANCE'S RAM JET COLD AIR INDUCTION SYSTEM FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

October 2000

by

Mobile Source Operations Division 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.)

1

### **SUMMARY**

Banshee Performance, of 1212 E. Walnut Ave., Orange, California 92867, has applied for an exemption from the prohibitions in Section 27156 of the California Vehicle Code (VC) for the Ram Jet Cold Air Induction System designed for the 1986 to 1993 model-year 5.0 liter V-8 Ford Mustang.

Based on an engineering evaluation of the impact on emissions with the Ram Jet Cold Air Induction System installed, the staff concludes that the Ram Jet Cold Air Induction System will not adversely affect exhaust emissions from vehicles for which the exemption is requested.

The staff recommends that Banshee Performance, be granted an exemption as requested and that Executive Order D-508 be issued.

i

# TABLE OF CONTENTS

Page Number

SUMMARY	i
CONTENTS	ii
I. INTRODUCTION	1
II. CONCLUSION	1
III. RECOMMENDATION	1
IV. RAM JET COLD AIR INDUCTION SYSTEM DESCRIPTION	1
V. DISCUSSION OF THE RAM JET COLD AIR INDUCTION	
SYSTEM	2

Ĩ

# EVALUATION OF BANSHEE PERFORMANCE'S RAM JET COLD AIR INDUCTION SYSTEM FOR AN EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

## I. INTRODUCTION

Banshee Performance, of 1212 E. Walnut Ave., Orange, California 92867, has applied for an exemption from the prohibitions in Section 27156 of the California Vehicle Code (VC) for the Ram Jet Cold Air Induction System designed for the 1986 to 1993 model-year 5.0 liter V-8 Ford Mustang.

## II. CONCLUSIONS

Based on an engineering evaluation of a vehicle with the Ram Jet Cold Air Induction System installed, the staff concludes that the Ram Jet Cold Air Induction System will not adversely affect exhaust emissions from the vehicles for which the exemption is requested.

## III. RECOMMENDATION

The staff recommends that Banshee Performance, be granted an exemption for their Ram Jet Cold Air Induction System for installation on the 1986 to 1993 modelyear 5.0 liter V-8 Ford Mustang.

#### IV. RAM JET COLD AIR INDUCTION SYSTEM DESCRIPTION

The intent of installing the Ram Jet Cold Air Induction System is to increase power output from the engine. The power increase is due to the increase in density of the intake air caused by the hood scoop which draws air from outside of the engine compartment. Air in the engine compartment is often hotter than the air outside of the vehicle. The cooler outside air would have a slightly higher density, and supplying the engine with this denser air charge would produce more power.

The Ram Jet Cold Air Induction System was designed to be installed on 1986 to 1993 model-year 5.0 liter Ford Mustangs. In installing the Ram Jet Cold Air Induction System, the hood of the vehicle must be cut to accommodate the hood scoop. The stock airbox, and intake tubing are replaced by components of the Ram Jet Cold Air Induction System. A reusable open-element air filter is used in the airbox supplied with the Ram Jet Cold Air Induction System.

## DISCUSSION OF THE RAM JET COLD AIR INDUCTION SYSTEM

V.

No testing was required to determine the emissions impact of the Ram Jet Cold Air Induction System. The Ram Jet Cold Air Induction System does not present an extreme modification. The Ram Jet Cold Air Induction System does allow for an increase in induction efficiency, but unlike a supercharger or turbocharger there is no provision or requirement for fuel enrichment. Therefore, an adverse effect on emissions is not expected. Also, the applicable vehicles subject to this Executive Order are not subject to Low-Emission Vehicle standards or On-Board Diagnostic II requirements, so no testing was required.

The staff concludes that the Ram Jet Cold Air Induction System meets the criteria for the exemption of general criteria parts. However, the ARB finds that

-2-

reasonable grounds exist to believe that use of the Ram Jet Cold Air Induction System may adversely affect emissions of motor vehicles when operating under conditions outside the parameters of the previously prescribed test procedure. Accordingly, the ARB reserves the right to conduct additional emission tests in the future, as such tests are developed.

Banshee Performance, has submitted all the required information and fulfilled the requirements for an exemption.