

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-161-8
Relating to Exemptions under Section 27156
of the Vehicle Code

GALE BANKS ENGINEERING
EXHAUST CROSSOVER PIPES, PARTS NO. 52702-STD AND NO. 52702-HO
FOR 1982-1988 CHEVROLET CAMAROS AND PONTIAC FIREBIRDS
EQUIPPED WITH V8 ENGINES

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 exhaust crossover pipes parts No. 52702-STD and No. 52702-HO manufactured by Gale Banks Engineering 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 1982 through 1988 model-year Chevrolet Camaros and Pontiac Firebirds equipped with V-8 engines.

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 device 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 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 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 THE GALE BANKS ENGINEERING EXHAUST CROSSOVER PIPES.

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.

Executive Order D-161-5, dated May 7, 1987, is superseded and of no further force and effect.

Executed at El Monte, California, this 17th day of November, 1987.



K. D. Drachand, Chief
Mobile Source Division

State of California
AIR RESOURCES BOARD

EVALUATION OF GALE BANKS ENGINEERING'S EXHAUST
CROSSOVER PIPES PARTS NO. 52702-STD AND NO. 52702-HO
FOR 1982-1988 CHEVROLET CAMAROS AND PONTIAC FIREBIRDS
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November, 1987

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EQUIPED WITH V8 ENGINES

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

Gale Banks Engineering (Banks) has requested an update to the existing Executive Order D-161-5 which exempted their exhaust crossover pipes, parts No. 52702-STD and No. 52702-H0 from the prohibitions in Vehicle Code Section 27156 for installation on 1982-1987 Chevrolet Camaros and Pontiac Firebirds equipped with V8 engines. Their update request is to include 1988 Chevrolet Camaros and Pontiac Firebirds equipped with V8 engines.

Based on the previously submitted information as well as comparative exhaust emissions data of a 1985 Pontiac Firebird and based on the fact that the 1986, 1987 and 1988 model-year fuel-injected engines are carry-overs from 1985 model-year, the staff concludes that the installation of the Banks crossover pipes will not adversely affect exhaust emissions from the vehicles for which update is requested.

The staff recommends that Banks be granted an exemption update for their crossover pipes and that Executive Order D-161-8 be issued.

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EVALUATION OF GALE BANKS ENGINEERING'S EXHAUST
CROSSOVER PIPES PARTS NO. 52702-STD AND NO. 52702-H0
FOR 1982-1988 CHEVROLET CAMAROS AND PONTIAC FIREBIRDS
EQUIPPED WITH V8 ENGINES

I. INTRODUCTION

Gale Banks Engineering (Banks) of 546 Duggan Avenue, Azusa, California 91702, has requested an update to the existing Executive Order D-161-5 which exempted their exhaust crossover pipes, parts No. 52702-STD and No. 52702-H0 from the prohibitions in Vehicle Code Section 27156 for installation on 1982-1987 Chevrolet Camaros and Pontiac Firebirds equipped with V8 engines. Their update request is to include 1988 Chevrolet Camaros and Pontiac Firebirds equipped with V8 engines.

Banks previously has submitted a completed application, all the necessary information and comparative exhaust emissions data.

II. CONCLUSION

Based on the previously submitted information as well as the comparative exhaust emissions tests performed on a 1985 Pontiac Firebird equipped with a 305 V8 gasoline fuel-injected engine and based on the fact that the 1986, 1987 and 1988 model-year fuel-injected engines are carry-overs from 1985 model-year, the staff concludes that the installation of the Banks crossover pipes will not adversely affect exhaust emissions from the vehicles for which an exemption update is requested.

III. RECOMMENDATIONS

The staff recommends that Banks be granted an exemption update for their crossover pipes to include 1988 Chevrolet Camaros and Pontiac Firebirds equipped with V8 engines and that Executive Order D-161-8 be issued.

IV. EXHAUST CROSSOVER PIPE DESCRIPTION

The Banks crossover pipes are high quality replacements for the original equipment manufacturer (OEM) crossover pipes found on 1982-1988 Camaros and

Firebirds equipped with V8 engines. The function of the exhaust crossover pipes (both OEM and Banks) is to route exhaust gases from the two exhaust manifolds of the V8 engine into a common pipe which then feeds the catalytic converter. The OEM crossover pipes are press bent and the connection between the two manifold runners is a T-type joint. This configuration is restrictive and the T-type joint causes high turbulence. The Banks crossover pipes are designed to eliminate this restriction and turbulence and improve engine performance. The Banks crossover pipes use larger tubing which is mandrel bent to provide smoother bends and the two manifold runners are connected with a Y-type joint to reduce turbulence.

Two slightly different crossover pipes are necessary to cover all 1982-1988 Camaros and Firebirds equipped with V8 engines because the carbureted engines have different exhaust manifolds than the fuel-injected engines. Banks part No. 52702-HO is for fuel-injected engines and No. 52702-STD is for carbureted engines.

The installation of the Banks crossover pipes do not require the disconnection or removal of any OEM emission control components and does not alter the location of the catalytic converter. Installation instructions, included in every kit show how to properly install the Banks crossover pipes (Appendix 1). The Banks kit identification label is shown in Appendix 2.

VI. DISCUSSION

Banks crossover pipes for 1982-1987 Camaros and Firebirds equipped with V8 engines were granted exemption (E.O. D-161-5) on May 7, 1987. Exemption was granted on the basis that Banks crossover pipes appear to be as durable as the OEM crossover pipes which they are designed to replace and that the effectiveness of vehicle's pollution control system was not reduced.

Gale Banks Engineering is making their Banks crossover pipes available for installation on 1988 Camaros and Firebirds equipped with V8 engines. Their Banks crossover pipes are identical to those previously approved by the Air Resources Board.

In response to the request, the staff compared the engine design of the 1985, 1986, 1987 and 1988 models. The staff also found that the exhaust crossover pipes would not affect the OBD system. Since the 1988 Chevrolet Camaros and Pontiac Firebirds equipped with V8 engines are carry-overs from 1985-1987 model-year engines, and based on the previously submitted information as well as the comparative exhaust emissions tests performed on a 1985 Pontiac Firebird equipped with a 305 CID V8 gasoline fuel-injected engine, the staff is of the opinion that the installation of the Banks crossover pipes will not adversely affect exhaust emissions from the vehicles for which an exemption update is requested.

BANKS POWER PACK F-BODY EXHAUST SYSTEM
FOR '82 THRU '88 V-8 CAMARO AND FIREBIRD

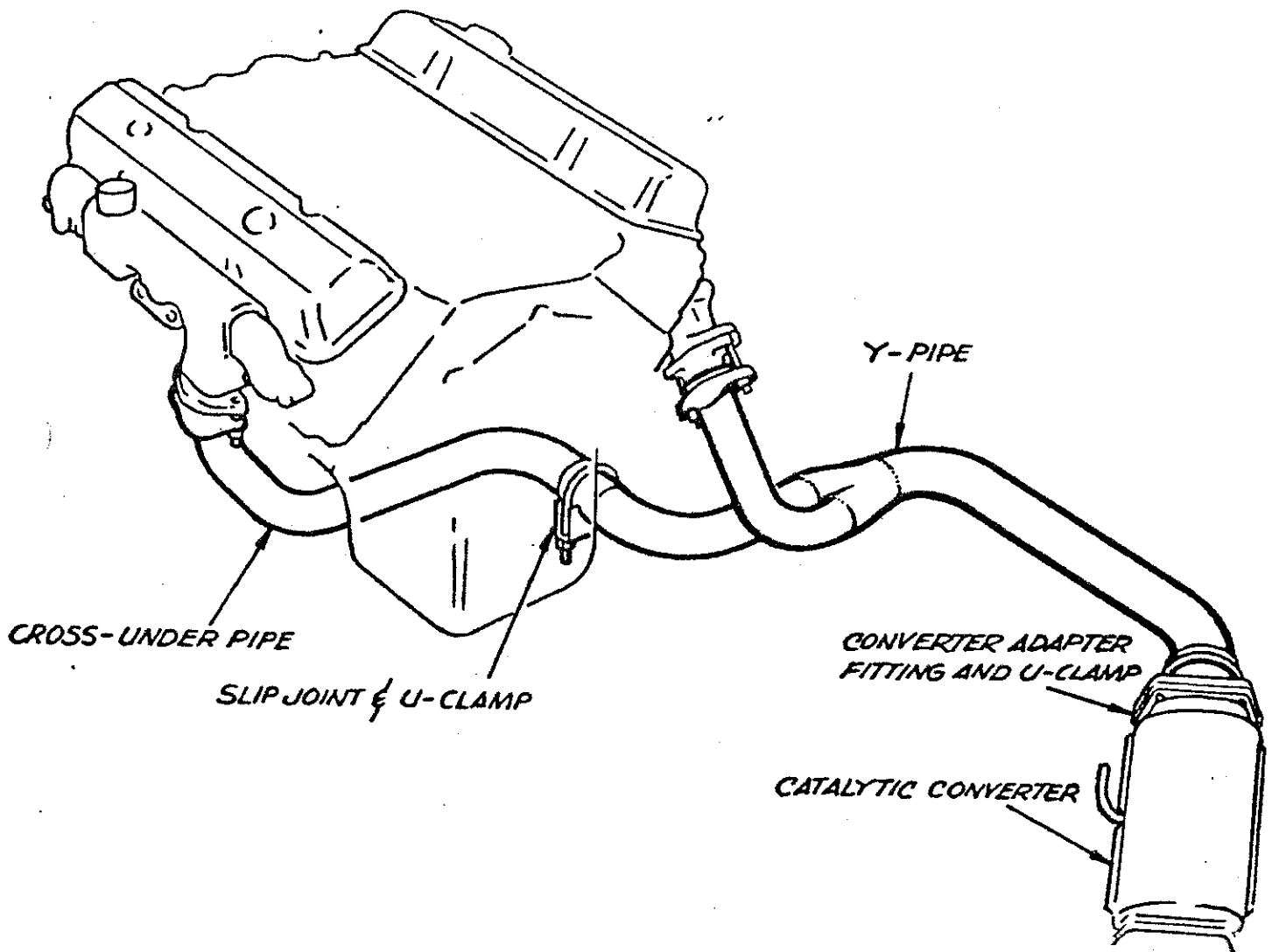
Instructions for Installation

1. Raise vehicle, support on jacks or ramps of suitable capacity for vehicle weight.
2. Disconnect exhaust head pipe assembly at both exhaust manifolds and at catalytic converter. Remove head pipe assembly.
3. Assemble new cross-under pipe and Y-pipe outside of vehicle. Do not install U-clamp. See illustration.
4. Assemble catalytic converter adapter flange to Y-pipe. Do not install U-clamp. See illustration.
5. Lift assembled Y-pipe into place and reattach to engine exhaust manifolds. Rotate cross under pipe in slip joint as required for alignment. Tighten nuts on exhaust manifold studs, but leave just loose enough to move piping for alignment.
6. Reattach catalytic converter to converter adapter flange. Rotate slip joint as required for realignment. Tighten mounting bolts (tighten factory U-clamp on slip joint converters).
7. Check to insure all tubing pieces are properly aligned, and have clearance to floorboards, driveshaft, etc.
8. Tighten nuts on engine exhaust manifold studs.
9. Install and tighten one 2 1/2" U-clamp on Y-pipe assembly.
10. Install and tighten one 3" U-clamp on converter adapter flange fitting.
11. Start engine. Listen for any exhaust leaks and tighten joints as required.

banks

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CARAMO / FIREBIRD EXHAUST SYSTEM



banks

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banks

GALE BANKS ENGINEERING
546 DUGGAN AVE., AZUSA, CA. 91702

EXHAUST SYSTEM FOR CAMARO/FIREBIRD

MODEL NOS. 52702 STD/HO CARB E.O. No. _____