

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-204  
Relating to Exemptions Under Section 27156  
of the Vehicle Code

COAST FILTRATION, INC.  
CATALYTIC FUEL CONDITIONER

WHEREAS, Vehicle Code Section 27156 and Title 13 California Code of Regulations (hereafter "CCR") Section 2222(e), authorize the California Air Resources Board (ARB) and its Executive Officer to exempt add-on and modified parts from the prohibitions of Vehicle Code Section 27156.

WHEREAS, Coast Filtration, Inc. has applied to the ARB for exemption from the prohibitions of Vehicle Code Section 27156 for the Catalytic Fuel Conditioner model #0, for motorcycles, passenger cars and light-duty trucks, and model #1, for medium-duty vehicles, heavy-duty engines and diesel engines.

WHEREAS, pursuant to the authority vested in the Executive Officer by Health and Safety Code Section 39515 and in the Chief, Mobile Source Division by Health and Safety Code Section 39516 and Executive Order G-45-5, the Air Resources Board finds:

1. The Catalytic Fuel Conditioner is an add-on device attached to the fuel line in a motor vehicle.
2. The Catalytic Fuel Conditioner is intended for use with a required motor vehicle pollution control system.
3. The Catalytic Fuel Conditioner by being installed in the engine alters the original design of a motor vehicle pollution control system.
4. The Catalytic Fuel Conditioner is a device subject to the prohibitions of Vehicle Code Section 27156 and an add-on part as defined by 13 CCR Section 1900(b)(1).
5. The Catalytic Fuel Conditioner does not reduce the effectiveness of any required motor vehicle pollution control device.
6. The Air Resources Board, in the exercise of technical judgement, is aware of no basis on which the Catalytic Fuel Conditioner will provide an increase in fuel economy.

7. It has not been determined what effect use of the Catalytic Fuel Conditioner may have on any warranty, either expressed or implied, by the manufacturer of a motor vehicle on which the device is installed.
8. The Catalytic Fuel Conditioner is not a certified motor vehicle pollution control device pursuant to Health and Safety Code Section 43644.
9. The Air Resources Board by granting an exemption to Coast Filtration, Inc. for the Catalytic Fuel Conditioner does not recommend or endorse in any way the Catalytic Fuel Conditioner for emissions reduction, fuel economy, or any other purpose.

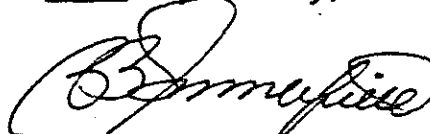
IT IS HEREBY RESOLVED that the Catalytic Fuel Conditioner is exempt from the prohibitions of Vehicle Code Section 27156 for installation on 1990 and earlier model-year vehicles powered with gasoline or diesel internal combustion engines subject to the following conditions:

1. 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.
2. No changes are permitted to the device as described in the application for exemption. Any changes to the device, applicable model year, or other factors addressed in this order must be evaluated and approved by the Air Resources Board prior to marketing in California.
3. 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 the Executive Order shall be prohibited unless prior approval is obtained from the Air Resources Board. Exemption of this product shall not be construed as an exemption to sell, offer for sale, or advertise any component of the product as an individual device.
4. Any oral or written references to this Executive Order or its content by Coast Filtration, Inc., its principals, agents, employees, distributors, dealers, or other representatives must include the disclaimer that the Executive Order or the exemption it provides is not an endorsement or approval of any fuel economy or emissions reduction claims for the Catalytic Fuel Conditioner and is only a finding that the device is exempt from the prohibitions of Vehicle Code Section 27156.

5. 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 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 after hearing that grounds for revocation exist.

Executed at El Monte, California, this 16<sup>th</sup> day of July, 1990.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

State of California  
AIR RESOURCES BOARD

EVALUATION OF COAST FILTRATION, INC.'S CATALYTIC FUEL CONDITIONER  
FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE  
SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE  
CALIFORNIA ADMINISTRATIVE CODE

July 1990

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by

Mobile Source Division  
State of California  
Air Resources Board  
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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

Coast Filtration, Inc., of 142 Viking Ave, Brea, California 92621, has applied for exemption from the prohibitions in Section 27156 of the California Vehicle Code for their Catalytic Fuel Conditioner (CFC). The CFC is designed for installation on 1990 and older model year gasoline and diesel powered vehicles. CFC model #0 is designed for motorcycles, passenger cars and light-duty trucks. CFC model #1 is designed for medium-duty vehicles, heavy-duty engines and diesel engines.

Previously, the Air Resources Board exempted four similar devices; the "Moleculator Fuel Energizer" and the "Fuel Dominator" by Internal Energy Management Corporation, the "Top Eliminator" by Top Eliminator., and the "Fuel-Cat" by Fuel-Cat, Inc. Based on the engineering evaluation of the device and exemption of similar devices, the staff believes the CFC does not have any adverse effect on exhaust emissions. The staff recommends the Coast Filtration, Inc.'s Catalytic Fuel Conditioner be exempted from the prohibitions in Vehicle Code Section 27156 and that Executive Order D-204 be issued.

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EVALUATION OF COAST FILTRATION, INC.'S CATALYTIC FUEL CONDITIONER  
FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN  
ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA ADMINISTRATIVE CODE

I. INTRODUCTION

Coast Filtration, Inc., of 142 Viking Ave, Brea, California 92621, has applied for exemption from the prohibitions of Section 27156 of the California Vehicle Code for the Catalytic Fuel Conditioner (CFC). The device is designed for installation on 1990 and older model-year gasoline and diesel powered vehicles. CFC model #0 is designed for motorcycles, passenger cars and light-duty trucks. CFC model #1 is designed for medium-duty vehicles, heavy-duty engines and diesel engines.

The applicant submitted drawings and specifications of the device for our evaluation.

II. CONCLUSIONS

Previously the Air Resources Board (ARB) exempted four similar devices: the "Moleculator Fuel Energizer" and the "Fuel Dominator" by Internal Energy Management Corporation, the "Top Eliminator" by Top Eliminator, Inc., and the "Fuel-Cat" by Fuel-Cat, Inc. Based on the engineering evaluation of the device and prior exemptions issued to devices that operate in a manner similar to the CFC, the staff believes that the CFC will not have any adverse effects on the exhaust emissions from gasoline and diesel powered vehicles.



### III. RECOMMENDATION

The staff recommends Coast Filtration Inc. be granted an exemption from the prohibitions in California Vehicle Code Section 27156 for their Catalytic Fuel Conditioner and that Executive Order D-204 be issued.

### IV. DEVICE DESCRIPTION

The CFC device is a cylindrical shape device with a core of metal alloy. The metal alloy is composed of nickel, copper, zinc, and other semi-precious metals. The device is narrowed on both ends in order to match the fuel lines. The CFC is 4 inches long with core length of 2 inches, and an inner core diameter of .5 inches. The CFC installation instructions and drawings are shown in Appendix A and B, respectively.

The device is installed in series with the vehicle fuel line. According to the applicant, the CFC utilizes a dissimilar metal alloy bar that energizes the fuel molecules prior to the fuel being vaporized in a carburetor or fuel injection system.

### V. DISCUSSION

The ARB did not perform any emission or fuel economy tests to substantiate the claims made by the manufacturer. No adjustments such as timing, EGR, fuel metering or any other engine adjustments are included in the installation instructions. Previously, the ARB exempted three similar devices: "Polarion-X" by AZ Industries, Inc., "Petro-Mizer MKI" by P and M Research and Development Laboratory, and "Fuel Energizer" by The Magnetizer Group, Inc. The exemptions were granted based on back-to-back CVS-testing, fuel economy testing

and engineering evaluation. Because of the previous exemptions issued to similar devices with the same operating principle and the fact that qualifying for an exemption is based on not adversely affecting exhaust emissions, the staff recommends that Coast Filtration, Inc. be granted an exemption as requested.

APPENDIX

APPENDIX A

COAST FILTRATION, INC.

Item 9 (A)

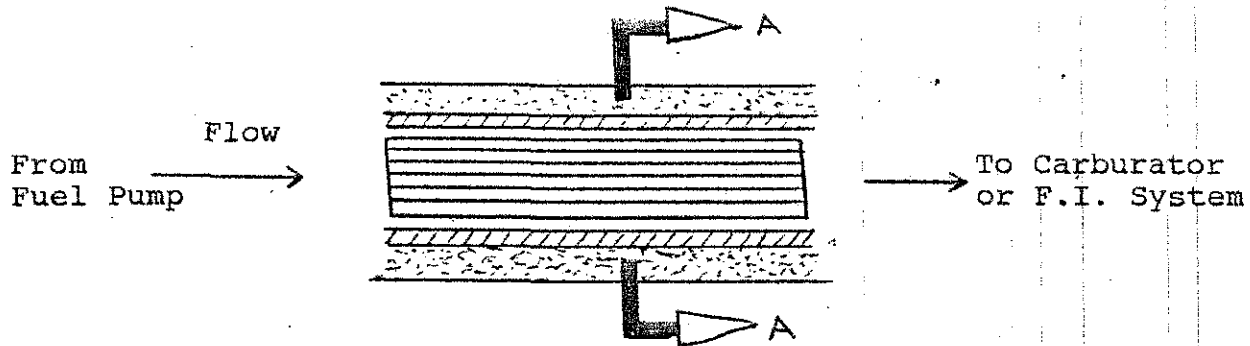
CATALYTIC FUEL CONDITIONER (C.F.C.)

Description:

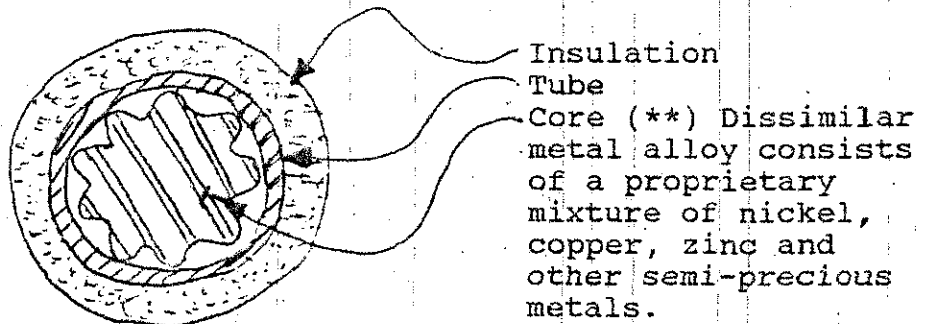
The C.F.C. consists of a tube and an alloy core (slug) of dissimilar metals. (\*\*)

The C.F.C. includes end fittings that facilitate installation in-line on the fuel line going to the carburetor or F.I. system.

Fuel passes through the C.F.C. where natural ion-exchange occurs due to contact with the dissimilar metal core. It is important that the C.F.C. be kept isolated (un-grounded) from making contact with other metal parts of the engine.



VIEW  
A-A



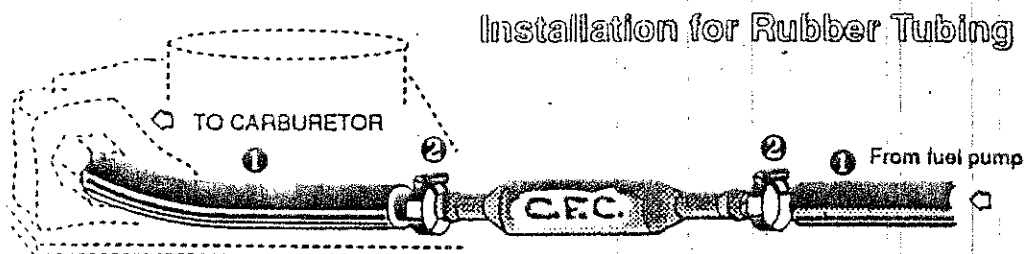
## APPENDIX B

COAST FILTRATION, INC.

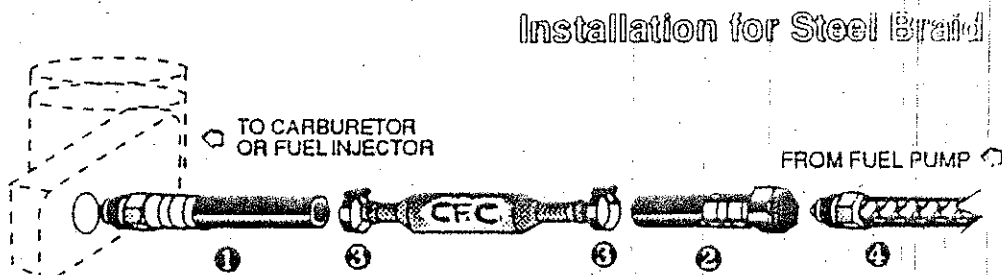
### CATALYTIC FUEL CONDITIONER

#### Item 9(c) Installation Instructions

Location: Install the C.F.C. as close as possible to the carburetor or fuel block. Please insure the C.F.C. is not touching or resting on any metal surfaces. If the unit is grounded it may not work. Professional installation is recommended.



- 1) Cut rubber fuel line (1) no more than 12" from carburetor.
- 2) Place clamps (2) on each end of the fuel line.
- 3) Insert C.F.C. into rubber fuel line.
- 4) Tighten clamps securely
- 5) Check for leaks.



- 1) Disconnect the steel braid fuel line (4) from the carburetor or fuel block, slide fuel line back to make room for C.F.C.
- 2) Special hose fittings (1) and (2) are provided by C.F.I. or person doing installation (high pressure).
- 3) Insert C.F.E. after putting clamps onto hose.
- 4) Tighten fittings (1) at carburetor or F.I., then tighten (2) connection.
- 5) Tighten clamps (3) securely
- 6) Check for leaks.