State of California AIR RESOURCES BOARD

EXECUTIVE ORDER D-223 Relating to Exemptions Under Section 27156 of the Vehicle Code

UNITED AUTO DISMANTLING, INC. GAS TANK RESTRICTOR, MODELS 201, 202 AND 203

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 Gas Tank Restrictor, Models 201, 202 and 203 manufactured by United Auto Dismantling, Inc. of 2115 South Union Drive, Bakersfield, CA 93307, has been found not to reduce the effectiveness of the applicable vehicle pollution control system and, therefore, is exempt from the prohibitions of Section 27156 of the Vehicle Code for repairing damaged or missing fuel fill pipe restrictors on the following vehicles certified for unleaded gasoline.

- Model 201 GM, Ford, AMC, Chrysler vehicles with "screw in" type fuel filler caps, and Chrysler vehicles with "twist on" type fuel filler caps. All other foreign and domestic vehicle with pipe diameter of 1.80 to 1.95 inches.
- Model 202 Ford vehicles with stepped double flange on inside tube. All other foreign and domestic vehicles with pipe diameter of 2.00 to 2.09 inches.
- Model 203 Chrysler vehicle with "funnel" shaped gas filler neck which have an inside diameter exceeding 2.095 inch, and Ford vehicles gas filler necks without stepped diameter or double flange. All other foreign and domestic vehicle with pipe diameter of 2.10 to 2.25 inches.

This Executive Order is valid provided that installation instructions for these gas tank restrictors will not recommend tuning the vehicle to specifications different from those submitted by United Auto Dismantling, Inc.

Changes made to the design or operating conditions of the device, as exempt by the Air Resources Board, which adversely affect the performance of a vehicle's pollution control system shall invalidate this Executive Order. UNITED AUTO DISMANTLING, INC. GAS TANK RESTRICTOR, MODELS 201, 202 AND 203

Marketing of this device using any 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 the device shall not be construed as exemption to sell, offer for sale, or advertise any component of the kit as an individual device.

This Executive Order does not constitute any opinion as to the effect 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 CLAIMS OF THE APPLICANT CONCERNING ANTI-POLLUTION BENEFITS OR ANY ALLEGED BENEFITS OF UNITED AUTO DISMANTLING, INC.'S GAS TANK RESTRICTOR, MODELS 201, 202 AND 203.

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.

Executive Order D-160-2, dated August 18, 1988, is superseded and of no further force and effect.

Executed at El Monte, California, this $2^{\frac{D}{2}}$ day of May, 1991.

Koma-Kaye,

R. B. Summerfield Assistant Division Chief Mobile Source Division

State of California AIR RESOURCES BOARD

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EVALUATION OF UNITED AUTO DISMANTLING, INC.'S GAS TANK RESTRICTOR, MODELS 201, 202 AND 203 FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

State of California AIR RESOURCES BOARD

EVALUATION OF UNITED AUTO DISMANTLING, INC.'S GAS TANK RESTRICTOR, MODELS 201, 202 AND 203 FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

by

Mobile Source Division State of California Air Resources Board 9528 Telstar Avenue El Monte, CA 91731-2990

(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

United Auto Dismantling, Inc., of 2115 South Union Drive, Bakersfield, CA 93307, has requested an update to Executive Order D-160-2 from the prohibitions of Vehicle Code Section (VC) 27156 for their Gas Tank Restrictor, Models 201, 202 and 203. The exemption update will reflect a change in ownership; these devices were previously owned by Advanced Emission Technology (AET). AET has submitted a letter informing the Air Resources Board (ARB) of the transfer of ownership to United Auto Dismantling, Inc.

These devices are designed to replace damaged or tampered original equipment manufacturer (OEM) unleaded fuel fill pipe restrictors on the following catalyst equipped vehicles:

Model 201 - GM, Ford, AMC, Chrysler vehicles with "screw in" type fuel filler caps, and Chrysler vehicles with "twist on" type fuel filler caps. All other foreign and domestic vehicles with pipe diameter of 1.80 to 1.95 inches.

Model 202 - Ford vehicles with stepped double flange on inside tube. All other foreign and domestic vehicles with pipe diameter of 2.00 to 2.09 inches.

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Model 203 - Chrysler vehicle with "funnel" shaped gas filler neck which have an inside diameter exceeding 2.095 inches and Ford vehicle with gas filler necks without stepped diameter of double flange. All other foreign and domestic vehicles with pipe diameter of 2.10 and 2.25 inches.

This device is only applicable for replacing OEM restrictors where remains of the OEM restrictor exists.

The staff recommends adoption of Executive Order D-223 granting United Auto Dismantling, Inc. exemption for the Gas Tank Restrictor, Models 201, 202 and 203 from the prohibitions in Vehicle Code Section (VC) 27156. TABLE OF CONTENTS

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EVALUATION OF UNITED AUTO DISMANTLING, INC.'S GAS TANK RESTRICTOR MODELS 201, 202 AND 203 FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA CODE OF REGULATIONS

I. <u>INTRODUCTION</u>

Advanced Emission Technology (AET) of Vancouver, Washington has received an exemption from the prohibitions of Section 27156 of the Vehicle Code under Executive Order D-160-2 for its Gas Tank Restrictor, Models 201, 202 and 203. This device is designed to replace damaged or tampered original equipment manufacturer (OEM) unleaded fuel fill pipe restrictors on the following catalyst equipped vehicles:

- Model 201 GM, Ford, AMC, Chrysler vehicles with "screw in" type fuel filter caps, and Chrysler vehicles with "twist on" type fuel filler caps. All other foreign and domestic vehicles with pipe diameter of 1.80 to 1.95 inches.
- Model 202 Ford vehicles with stepped double flange on inside tube. All other foreign and domestic vehicles with pipe diameter of 2.00 to 2.09 inches.
- Model 203 Chrysler vehicles with "funnel" shaped gas filler neck which have an inside diameter exceeding 2.095 inches and Ford vehicles with gas filler necks without stepped diameter or double flange. All other foreign and domestic vehicles with pipe diameter of 2.10 and 2.25 inches.

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This device is only applicable for replacing OEM restrictors where remains of the OEM restrictor exists.

United Auto Dismantling, Inc. (United), of 2115 South Union Drive, Bakersfield, California 93307, has requested an update to Executive Order D-160-2 to reflect a change in ownership of the Gas Tank Restrictor, Models 201, 202 and 203. AET submitted a statement to the ARB stating that United has acquired all rights to the gas tank restrictors. United claims that there is no change in the design of the original units or their application.

II. <u>CONCLUSIONS</u>

Based on the previous evaluation of the gas tank restrictors, the staff concludes that the United Gas Tank Restrictor, Models 201, 202 and 203 meets the requirements for a VC 27156 exemption and will not have any adverse effects on the exhaust emissions from gasoline powered vehicles.

III. <u>RECOMMENDATION</u>

The staff recommends United Auto Dismantling, Inc. be granted an exemption from the prohibitions in California Vehicle Code Section 27156 for their Gas Tank Restrictor, Models 201, 202 and 203 and that Executive Order D-223 be issued.

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IV. <u>DEVICE DESCRIPTION</u>

The Gas Tank Restrictor device is an unleaded fuel fill pipe restrictor to replace damaged or tampered OEM restrictors. It is not intended to replace OEM restrictors which have been completely removed; without any support (remnant from the damaged or tampered OEM restrictor) it would fall through the fill pipe into the fuel tank.

The device (all three models) is made of 0.028 inch sheet metal (see Appendices A, B and C for drawings). The device has a 0.915 inch diameter filling hole for passing the nozzle to the required depth in the fill pipe. The filling hole has an eccentricity of 0.230 inch with respect to the centerline of the fill pipe neck. The overall diameter of the device is 1.95 inches (model 201), 2.072 inches (model 202), or 2.210 inches (model 203).

The diameter of the device where the teeth have been removed is 1.56 inches (only models 201 and 203). Attached to the hind side of the device is a spring loaded 0.029 inch thick flapper door which covers the filling hole and is maintained in the closed position.

The device has 16 (model 202) or 12 (models 201 and 203) sharp teeth which are unequally spaced around the device allowing the device to be pushed into the fill pipe and to fit on top of the remains of the OEM restrictor. According to the installation instructions (see Appendix D), the device can be installed without removing the gas tank or gas filler tube from the vehicle. Once installed, it cannot be removed since the teeth are all bent upward, and the device is squeezed tightly against the fill pipe wall.

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V. <u>DISCUSSION</u>

United has purchased AET and the rights to their products which are exempted from VC 27156 under Executive Order D-160-2. All the necessary equipment used by AET to manufacture Gas Tank Restrictor, Models 201, 202 and 203 will be acquired by United. The manufacturing process and materials used will remain the same and some personnel from AET will be retained by United as consultants.

The staff is of the opinion that the United Gas Tank Restrictor, Models 201, 202 and 203, meets the requirements for exemption from the prohibitions of Vehicle Code Section 27156.

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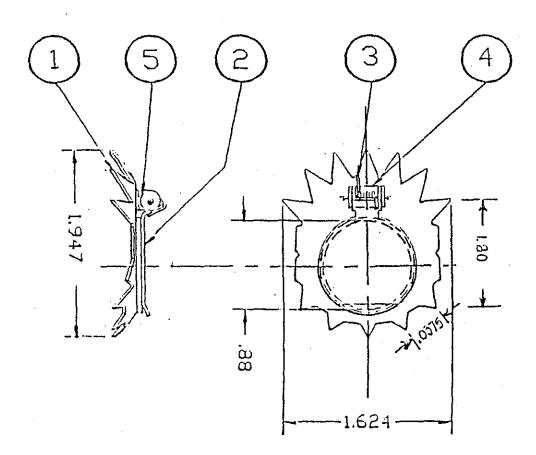
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APPENDIX

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APPENDIX A



"MODEL 201"

1. Metal Frame - 0.028 thickness

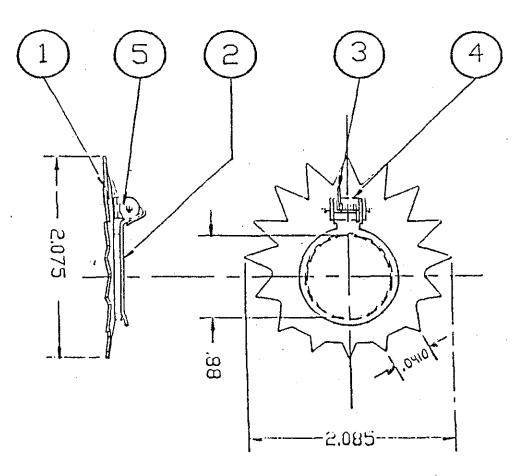
2. Flapper Door - 0.029 thickness

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3. Spring

4. Frame for Flapper

5. Rivet



"MODEL 202"

1. Metal Frame - 0.028 thickness

- 2. Flapper Door 0.029 thickness
- 3. Spring
- 4. Frame for Flapper
- 5. Rivet

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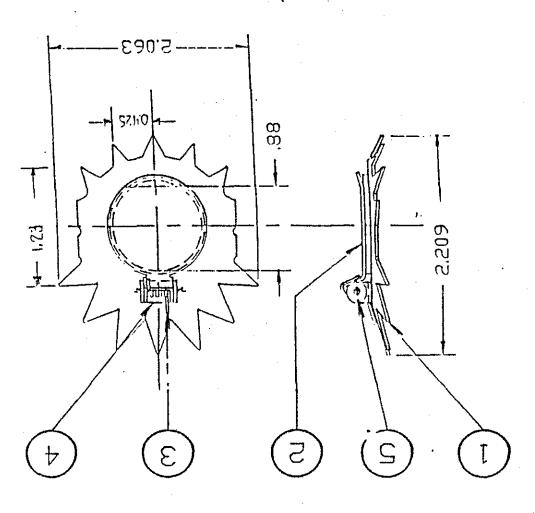
4. Frame tor Flapper

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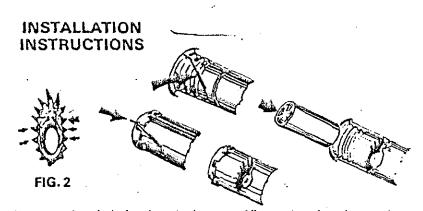
2. Flapper Door - 0.029 thickness

A. Netal Frame - 0.028 thickness

"NODEL 203"



APPENDIX C



When resizer is being installed, use a 1" wooden dowel to make sure worn or tampered hole is large enough to accept unit. The Restrictor with flapper assembly will require a much larger opening. Insert the Ford type 202 or the 302 vertically (on edge) through the two notches in the lip. Unit will then drop into pipe. After positioning, drive into place using a suitable sized wooden dowel or installation tool part no. 304. See fig. 1.

Then insert the device at a 45 degree angle with the top 7 teeth still outside the lip and the bottom 5 teeth inside the pipe touching the old restrictor cross section. After proper positioning, drive into place with a wooden dowel against the top 7 teeth but below the bend line. If the 203 is used on a Chrysler neck with a wide lip, snap off the 5th tooth for easier insertion. See fig. 2.

When using the 203 on Ford vehicles, refer to installation instructions above for the 202.

If the original hole does not exist or is greatly enlarged, Restrictor with flapper should always be installed so that the offset filler hole is positioned toward the bottom of the filler pipe.

LIMITATIONS

All makes and models where tampering is so extensive that original equipment metal has been completely removed, in this case use Universal Part No. D-160.

Device will not "seat" properly outside of diameter range listed on chart to the right:

Part No's	Inches
201, 301	1.950
202, 302	2.090
203, 303	2.250



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