State of California AIR RESOURCES BOARD

EXECUTIVE ORDER D-203 Relating to Exemptions Under Section 27156 of the Vehicle Code

SOFTRON INTERNATIONAL SOFTRON MODEL #100 FLUID 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, Softron International has applied to the ARB for exemption from the prohibitions of Vehicle Code Section 27156 for the Softron model #100 fluid conditioner.

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 Softron model #100 fluid conditioner is an add-on device attached to the fuel line in a motor vehicle.
- 2. The Softron model #100 fluid conditioner is intended for use with a required motor vehicle pollution control system.
- 3. The Softron model #100 fluid conditioner by being installed in the engine alters the original design of a motor vehicle pollution control system.
 - 4. The Softron model #100 fluid 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 Softron model #100 fluid 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 Softron model #100 fluid conditioner will provide an increase in fuel economy.

SOFTRON INTERNATIONAL SOFTRON MODEL #100 FLUID CONDITIONER*

- 7. It has not been determined what effect use of the Softron model #100 fluid conditioner may have on any warranty, either expressed or implied, by the manufacturer of a motor vehicle on which the device is installed.
- The Softron model #100 fluid 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 Softron International for the Softron model #100 fluid conditioner does
 not recommend or endorse in any way the Softron model #100 fluid conditioner for emissions reduction, fuel economy, or any other purpose.

IT IS HEREBY RESOLVED that the Softron model #100 fluid conditioner is exempt from the prohibitions of Vehicle Code Section 27156 for installation on 1989 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 an 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 Softron International, 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 Softron model #100 fluid conditioner and is only a finding that the device is exempt from the prohibitions of Vehicle Code Section 27156.

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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 $\underline{944}$ day of July, 1990.

R. B. Summerfield Assistant Division Chief Mobile Source Division

State of California AIR RESOURCES BOARD

EVALUATION OF SOFTRON INTERNATIONAL'S SOFTRON MODEL #100 FLUID CONDITIONER FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA ADMINISTRATIVE CODE State of California AIR RESOURCES BOARD

EVALUATION OF SOFTRON INTERNATIONAL'S SOFTRON MODEL #100 FLUID CONDITIONER FOR EXEMPTION FROM THE PROHIBITIONS OF VEHICLE CODE SECTION 27156 IN ACCORDANCE WITH SECTION 2222, TITLE 13, OF THE CALIFORNIA ADMINISTRATIVE CODE

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

Softron International, of 13757 Seminole Drive, Chino, California 91710, has applied for exemption from the prohibitions in Section 27156 of the California Vehicle Code for their Softron model #100 fluid conditioner. The fluid conditioner is designed for installation on 1989 and older model year gasoline and diesel powered vehicles.

Previously, the Air Resources Board 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 Magnetizer Group, Inc., with the same basic operating principles. Based on the engineering evaluation of the device and exemption of similar devices, the staff believes the Softron model #100 fluid conditioner does not have any adverse effect on exhaust emissions. The staff recommends the Softron model #100 fluid conditioner be exempted from the prohibitions in Vehicle Code Section 27156 and that Executive Order D-203 be issued.

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I. <u>INTRODUCTION</u>

Softron International, of 13757 Seminole Drive, Chino, California 91710, has applied for exemption from the prohibitions of Section 27156 of the California Vehicle Code for the Softron model #100 fluid conditioner. The device is designed for installation on 1989 and older model-year gasoline and diesel powered vehicles.

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

II. <u>CONCLUSIONS</u>

Previously the Air Resources Board (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. Based on the engineering evaluation of the device and prior exemptions issued to devices that operate in a manner similar to the Softron model #100 fluid conditioner, the staff believes that the Softron model #100 fluid conditioner will not have any adverse effects on the exhaust emissions from gasoline and diesel powered vehicles.

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III. <u>RECOMMENDATION</u>

The staff recommends Softron International be granted an exemption from the prohibitions in California Vehicle Code Section 27156 for their Softron model #100 fluid conditioner and that Executive Order D-203 be issued.

IV. DEVICE DESCRIPTION

The Softron model #100 fluid conditioner is a magnetic device designed for installation on fuel lines. The device traps the fuel line between a magnet, enclosed in a stainless steel casing, and a stainless steel top cover. The fuel line is held on a grove in the magnet by a hose clamp embedded in the magnet. The hose clamp is adjustable for various fuel line sizes. The magnet is cylindrically shaped with a 1.5 inches diameter and a 1.25 inches height. The stainless steel cover is a cylinder with a 1.75 inch diameter and 1.25 inch height. Appendix A contains an engineering drawing of the device and Appendix B shows the installation instructions.

V. <u>DISCUSSION</u>

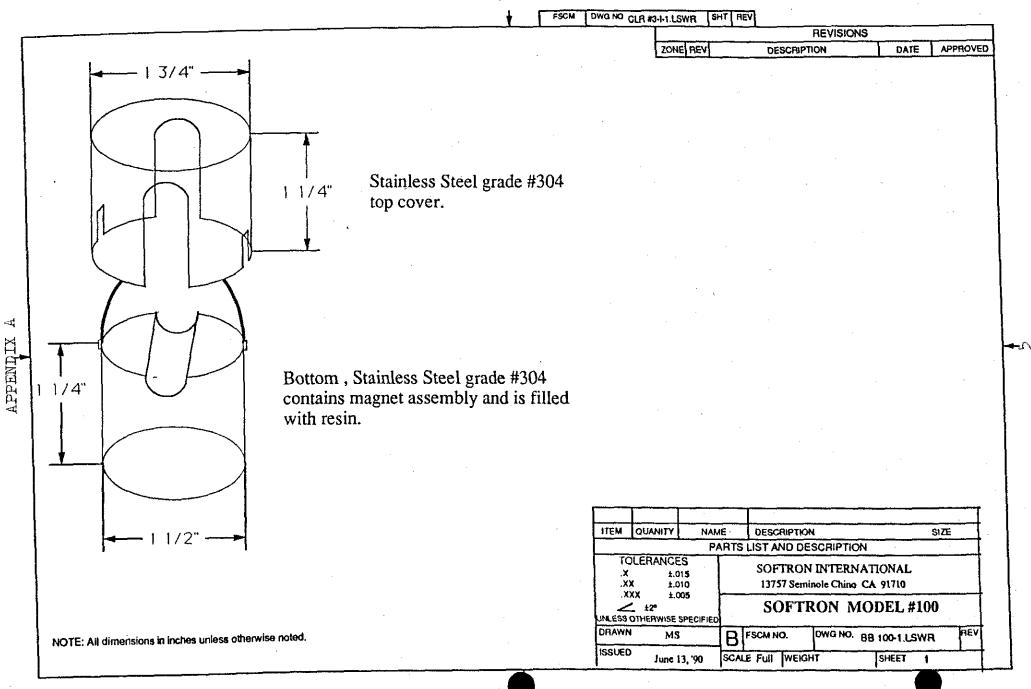
Softron International claims when the device is installed on a vehicle's fuel line, the hydrocarbons ionize making the fuel more conductive to the ignition by the spark plug, or by the heat of extreme compression in a diesel engine. Since the entire content of fuel is more conductive, combustion is more complete, reducing harmful emissions, and generally improving performance and fuel efficiency.

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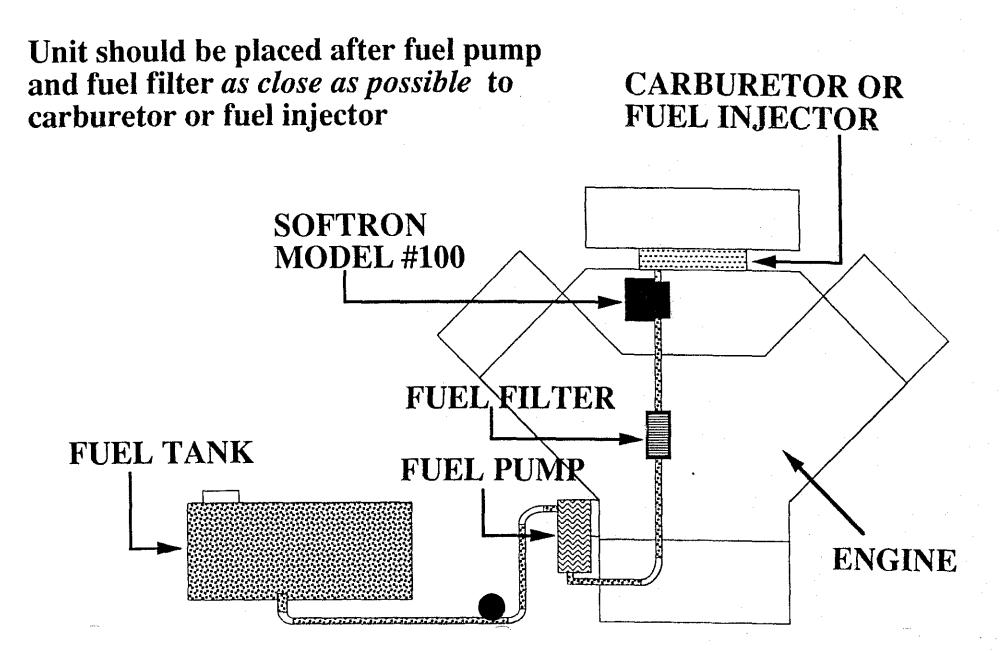
The ARB did not perform any emission or fuel economy tests to substantiate the claims made by the manufacturer. No adjustments such as timing, EGR, fuel metering or any other engine adjustments are included in the installation instructions. Previously, the ARB exempted three similar devices: "Polarion-X" 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 Softron International be granted an exemption as requested.

APPENDIX

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TYPICAL INSTALLATION



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