

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER D-491  
Relating to Exemptions Under Section 27156  
of the Vehicle Code

TECHNESSEN LTD.  
FUEL TANK MODIFICATIONS FOR  
1995-1998 MODEL-YEAR 3.0 AND 3.8 LITER  
FORD WINDSTAR MINIVANS

Pursuant to the authority vested in the Air Resources Board (ARB) 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-45-9;

IT IS ORDERED AND RESOLVED: That fuel tank modifications made by Technessen Ltd. of 3190 Ridgeway Drive, Units 9-11, Mississauga, Ontario, Canada have been found not to reduce the effectiveness of the applicable vehicle pollution control system, and therefore, the fuel tank modifications are exempt from the prohibitions of Section 27156 of the California Vehicle Code for Canadian (federal) 1995-1998 model-year 3.0 and 3.8 liter Ford Motor Company Windstar minivans, originally equipped with 20-gallon high density polyethylene fuel tanks.

This exemption is based on hot soak and 2-day diurnal evaporative emission and on-board diagnostic system testing conducted by Technessen on a 1998 model-year 3.8 liter Ford Windstar minivan. The evaporative emission test results are shown below:

Evaporative Emission Test (grams/test)  
Hot Soak+2-Day Diurnal

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After Modifications	2.065
<b>With DF</b>	<b>2.185</b>
100K DF	0.120
<b>Emission Standard</b>	<b>2.5</b>

The test data show that the hot soak plus the 2-day diurnal evaporative emissions of the Windstar with the fuel tank modifications are below the applicable standard.

Technessen also showed that the fuel tank modifications do not affect the operation of the vehicle's on-board diagnostic leak detection system. Staff expects the same impact on evaporative emissions and OBD II system when the modifications are made on all of the vehicles for which Technessen Ltd. is requesting exemption.

Exemption of the fuel tank modifications shall not be construed as an exemption to sell, offer for sale, or advertise any components of the modifications as individual devices.

This Executive Order is valid provided that instructions for the fuel tank modifications not recommend tuning the vehicles to specifications different from those submitted by the vehicle manufacturer.

Changes made to the design or operating conditions of the fuel tank modifications, as exempted by the ARB, which may adversely affect the performance of a vehicle's pollution control system, shall invalidate this Executive Order.

Marketing of the fuel tank modifications using an identification other than that shown in this Executive Order or for an application other than that listed in this Executive Order shall be prohibited unless prior approval is obtained from the ARB.

This Executive Order does not constitute any opinion as to the effect the fuel tank modifications may have on any warranty either expressed or implied by the vehicle manufacturer.

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.

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 TECHNESSEN LTD.'S FUEL TANK MODIFICATIONS.

Violation of any of the above conditions shall be grounds for revocation of this Executive Order. The Executive Order may be revoked only after a ten-day written notice of intention to revoke the Executive Order, in which period the holder of the Executive 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 Executive Order may not be revoked until a determination after the hearing that grounds for revocation exist.

Executed at El Monte, California, this 23<sup>rd</sup> day of November 1999.



R. B. Summerfield, Chief  
Mobile Source Operations Division