

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER D-420U-4

Relating to Exemptions under
Sections 38390 and 38391 of the Vehicle Code

Engine Control Systems - A Division of Lubrizol Canada Ltd.
K-Type and S-Type Unikaf Combifilters
with or without AZ Purifier

Pursuant to the authority vested in the Air Resources Board (ARB) by Part 5, Division 26 of the Health and Safety Code and Sections 38390, 38391, and 38395 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-02-003;

IT IS ORDERED AND RESOLVED: That installation of the Unikaf Combifilters, manufactured by Engine Control Systems of 165 Pony Drive, Newmarket, Ontario, Canada L3Y 7V1, has been found not to reduce the effectiveness of the applicable engine emission control system, and therefore, the K-type and S-type Unikaf Combifilters are exempt from the prohibitions in Sections 38390 and 38391 of the Vehicle Code for installation on 1996 through 2003 model-year off-road compression-ignition engines rated at or above 25 horsepower.

This Executive Order applies to Unikaf Combifilters used with or without Engine Control Systems' AZ Purifier, downstream of the filters. The Unikaf Combifilters and the AZ Purifier can be used on engines operated using standard California diesel with a maximum sulfur content of 500 parts per million by weight (ppmw) or ultra-low sulfur diesel (ULSD) with a maximum sulfur content of 15 ppmw. The Unikaf Combifilters and AZ Purifiers exempted under this Executive Order are identified in Attachment A.

The Unikaf Combifilters are actively regenerated filters that require regeneration after 8-10 hours of operation or when the backpressure monitor indicates excessive pressure.

This Executive Order is based on emission tests conducted by Engine Control Systems with the Unikaf Combifilters and the AZ Purifier. Test data showed no adverse impact on engine emissions. The same emissions impact is expected when the Unikaf Combifilters are installed, with or without the AZ Purifier, on any of the engines listed above.

This Executive Order is valid provided that installation instructions for the Unikaf Combifilters do not recommend tuning the engines to specifications different from those of the engine manufacturer.

Changes made to the design or operating conditions of the Unikaf Combifilters, as exempted by the ARB, which adversely affect the performance of the engine's pollution control system, shall invalidate this Executive Order.

Marketing of the Unikaf Combifilters using 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 shall not apply to any Unikat Combifilters advertised, offered for sale, sold with, or installed on an off-road engine, vehicle, or equipment prior to or concurrent with transfer to an ultimate purchaser.

This Executive Order does not constitute any opinion as to the effect the use of the Unikat Combifilters may have on any warranty either expressed or implied by the engine manufacturer.

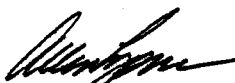
No claim of any kind, such as "Approved by the Air Resources Board," may be made with respect to the action taken herein in any advertising or other oral or written communication.

In addition to the foregoing, the ARB reserves the right in the future to review this Executive Order and the exemption provided herein to assure that the exempted add-on or modified part continues to meet the standards and procedures of California Code of Regulations, Title 13, Section 2474, et seq.

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 ENGINE CONTROL SYSTEMS' K-TYPE AND S-TYPE UNIKAT COMBIFILTERS.

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 is made after a hearing that grounds for revocation exist.

Executed at El Monte, California, this 18TH day of June 2003.



Allen Lyons, Chief
Mobile Source Operations Division

Attachment A

Unikat Combifilter		AZ Purifier Catalyst	
Filter Model		ECS Part Number	Catalyst Model
K-Type	K3, K5, K9, K10, K18, DK20, DK36	A16-XXXX	AZ25, AZ26, AZ27
S-Type	S3, S5, S9, S10, S18, DS20, DS36		

Note: Filter Model

Dual filter models are designated with a D before the model type designation, i.e. DK20.

ECS Part Number

Pre-fix A16 designates the Purifier converter design format (no muffler).

Catalyst Model

AZ designates catalyst formulation.

Numbers 25 through 27 designate catalyst size.

For custom direct fit applications, the part number will describe the converter design format and application, i.e. AZ Purimuffler for ABC Trucking with Cummins B engine.