

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-249-1
Relating to Certification of New Motor Vehicles

GRUMMAN OLSON

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Orders G-45-3, and G-45-4;

IT IS ORDERED AND RESOLVED: That 1983 model-year Grumman Olson exhaust emission control systems are certified as described below for diesel-powered light-duty trucks.

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
DGR1.6K6JAA4 (DVW1.6D6JJA0) (1983 Volkswagen)	97 (1.6)	Engine Modification (Diesel Injection - Prechamber)

Vehicle Models, Transmissions, Engine Codes as listed on attachments.

The following are the emission standards for this engine family to be listed on the window decal required by California Assembly-Line Test Procedures for 1983 model-year vehicles:

<u>Equivalent Inertia Weight</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0-3999	0.46	10.6	1.5

The following are the certification emission values for this engine family:

<u>Equivalent Inertia Weight</u>	<u>Hydrocarbons Grams per Mile</u>	<u>Carbon Monoxide Grams per Mile</u>	<u>Nitrogen Oxides Grams per Mile</u>
0-3999	0.21	1.0	1.2

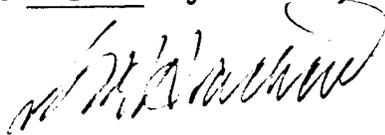
BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1981 and Subsequent Model Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles."

BE IT FURTHER RESOLVED: That the Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 8th day of June, 1983.



K. D. Drachand, Chief
Mobile Source Control Division

Manufacturer	<u>Grumman Olson</u>	Executive Order No.	<u>A-249-1</u>
Engine Family	<u>DGR1.6K6JAA4</u>	Evaporative Family	<u>N/A</u>
		Engine CID (Liters)	<u>97 (1.6) L4</u>

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance
 EEC-Electronic Engine Control
 EI-Electronic Ignition
 ESAC-Electronic Spark Advance Control
 VA-Vacuum Advance
 VR-Vacuum Retard

Fuel System

CFI, CL, DID, DIP, EFI, MFI
 nV-nVenturi Carburetor
 VV-Variable Venturi

Exhaust Emissions Control System

AIP-Air Injection-Pump
 AIV-Air Injection-Valve
 CL-Closed Loop
 EGR-Exhaust Gas Recirculation
 EM-Engine Modification
 OC-Oxidation Catalyst System
 TR-Thermal Reactor
 TWC-Three-Way Catalyst System

Special Features

CCV-Combustion Chamber Valve
 CFI-Central Fuel Injection
 DID-Diesel Injection-Direct
 DIP-Diesel Injection-Prechamber
 EFI-Electronic Fuel Injection
 MFI-Mechanical Fuel Injection
 TC-Turbocharged

VEHICLE MODELS:

Kubvan

DRIVE SYSTEM: Front Engine/ Front -Wheel Drive

1983 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars Light-Duty Trucks Medium-Duty Vehicles Gas Diesel

Manufacturer Grumman Olson

Page 2

Engine Family DGR1.6K6JAA4

Engine Code -

ECS (Special Features) EM (DIP)

CID (Liter)-97 (1.6) L4
Type -

Engine Code	Vehicle Models (If Coded see attachment)	Trans.	Equiv. Test Weight	Ign. System Part No.	Fuel System DIP Part No.	EGR Valve Part No.	Label Ident. Part No.
G0E01	Kubvan	M4 A3	2375	N/A	Control Unit VW 068-130-107J or 068-130-109C	N/A	

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

*Add 10% to dyno test HP for air conditioning usage.

Date of Issue -