

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-11-27
Relating to Certification of New Motor Vehicles

REGIE NATIONALE des USINES RENAULT

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 1989 model-year Regie Nationale des Usines Renault emission control systems are certified as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement</u> <u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems</u> <u>(Special Features)</u>
KRE2.2V5FGA8	2.2	(132)	Exhaust Gas Recirculation Oxygen Sensor Three-Way Catalyst (Electronic Port Fuel Injection)

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The following are the emission standards for this engine family:

<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
0.39	7.0	0.4

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

<u>Hydrocarbons</u> <u>(Grams per Mile)</u>	<u>Carbon Monoxide</u> <u>(Grams per Mile)</u>	<u>Nitrogen Oxides</u> <u>(Grams per Mile)</u>
0.34	1.6	0.3

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Gasoline-Powered Motor Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" (Title 13, California Administrative Code, Section 2290) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high altitude requirements and highway emission standards as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Tune-Up Label Specifications" (Title 13, California Administrative Code, Section 1965) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the vehicle models listed have been granted an exemption from compliance with the requirements of the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." (Title 13, California Administrative Code, Section 1968) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2035 et seq.).

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 March, 1988.



K. D. Drachand, Chief
Mobile Source Division

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Regie Nationale des Usines Renault Engine Family KRE 2.2 V5 FG A8
 Evaporative Family KV-2.2J-1P Engine Type I4
 Engine Liters (CID) 2.2 (132)

ABBREVIATIONS:

Ignition System

CA - Centrifugal Advance
 ECU - Electronic Control Unit
 EI - Electronic Ignition
 ESAC - Electronic Spark Advance Control
 VA - Vacuum Advance
 VR - Vacuum Retard

Fuel System

CFI, EPFI, MPFI, SFI
 DID, DIP, HOS, OS
 nV - nVenturi Carburetor
 VV - Variable Venturi Carburetor

VEHICLE MODELS:

K48A - Medallion Wagon
 L48A - Medallion Sedan

Exhaust Emissions Control System

AIP - Air Injection-Pump
 AIV - Air Injection-Valve
 EGR - Exhaust Gas Recirculation
 EIC - Electronic Injection Control
 (Diesel Only)
 EM - Engine Modification
 SPL - Smoke Puff Limiter or
 Throttle Delay
 TOC - Trap Oxidizer, Continual
 TOP - Trap Oxidizer, Periodical
 DBC - Dual Bed Catalyst
 OC - Oxidation Catalyst
 TWC - Three-Way Catalyst
 WUOC - Warm-Up Oxidation Catalyst
 WUTWC - Warm-Up Three-Way Catalyst
 OS - Oxygen Sensor
 HOS - Heated Oxygen Sensor

Special Features

CFI - Central Fuel Injection
 EPFI - Electronic Port Fuel Injection
 MPFI - Mechanical Port Fuel Injection
 SFI - Sequential Fuel Injection
 DID - Diesel Injection-Direct
 DIP - Diesel Injection-Prechamber
 TC - Turbocharger
 SC - Supercharger
 IC - Intercooler or Aftercooler
 CCV - Combustion Chamber Valve
 OBD - On-Board Diagnostics

ENGINE: FRONT X MID _____ REAR _____

DRIVE: FWD X RWD _____ 4WD FULL TIME _____ 4WD PART TIME _____

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEETPassenger Cars X Light-Duty Trucks Medium-Duty Vehicles Gas X Diesel Manufacturer Regie Nationale des Usines Renault Engine Family KRE 2.2 V5 FG A8Liter (CID) 2.2 (132) Engine Type I4Emission Control System
(Special Features) EGR + OS + TWC (EPFI)

Engine Code	Vehicle Models (If Coded See Attachment)(Hp)	Trans Type	Equiv. Test Weight	Ign. System/ECU ESAC Part No.	Fuel System EPFI Part No.	EGR Valve Part No.	Catalyst Part No.
A	L48A	A3	3125	7700 736 396	7700736396	7700730058	7700732424 7700732034
	K48A		3250				
B	L48A	M5	3000	7700 736 395	7700736395		
	K48A		3125				
C	L48A	A3	3125	7700 742 979	7700742979		
	K48A		3250				
D	L48A		3125	7700 741 579	7700741579		
	K48A		3250				
E	L48A	M5	3000	7700 741 578	7700741578		
	K48A		3125				

Comments: _____

(See Page 1 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.)

Date of Issue: _____

Revisions: _____

Engine Family: KRE 2.2 V5 FG A8

1989 VEHICLE WEIGHTS AND ROADLOAD HORSEPOWER
FEBRUARY 8, 1988

VEHICLE	VEHWT2.2					TIRES SHOWN Standard tire listed 1st Optional tires also listed				ROADLOAD HORSEPOWER & COASTDOWN TIMES			
	TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	SIZE MODEL	PRESSURE FR RR		(2) USAGE	A/C (SEC.)	HP.	NON A/C (SEC.)	HP.
MEDALLION 4-DOOR BEDAN	2729	1748	3088	2.2L	NS	185/65R14 VECTOR	29	29	45X	15.87	5.4	16.95	4.9
						185/65R14 MXL			35X	17.54	5.2	18.44	4.7
						195/68R14 NCT			28X	15.94	5.8	16.88	5.3
	2819	1814	3125	2.2L	AS	185/65R14 VECTOR	29	29	45X	16.44	5.5	17.23	5.0
						185/65R14 MXL			35X	18.21	5.6	19.21	5.1
						195/68R14 NCT			28X	16.71	5.7	17.49	5.2
MEDALLION WAGON	2784	1798	3125	2.2L	NS	185/65R14 VECTOR	29	33	45X	16.22	5.1	16.71	4.8
						185/65R14 MXL			35X	16.45	5.9	17.32	5.4
						195/68R14 NCT			28X	15.98	6.1	16.88	5.5
	2983	1814	3258	2.2L	AS	185/65R14 VECTOR	29	33	45X	16.68	5.8	17.53	5.3
						185/65R14 MXL			35X	16.83	7.3	17.76	6.7
						195/68R14 NCT			28X	16.44	6.7	17.36	6.1