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:

Engine Family	Displacement Liters	(Cubic Inches)	Exhaust Emission Control Systems (Special Features)
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:

Hydrocarbons (Grams per Mile)	Carbon Monoxide (Grams per Mile)	Nitrogen Oxides (Grams per Mile)
0.39	7.0	0.4

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

Hydrocarbons (Grams per Mile)	Carbon Monoxide (Grams per Mile)	Nitrogen Oxides (Grams per Mile)
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

E.O. # A-11-27

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____

E.O. # A-11-27

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer Regie Nationale des Usines Renault Engine Family KRE 2.2 V5 FG A8

Liter (CID) 2.2 (132) Engine Type I4

Emission 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 TOTAL WT.	AXLE WT.	TEST WT.	ENG	TRANS	TIRES SHOWN Standard tire listed 1st Optional tires also listed: SIZE MODEL	PRESSURE FR	PRESSURE RR	(%) USAGE	ROADLOAD HORSEPOWER & COASTDOWN TIMES A/C (SEC.)	A/C HP.	NON A/C (SEC.)	NON A/C HP.
MEDALLION 4-DOOR SEDAN	2729	1748	3000	2.2L	M5	185/65R14 VECTOR	29	29	45%	15.87	5.4	16.55	4.9
						185/65R14 MXL			35%	17.54	5.2	18.46	4.7
						195/60R14 NCT			20%	15.96	5.8	16.80	5.3
	2819	1816	3125	2.2L	A3	185/65R14 VECTOR	29	29	45%	16.44	5.5	17.23	5.0
						185/65R14 MXL			35%	18.21	5.6	19.21	5.1
						195/60R14 NCT			20%	16.71	5.7	17.49	5.2
MEDALLION WAGON	2784	1798	3125	2.2L	M5	185/65R14 VECTOR	29	33	45%	16.22	5.1	16.71	4.8
						185/65R14 MXL			35%	16.45	5.9	17.32	5.4
						195/60R14 NCT			20%	15.98	6.1	16.80	5.5
	2983	1814	3250	2.2L	A3	185/65R14 VECTOR	29	33	45%	16.68	5.8	17.53	5.3
						185/65R14 MXL			35%	16.83	7.3	17.76	6.7
						195/60R14 NCT			20%	16.46	6.7	17.36	6.1