

A. B.

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-232-14
Relating to Certification of New Heavy-Duty Motor Vehicle Engines

RENAULT VEHICULES INDUSTRIELS

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 of the Health and Safety 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-45-3;

IT IS ORDERED AND RESOLVED: That the following Renault Vehicules Industriels 1990 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems (Special Features)</u>
LRE0335FPA6	6.2	(377)	(Smoke Puff Limiter) (Turbocharger) (Charge Air Cooler)
LRE0538FAA7	8.8/9.8	(538/600)	(Turbocharger) (Charge Air Cooler)

Engine models and codes are listed on attachments.

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

<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
1.3	15.5	6.0	0.60

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

<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>	<u>Particulates gm/bhp-hr</u>
LRE0335FPA6	0.6	2.9	5.9	0.41
LRE0538FAA7	0.8	1.8	5.6	0.41

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Health and Safety Code Section 43205.5).

Engines 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 attachments.

Executed at El Monte, California this 3rd day of April, 1990.



K. D. Drachand, Chief
Mobile Source Division

1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer RENAULT VEHICULES INDUSTRIELS Engine Family LRE0335FPA6
 Liter (CID) 6.174 (377) Engine-Type In-line 6
 Emission Control Sys. and (Special Features) SPL (TC) (CAC)

Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)	Maximum Rated Torque at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)
MIDR060226I	R. Bosch Gmbh 5000 676 339	R. Bosch Gmbh 5000 676 305	180 2500	79 (64.1)	427 1500	84 (41.95)
MIDR060226K	5000 684 020	5000 676 305	210 2350	100 (77.8)	570 1400	110 (51.0)

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1990 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer RENAULT VEHICULES INDUSTRIELS Engine Family LRE0538FAA7
 Liter (CID) 8.8 (538) Engine-Type In-line 6
 Emission Control Sys. and (Special Features) (TC) (CAC)

Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)	Maximum Rated Torque at RPM	Fuel Rate mm ³ /stroke (lbs/Hr)
MIDR062030C	R. Bosch Gmbh 5000 681 197	R. Bosch Gmbh 5000 785 794	204 2300	108 (82)	488 1500	104 (51.4)
MIDR062045L	R. Bosch Gmbh 5000 681 172	R. Bosch Gmbh 5000 789 576	240 2000	138 (91)	868 1200	165 (65.2)

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