State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-277-21
Relating to Certification of New Motor Vehicles

ROVER GROUP LIMITED

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 Order G-45-9;

IT IS ORDERED AND RESOLVED: That 2000 model-year Rover Group Limited exhaust emission control systems are certified as described below for medium-duty vehicles:

Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Gasoline

Engine Family: YLRXT04.6002 Displacement: 4.55 Liters (278 Cubic Inches)
3.95 Liters (241 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Dual Three Way Catalytic Converters
Dual Heated Oxygen Sensors (two)
Secondary Air Injection
Sequential Multiport Fuel Injection

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

The non-methane organic gas (NMOG), carbon monoxide (CO), oxides of nitrogen (NOx), and formaldehyde (HCHO) LEV certification exhaust emission standards for this engine family in grams per mile are:

Test Weight (lbs.)	Miles	NMOG	CO	NOx	HCHO	CO (20°F)
3751-5750	50,000	0.160	4.4	0.4	0.018	12.5
	120,000	0.230	6.4	0.6	0.027	n/a

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.94

The certification exhaust emission values set forth for NMOG reflect application of a 0.94 RAF for 2000 model-year LEVs. The LEV certification exhaust emission values for this engine family in grams per mile are:

Test Weight (lbs.)	Miles	NMOG	CO	NOx	HCHO	CO (20°F)
3751-5750	50,000	0.125	1.7	0.1	0.003	5.6
	120,000	0.141	1.7	0.1	0.003	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the medium-duty vehicle phase-in requirements as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles" (Title 13, California Code of Regulations, Section 1960.1(h)(2)).

BE IT FURTHER RESOLVED: That under the submitted medium-duty vehicle phase-in compliance plan, if the manufacturer incurs "Vehicle Equivalent Debits" for the aforementioned model year due to the manufacturer's failure to produce and deliver for sale in California the equivalent quantity of medium-duty vehicles certified to low-emission vehicle and/or ultra-low-emission vehicle exhaust emission standards required by the above-referenced standards and test procedures, all "Vehicle Equivalent Debits" incurred by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles," and the listed vehicle models comply with those standards.

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" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, 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 Emission Control and Smog Index Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit 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 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 provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned model year.

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 16th day of August 1999.

R. B. Summerfield, Chief
Mobile Source Operations Division

2000 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET Page1
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer : Rover Group Ltd Exh Eng Fam : YLRXT04.6002 Evap Fam : YLRXE0124001

All Eng Codes in Eng Fam : CA ____ 49S ____ 50S X AB965 ____, ORVR ____: YES ____ NO X

Exh Std : CA Tier-1 ____ TLEV ____ LEV X ULEV ____ SULEV , ____ US EPA Tier-1 ____

Veh Class (es) : PC ____ LDT 1 ____ LDT 2 ____ MDV 1 ____ MDV 2 X MDV 3 ____ MDV 4 ____ MDV 5 ____

Single Cert Std for Multi-Class Eng Fam : N/A (specify : N/A, LDT 1, MDV1, MDV2, MDV3, MDV4)

Fuel Type (s) : Dedicated X Flex-Fuel ____ Dual-Fuel ____ Bi-Fuel ____ Gasoline X Diesel ____

CNG ____ LNG ____ LPG ____ M85 ____ Other (specify) ____

Emiss Test Fuel (s) Indo ____ CBG X CNG ____ LPG ____ M85 ____ Other (specify) ____

Diesel : 13 CCR 2282 ____ 40 CFR 86.113-90 ____ 40 CFR 86.113-94 ____

Evaporative Emission Test Procedure : California ____ Federal X

Service Accum : Std AMA X Mod AMA ____ Mfr ADP ____ Other (specify) ____

NMOG Test Procedure : N/A ____ Std X Equiv ____ R/L Test Proc : Shed : ____ Pt Source X

Engine Configuration : V8 Displacement: 4.55/3.95 Litres 278/241 Cubic Inches

Valves per Cylinder : 2 Rated HP : 222/188 @ 4750 RPM

Engine : Front X Mid ____ Rear ____ Drive : FWD ____ RWD ____ 4WD-FT X 4WD-PT ____

Exhaust ECS (e.g., MFI, EGR, TC, CAC) : SFI/2TWC/2HO2S(2)/AIR

(use abbreviations per SAE J1930 JUN 93)

Engine Code (also list CA/49ST/50ST)	Vehicle Models (if coded see attachment)	Trans (M5, A4 etc.)	ETW or Test Wt.	DPA or RLHP	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No
4.0HCF-99D (50 ST)	Discovery Series II	A4	5500	14.1	NNW101820	N/A	WAG104460 WAG104470
4.0HCF-99E (50 ST)	Range Rover	A4	5500	13.9	NNW101900	N/A	WAG104450
4.6HCF-99B (50 ST)	Range Rover	A4	5500	13.9	NNW101910	N/A	WAG104450

Date Issued : 4.19.99 Revisions :