

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-277-14  
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 1996 model-year Rover Group Limited exhaust emission control systems are certified as described below for medium-duty vehicles:

Fuel Type: Gasoline

Engine Family: TLR4.6H8G1EK Displacement: 3.95 Liters (241 Cubic Inches)  
4.55 Liters (278 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

- Sequential Multiport Fuel Injection
- Dual Three Way Catalytic Converters
- Dual Heated Oxygen Sensors (Two)

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

The certification exhaust emission standards for this engine family in grams per mile are:

<u>Test Weight (lbs.)</u>	<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon Monoxide (20°F)</u>
3751-5750	50,000	0.32	4.4	0.7	12.5
	120,000	0.46	6.4	0.98	n/a

The certification exhaust emission values for this engine family in grams per mile are:

<u>Test Weight (lbs.)</u>	<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon Monoxide (20°F)</u>
3751-5750	50,000	0.23	2.7	0.1	8.7
	120,000	0.33	4.2	0.18	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 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 shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles", pursuant to provisions in said standards and test procedures applicable to small-volume manufacturers.

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 Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the manufacturer is certifying the listed vehicle models with a partially complying on-board diagnostic system for the aforementioned model year pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(6.1) ("Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines").

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.).

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 10<sup>th</sup> day of July 1995.

  
R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

1996 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer : Rover Group Ltd Exh Eng Fam : TLR4.6H8G1EK Evap Fam : TLR1060AYPOC  
 All Eng Codes in Eng Fam : CA  49S 50S AB965  
 Exh Std : CA Tier-1  TLEV      LEV      ULEV      ZEV     ; US EPA Tier-1   
 Evap Std : 50K  Useful Life with R/L      In-Use Exh Std : Full In Use      Alt In Use   
 Veh Class (es) : PC      LDT1      LDT2      MDV1      MDV2  MDV3      MDV4      MDV5       
 Single Cert Std for Multi-Class Eng Fam : N/A (specify : N/A, LDT1, MDV1, NDV2, MDV3, MDV 4)  
 Fuel Type (s) : Dedicated  Flex-Fuel :      Dual-Fuel      Bi-Fuel      Gasoline  Diesel       
                   CNG      LNG      LPG      M85      Other (specify)       
 Emiss Test Fuel (s) Indo  Ph2      CNG      LPG      M85      Other (specify)       
                   Diesel : 13 CCR 2282      40 CFR 86.113-90      40 CFR 86.113-94       
 Service Accum : Std AMA      Mod AMA      Mfr ADP      Other (specify) ADF  
 NMOG Test Procedure : N/A  Std      Equip      R/L Test Proc : SHED      Pt Source       
 Hybrid : Type A      B      C     , APU Cycle (e.g. Otto, Diesel, Turbine) :       
 Engine Configuration : V8 Displacement : 3.95/ Liters 241/ Cubic Inches  
 Valves per Cylinder : 2 Rated HP : 188 @ 4750 RPM  
 Engine : Front  Mid      Rear      Drive : FWD      RWD      4WD-FT  4WD-PT       
 Exhaust ECS (e.g., MFI, EGR, TC, CAC) : SFI/2TWC/2HO2S (2)  
 (use abbreviations per SAE J1930 SEP91)

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-95C	Discovery	A4	5250	14.3	ERR 6167	N/A	ESR 3644 ESR 3645
4.0HC-95G (CAL)	Discovery	A4	5250	14.3	ERR 6355	N/A	ESR 3644 ESR 3645
4.0HC-95D (CAL)	Discovery	M5	5250	13.4	ERR 6355	N/A	ESR 3644 ESR 3645
4.0HC - 95J (CAL)	Discovery	A4	5250	14.3	ERR 6759	N/A	ESR 3644 ESR 3645
4.0HC - 95K (CAL)	Discovery	M5	5250	13.4	ERR 6759	N/A	ESR 3644 ESR 3645

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Manufacturer : Rover Group Ltd Exh Eng Fam : TLR4.6H8G1EK Evap Fam : TLR1109AYPOD  
 All Eng Codes in Eng Fam : CA  49S 50S AB965  
 Exh Std : CA Tier-1  TLEV      LEV      ULEV      ZEV     ; US EPA Tier-1   
 Evap Std : 50K  Useful Life with R/L      In-Use Exh Std : Full In Use      Alt In Use   
 Veh Class (es) : PC      LDT1      LDT2      MDV1      MDV2  MDV3      MDV4      MDV5       
 Single Cert Std for Multi-Class Eng Fam : N/A (specify : N/A, LDT1, MDV1, NDV2, MDV3, MDV 4)  
 Fuel Type (s) : Dedicated  Flex-Fuel :      Dual-Fuel      Bi-Fuel      Gasoline       Diesel       
                   CNG      LNG      LPG      M85      Other (specify)       
 Emiss Test Fuel (s) Indo  Ph2      CNG      LPG      M85      Other (specify)       
                   Diesel : 13 CCR 2282      40 CFR 86.113-90      40 CFR 86.113-94       
 Service Accum : Std AMA      Mod AMA      Mfr ADP      Other (specify) ADF  
 NMOG Test Procedure : N/A  Std      Equiv      R/L Test Proc : SHED      Pt Source       
 Hybrid : Type A      B      C     , APU Cycle (e.g. Otto, Diesel, Turbine) :       
 Engine Configuration : V8 Displacement : 4.55/3.95 Liters 278/241 Cubic Inches  
 Valves per Cylinder : 2 Rated HP : 222/188 @ 4750 RPM  
 Engine : Front  Mid      Rear      Drive : FWD      RWD      4WD-FT  4WD-PT       
 Exhaust ECS (e.g. , MFI, EGR, TC, CAC) : SFI/2TWC/2HO2S (2)  
 (use abbreviations per SAE J1930 SEP91).

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.
4.6 HCF-96	Range Rover	A4	5500	13.9	ERR 6129	N/A	ESR 3852
4.0 HCF-95C	Range Rover	A4	5500	13.9	ERR 6129	N/A	ESR 3852
4.6 HC-96A (CAL)	Range Rover	A4	5500	13.9	AMR 5498	N/A	ESR 3852
4.0HC - 95F (CAL)	Range Rover	A4	5500	13.9	AMR 5498	N/A	ESR 3852
4.6HC - 96B (CAL)	Range Rover	A4	5500	13.9	AMR 5688	N/A	ESR 3852
4.0HC - 95H (CAL)	Range Rover	A4	5500	13.9	AMR 5688	N/A	ESR 3852

Date Issued : 02.27.95

Revisions : 6.22.95 8.21.95 10.18.95

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 Exh Std : CA Tier-1  TLEV  LEV  ULEV  ZEV  ; US EPA Tier-1   
 Evap Std : 50K  Useful Life with R/L  In-Use Exh Std : Full In Use  Alt In Use   
 Veh Class (es) : PC  LDT1  LDT2  MDV1  MDV2  MDV3  MDV4  MDV5   
 Single Cert std for Multi-Class Eng Fam : N/A (specify : N/A, LDT1, MDV1, MDV2, MDV3, MDV 4)  
 Fuel Type (s) : Dedicated  Flex-Fuel  Dual-Fuel  B-Fuel  Gasoline  Diesel   
CNG  LNG  LPG  M85  Other (specify) \_\_\_\_\_  
 Emiss Test Fuel (s) Indo  Ph2  CNG  LPG  M85  Other (specify) \_\_\_\_\_  
Diesel : 13 CCR 2282  40 CFR 86.113-90  40 CFR 86.113-94   
 Service Accum : Std AMA  Mod AMA  Mfr ADP  Other (specify) ADF   
 NMOG Test Procedure : N/A  Std  Equip  R/L Test Proc : SHED  Pt Source   
 Hybrid : Type A  B  C  , APU Cycle (e.g. Otto, Diesel Turbine) : \_\_\_\_\_  
 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  Mid  Rear  Drive : FWD  RWD  4WD-FT  4WD-PT   
 Exhaust ECS (e.g. , MFI, EGR, TC, CAC) : SFI/2TWC/2HO2S (2)

(use abbreviations per SAE J1930 SEP91)

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20	<u>Assigned dfs</u>		<u>95 SDV 418</u>
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 Evap Std : 50K  Useful Life with R/L      In-Use Exh Std : Full In Use Alt In Use   
 Veh Class (es) : PC LDT1 LDT2 MDV1 MDV2  MDV3 MDV4 MDV5  
 Single Cert std for Multi-Class Eng Fam : N/A (specify : N/A, LDT1, MDV1, MDV2, MDV3, MDV 4)  
 Fuel Type (s) : Dedicated  Flex-Fuel Dual-Fuel B-Fuel Gasoline  Diesel  
CNG LNG LPG M85 Other (specify)       
 Emiss Test Fuel (s) Indo  Ph2 CNG LPG M85 Other (specify)       
Diesel : 13 CCR 2282 40 CFR 86.113-90 40 CFR 86.113-94  
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(use abbreviations per SAE J1930 SEP91)

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1	Authorized Representative	<u>01/1</u>	21	Gen Std, Increase in Emiss, Safety,
	Fuel Specification	<u>03/1</u>		Meets all reqmts
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4	Test Procedure	<u>05/1</u>	23	Driveability Statement
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6	Emission Warranty Statement	<u>06/3</u>	25	Tamper Resistance Method (s)
7	Maint : Cert/Req'd/Recm'd	<u>06/1</u>	26	Fill Pipe Specifications
8	Emiss Label/VAc House Diag	<u>07/1</u>	27	High Altitude Compliance
9	Evap Control System	<u>19/1</u>	28	OBD Sys incl Marked Revisions
10	Engine Parameters	<u>20/1</u>	29	I & M Test Procedure & Data
11	Fuel System	<u>08/2</u>	30	50 Degree F Compliance
12	Ignition System	<u>08/11</u>	31	Manufacturer's RAF
13	Exhaust Control System	<u>08/9</u>	32	Phase-in Plans : Exh Cert Stds
14	Proj Sales (LDT/MDV Split)	<u>02/5</u>		Exh In-Use Stds
15	Vehicle Description	<u>20/16</u>		Evap Cert Stds
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17	R/L Temp & Press Profiles	<u>-</u>	34	AB965 Credits / Withdrawals
18	EDV Selection	<u>20/12</u>	35	EPA Certificate
19	Prod Veh same as Test Veh	<u>17/1</u>	36	Equiv NMOG Proc-ARB Approval
20	Test Vehicle Information	Durability Data Vehicle	Emission Data Vehicle	Emission Data Vehicle
	C/O or C/A MY & ID	<u>Assigned dts</u>	<u>96</u> <u>1613</u>	<u>    </u> <u>    </u>
	Vehicle Log Page (s)	<u>    </u>	<u>    </u>	<u>    </u>
	Zero Mile Book Page (s)	<u>    </u>	<u>    </u>	<u>    </u>
	Maint Logs & Engr Eval	<u>    </u>	<u>    </u>	<u>    </u>