State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-48-19 Relating to Certification of New Motor Vehicles

ROLLS-ROYCE MOTORS 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 Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1989 model-year Rolls-Royce Motors Limited exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

| Engine Family | Displacement <u>Liters (Cubic inches)</u> | | Exhaust Emission Control Systems (Special Features) | |
|---------------|--|-------|---|--|
| KRR412V6FNA5 | 6.8 | (412) | Air Injection - Pump Exhaust Gas Recirculation Three-Way Catalyst Heated Oxygen Sensor (Mechanical Fuel Injection) No On-Board Diagnostics (Exempt) | |

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) | |
|-------------------------------|-------------------------------------|-------------------------------------|--|
| | | | |
| 0.41 | 7.0 | 0.7 | |

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

| Hydrocarbons | Carbon Monoxide | Nitrogen Oxides |
|------------------|------------------|------------------|
| (Grams per Mile) | (Grams per Mile) | (Grams per Mile) |
| 0.29 | 2.9 | 0.7 |

BE IT FURTHER RESOLVED: That the listed models are certified to the optional NOx emission standard thereby making the vehicle manufacturer subject to Section 1960.1.5 of Title 13, California Administrative Code which includes recall liability for emission control components up to 7 years or 75,000 miles if found defective by the Executive Officer.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying to the optional NOx standard by providing evidence that there are sufficient projected sales of vehicles certifying to the primary NOx emission standard, or is allowed a delay in implementation under small volume

manufacturer provisions, or is allowed a delay in implementation under the "in lieu" standards, or is certifying passenger cars weighing more than 5250 ibs. loaded vehicle weight.

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 "Maifunction 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.) with the 2 year/24,000 mile warranty provisions of Health and Safety Code Section 43204.

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 10th day of June, 1988.

K. D. Drachand, Chief Mobile Source Division

| Manufactur Liter (CIE | Cars X Light- er Rolls-Royce 0) 6.8 (412) Control Sys. (Spec | Motor Ca | ars Limite | ed Engine Fa | mily KRR412V | | iese i |
|--------------------------|--|----------------|---|---------------------------------|----------------------|--|-----------------------------------|
| Engine Code | Vehicle Models (If Coded see attachment) (Dyno Hp) | Trans. Type | Equiv. Test Weight | Ign. System (ECU) Part No. | Fuel System Part No. | EGR Valve | Catalyst |
| A | Rolls-Royce Silver Spirit Silver Spur Silver Spur Limousine Corniche II Bentley Eight Eight L Mulsanne S Mulsanne S IWB Continental | A3 | 5500 5500 5500 5500 5500 5500 5500 550 | Lucas No. 42643 RR No. UE 70102 | Bosch No. | G.M. No. 07045068 RR No. UE 40755 | TWC Converter Assembly: UE 70187 |

Revisions:

Date of Issue

Fuel Injection

TC-Turbocharger

Diagnostics

OBD-On-Board

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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| Manufacturer Rolls-Royce Mo | tor Cars Ltd.Engine Family | KRR412V6FNA | 5 |
|--|--|-------------|---|
| Evaporative Family No3 | Engine Type | V8 | |
| · | Liters (CID) _ | 6.8 (412) | |
| ABBREVIATIONS | | | |
| Ignition System | Exhaust Emissions Control | System Sp | ecial Features |
| CA-Centrifugal Advance ECU-Electronic Control Unit EI-Electronic Ignition ESAC-Electronic Spark Advance Control VA-Vacuum Advance VR-Vacuum Retard | AIP-Air Injection-Pump AIV-Air Injection-Valve DBC-Dual Bed Catalyst EGR-Exhaust Gas Recirculation EIC-Electronic Injection Control EM-Engine Modification OC-Oxidation Catalyst OS-Oxygen Sensor HOS-Heated Oxygen Sensor SPL-Smoke Puff Limiter or Throttle Delay TOC-Trap Oxidizer, Continual TOP-Trap Oxidizer, Periodical | | CCV-Combustion Chamber Valve CFI-Central Fuel Injection or Throttle Body Injection DID-Diesel Injection- Direct DIP-Diesel Injection- Prechamber EFI-Electronic |
| Fuel System CFI, CL, DID, DIP, EFI, MFI nV-nVenturi Carburetor | TWC-Three-Way Catalyst WUOC-Warm-Up Oxidation Cata WUTWC-Warm-Up Three-Way Cat | talyt IC | Fuel Injection -Intercooler or Aftercooler I-Mechanical |

VEHICLE MODELS:

Rolls-Royce Silver Spirit
Rolls-Royce Silver Spur
Rolls-Royce Silver Spur Limousine
Rolls-Royce Corniche II
Bentley Eight
Bentley Eight L
Bentley Mulsanne S
Bentley Mulsanne S Long Wheelbase
Bentley Continental

| Engine: | Front X | Mid. | Rear | |
|---------|---------|-------|---------------|---------------|
| Drive: | FWD | RWD X | 4WD Full Time | 4WD Part Time |