State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-220-33
Relating to Certification of New Motor Vehicles

JAGUAR CARS LTD.

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 1993 model-year Jaguar Cars Ltd. exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: PJR4.0V5FTKX Displacement: 4.0 Liters (243 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Secondary Air Injection
Dual Warm Up Three-Way Catalytic Converters
Dual Three Way Catalytic Converters
Heated Oxygen Sensor
Exhaust Gas Recirculation
Multiport Fuel Injection

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:

Miles	Non-Methane Hydrocarbons	Carbon Monoxide	Nitrogen Oxides
50,000	0.39	7.0	0.4

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

Miles	Non-Methane Hydrocarbons	Carbon Monoxide	Nitrogen Oxides
50,000	0.22	1.4	0.4

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying to the 50,000-mile non-methane hydrocarbons and carbon monoxide standards based on its projected total sales of 1993 model California-certified passenger cars and light-duty trucks.

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" for the aforementioned model year (Title 13, California Code of Regulations, Section 2290).

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 vehicle models listed also comply with the requirements of the "Malfunction and Diagnostic System for 1988 and Subsequent Model Year[s]..." for the aforementioned model year (Title 13, California Code of Regulations, Section 1968).

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 24th day of September, 1992.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

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1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Jaguar Cars Ltd Engine Family PJR4.0V5FTKX

Passenger Car x (PC) Light-Duty Truck ____ Medium-Duty Vehicle ____

Stds Type Tier 0 Veh Type ____

Fuel Type Gasoline Evaporative Family XJFI

Engine Config I6 Liter (CID) 4.0 (243)

Engine: Front X Mid ___ Rear ___

Drive: FWD ___ RWD X 4WD-FT ___ 4WD-PT ___

Exhaust ECS & Special Features AIR:2WUTWC:2TWC:HO2S:EGR:MFI

Eng Code	Vehicle Models	Trans Type A- Automatic M- Manual	ETW	DPA	Ignition (ECM) Part No	EGR System Part No	Catalyst Part No
4.0HFC-93S	XJS	A			DAC 9617	EBC 2737	D'pipe ACA
4.0HFC-93SM/1		M			DBC 11502* DAC 11438 DBC 11507*		U'floor BDB
	i) Coupe	A&M	4000	7.9			
	ii) Convertible	A&M	4250	8.0			

Running change # 4.0-93/1 introduces new TCM with modified TPS default strategy to improve driveabilty when the vehicle is operated in the default mode.

Running change # 4.0-93/2 introduces new spark plug, RC9YCC, a double copper cored plug to give improved useful life.

Running change # 4.0-93/3 *introduces new ECM which inhibits the flagging of diagnostic fault code # 12, airflow meter, when the battery voltage is below 9v. This prevents false flagging during ECM power down. The occasional false flagging of code 12 was introduced with the incorporation of an anti-RFI capacitor into ECM.