State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-220-45
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 Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1996 model-year Jaguar Cars, Ltd. exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: TJC4.0VJGFGK Displacement: 4.0 Liters (243 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Dual Warm Up Three-Way Catalytic Converters
Dual Three Way Catalytic Converters
Dual Heated Oxygen Sensors (two)
Exhaust Gas Recirculation
Secondary Air Injection
Sequential Multiport Fuel Injection
Charge Air Cooler
Supercharger

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

The certification exhaust emission standards (in-use compliance standards in parentheses) for this engine family in grams per mile are:

Miles	Non-Methane Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Carbon Monoxide (20°F)
50,000	0.25 (0.32)	3.4 (5.2)	0.4 (0.4)	10.0 (10.0)
100,000	0.31 (n/a)	4.2 (n/a)	0.6 (n/a)	n/a

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

Miles	Non-Methane Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Carbon Monoxide (20°F)
50,000	0.24	1.7	0.3	5.7
100,000	0.31	2.4	0.3	n/a

BE IT FURTHER RESOLVED: That the listed vehicle models are permitted alternative in-use compliance set forth in the "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles", pursuant to provisions in the said standards and test procedures applicable to small-volume manufacturers.

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 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 the 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 28th day of February 1996.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

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.07.01.01 **1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET**

Manufacturer: Jaguar Cars Ltd Exh Eng Fam: TJC4.0VJGFGK Evap Fam: TJC1142AYMAO

Exh Std: CA Tier-1 X TLEV _ LEV _ ULEV _ ZEV _; US EPA Tier-1 X

Evap Std: 50K X Useful Life with R/L _

In-Use Exh Std: Full In-Use _ Alt In-Use X

Veh Class(es): PC X LDT1 _ LDT2 _ MDV1 _ MDV2 _ MDV3 _ MDV4 _ MDV5 _

Single Cert Std for Muti-Class Eng Fam: N/A

Fuel Type(s): Dedicated X Flex-Fuel _ Dual-Fuel _ Bi-Fuel _ Gasoline X
Diesel _ M85 _ CNG _ LNG _ LPG _ Other _____

Emission Test Fuel(s): Ind X Ph2 _ M85 _ CNG _ LPG _ Other _____
Diesel: 13 CRR 2282 _ 40CFR86.113-90 _ 40CFR86.113-94 _

Service Accum: Std AMA _ Mod AMA _ Mfr ADP _ Other ADF

NMOG Test Procedure: N/A X Std _ Equiv _ R/L Test Proc: SHED _ Pt Source _

Hybrid: Type A _ B _ C _, APU Cycle ____

Engine Configuration: L6 Displacement: 4.0 Liters 243 Cubic Inches

Valves per Cylinder: 4 Rated HP: 322 @ 5000 RPM

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

Exhaust ECS & Special Features: AIR:2HO2S(2):2WUTWC:2TWC:SFI:CAC:SC : EGR

Engine Code	Vehicle Models	Trans A- Auto M- Man	ETW	DPA	ECM (ICM) Part No.	EGR System Part No.	Catalyst Part No.
4.0SFC-96 (50ST)	XJR	A	4500	7.1	LNA1410SB & LNA1410SC	LHE1550AB	D/P: PCD U/F: PDB

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.07.01.02 **1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET**

Manufacturer: **Jaguar Cars Ltd** Exh Eng Fam: **TJC4.0VJGFGK** Evap Fam: **TJC1142AYMA0**

Exh Std: CA Tier-1 X TLEV _ LEV _ ULEV _ ZEV _; US EPA Tier-1 X

Evap Std: 50K X Useful Life with R/L _

In-Use Exh Std: Full In-Use _ Alt In-Use X

Veh Class(es): PC X LDT1 _ LDT2 _ MDV1 _ MDV2 _ MDV3 _ MDV4 _ MDV5 _

Single Cert Std for Muti-Class Eng Fam: **N/A**

Fuel Type(s): Dedicated X Flex-Fuel _ Dual-Fuel _ Bi-Fuel _ Gasoline X
Diesel _ M85 _ CNG _ LNG _ LPG _ Other _____

Emission Test Fuel(s): Ind X Ph2 _ M85 _ CNG _ LPG _ Other _____
Diesel: 13 CRR 2282 _ 40CFR86.113-90 _ 40CFR86.113-94 _

Service Accum: Std AMA _ Mod AMA _ Mfr ADP _ Other **ADF**

NMOG Test Procedure: N/A X Std _ Equiv _ R/L Test Proc: SHED _ Pt Source _

Hybrid: Type A _ B _ C _, APU Cycle ____

Engine Configuration: L6 Displacement: 4.0 Liters 243 Cubic Inches

Valves per Cylinder: 4 Rated HP: 322 @ 5000 RPM

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

Exhaust ECS & Special Features: **AIR:2HO2S(2):2WUTWC:2TWC:SFI:CAC:SC:EGR**

Engine Code	Vehicle Models	Trans A- Auto M- Man	ETW	DPA	ECM (ICM) Part No.	EGR System Part No.	Catalyst Part No.
4.0SFC-96 (50ST)	XJR	A	4500	7.1	LNA1410SD	LHE1550AB	D/P: PCD U/F: PDB

Revised ECM calibration introduced by R/C #4.0-96/7. See page 21-8 for description of the change.