## State of California AIR RESOURCES BOARD

## EXECUTIVE ORDER A-220-38 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 1994 model-year Jaguar Cars Ltd. exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: RJC4.0VHGAEK Displacement: 4.0 Liters (243 Cubic Inches)

## Exhaust Emission Control Systems and Special Features:

Secondary Air Injection
Exhaust Gas Recirculation
Dual Warm-Up Three Way Catalytic Converters
Dual Three Way Catalytic Converters

Heated Oxygen Sensor 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	Carbon	Nitrogen	
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
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	Carbon	Nitrogen	
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	
50,000	0.22	1.4	0.4	

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 fleet average non-methane organic gas (NMOG) exhaust mass emission 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".

BE IT FURTHER RESOLVED: That under the submitted compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That on January 14, 1993, the Air Resources Board adopted the repeal of the currently-effective requirement that each manufacturer certify a minimum of 80 percent of its projected sales of 1994 model-year California-certified passenger cars and light-duty trucks to the phase-in standards for NMHC, or the more stringent standards in section 1960.1(g)(2) of Title 13, California Code of Regulations. If the repeal of such requirement does not become effective, the manufacturer shall submit a plan for compliance with the requirement; passenger cars and light-duty trucks not meeting such phase-in or more stringent standards shall be certified only to the extent allowed under the requirement.

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model 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 listed vehicle models also comply with the "Malfunction and Diagnostic System for 1988 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles with Three-Way Catalyst Systems and Feedback Control" (Title 13, California Code of Regulations, Section 1968) for the aforementioned model year.

BE IT FURTHER RESOLVED: That the listed vehicle models have been exempted from compliance with the "Malfunction and Diagnostic System Requirements-1994 and Subsequent Model-Year Passenger Cars, Light-duty Trucks, and Medium-Duty Vehicles and Engines" pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(2.0) 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 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 // day of June, 1993.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

17-15

17.00.00.00 cont'd

E.O. # <u>A-220-38</u> Page <u>1</u> of <u>1</u>

.08.01.01 1994 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: Jaguar Cars Ltd

Engine Family: RJC4.0VHGAEK

Passenger Car: X (PC)

Stds Type: Tier 1

Fuel Type: Gasoline

Evaporative Family: RJC1091AYM00

Engine Configuration: 16 Liter (CID): 4.0 (243)

Engine: Front X Mid \_ Rear \_

Drive: FWD \_ RWD X 4WD-FT \_ 4WD-PT \_

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

Engine Code	Vehicle Models	Trans Type A- Automatic M- Manual	ETW	DPA	ECM (ICM) Part No	EGR System Part No	Catalyst Part No.
<del></del>	XJS		-				
4.0HFC-93S	Coupe	A	4000	8.0	DBC 11502	EBC2737	D/P: ACA U/F: BDB
	Convertible	A	4250	8.0	DBC 11502	EBC2737	D/P: ACA U/F: BDB
4.0HFC -93SM/1	Coupe	М	4000	8.0	DBC 11507	EBC2737	D/P: ACA U/F: BDB
·	Convertible	М	4250	8.0	DBC 11507	EBC2737	D/P: ACA U/F: BDB

JAGUAR CARS LTD

E.O. # <u>A-220-38</u> Page <u>1</u> of <u>1</u>

.08.01.01 1994 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: Jaguar Cars Ltd

Engine Family: RJC4.0VHGAEK

Passenger Car: X (PC)

Stds Type: Tier Yo

Fuel Type: Gasoline

Evaporative Family: RJC1091AYM00

Engine Configuration: 16 Liter (CID): 4.0 (243)

Engine: Front X Mid \_ Rear \_

Drive: FWD \_ RWD X 4WD-FT \_ 4WD-PT \_

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

Engine Code	Vehicle Models	Trans Type A- Automatic M- Manual	ETW	DPA	ECM (ICM) Part No	EGR System Part No	Catalyst Part No.
	XJS						
4.0HFC-93S	Coupe	A	4000	8.0	DBC 11502	EBC2737	D/P: ACA U/F: BDB
	Convertible	A	4250	8.0	DBC 11502	EBC2737	D/P: ACA U/F: BDB
4.0HFC -93SM/1	Coupe	М	4000	7.5*	DBC 11507	EBC2737	D/P: ACA U/F: BDB
	Convertible	М	4250	8.0	DBC 11507	EBC2737	D/P: ACA U/F: BDB

\*New wheel/tyre assembly, size 225/55ZR16, introduced by Running Change #4.0-94/8.

E.O. # 4-220-34 Page 1 of 1

.08.01.01 1994 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: Jaguar Cars Ltd

Engine Family: RJC4.0VHGAEK

Passenger Car: X (PC)

Stds Type: Tier 1

Fuel Type: Gasoline

Evaporative Family: RJC1091AYM00

Engine Configuration: 16 Liter (CID): 4.0 (243)

Engine: Front X Mid \_ Rear \_

Drive: FWD \_ RWD X 4WD-FT \_ 4WD-PT \_

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

Engine Code	Vehicle Models	Trans Type A- Automatic M- Manual	ETW	DPA	ECM (ICM) Part No	EGR System Part No	Catalyst Part No.
/ OURG	XJS	V		7 5	DBC 11507	EBC2737	D/P: ACA
4.0HFC -93SM/2	Coupe	М	4000	7.5	DBC 11307	EDC2/3/	*U/F: BDC
	Convertible	М	4250	8.0	DBC 11507	EBC2737	D/P: ACA *U/F: BDC

\*New catalytic converter configuration introduced by Running Change #4.0-94/9.1.

JAGUAR CARS LTD

.08.01.01 1994 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: Jaguar Cars Ltd Engine Family: RJC4.0VHGAKK

Passenger Car: X (PC)

Stds Type: <u>Tier 1</u>

Fuel Type: Gasoline Evaporative Family: RJC1091AYM00

Engine Configuration: 16 Liter (CID): 4.0 (243)

Engine: Front X Mid \_ Rear \_

Drive: FWD \_ RWD X 4WD-FT \_ 4WD-PT \_

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

Engine Code	Vehicle Models	Trans Type A- Automatic M- Manual	ETW	DPA	ECM (ICM) Part No	EGR System Part No	Catalyst Part No.
	XJS						
4.0HFC-93S	Coupe	A	4000	8.0	DBC 11502	EBC2737	D/P: ACA U/F: BDB
	Convertible	A	4250	8.0	DBC 11502	EBC2737	D/P: ACA U/F: BDB
4.0HFC -93SM/1	Coupe	М	4000	7.5	DBC 11507	EBC2737	D/P: ACA U/F: BDB
	Convertible	М	4250	8.0	DBC 11507	EBC2737	D/P: ACA U/F: BDB

New air flow meter introduced by Running Change #4.0-94/11.1. As a service replacement part number DBC 12516 replaces DBC 10852 (see Page 21-13).

E.O. # A-220-38 Page 1 of 1

.08.01.01 1994 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer: Jaguar Cars Ltd

Engine Family: RJC4.0VHGAEK

Passenger Car: X (PC)

Stds Type: Tier 1

Fuel Type: Gasoline

Evaporative Family: RJC1091AYM00

Engine Configuration: 16 Liter (CID): 4.0 (243)

Engine: Front X Mid \_ Rear \_

Drive: FWD \_ RWD X 4WD-FT \_ 4WD-PT \_

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

Engine Code	Vehicle Models	Trans Type A- Automatic M- Manual	ETW	DPA	ECM (ICM) Part No	EGR System Part No	Catalyst Part No.
	XJS		**		•		
4.0HFC -93SM/2	Coupe	М	4000	7.5	DBC 11507	EBC2737	D/P: ACA U/F: BDC
	Convertible	М	4250	8.0	DBC 11507	EBC2737	D/P: ACA U/F: BDC

New air flow meter introduced by Running Change #4.0-94/11.1. Part number DBC 12516 replaces DBC 10852 (see Page 21-13).