

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-220-48  
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 1997 model-year Jaguar Cars, Ltd. exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: VJC4.0VJGKEL Displacement: 4.0 Liters (243 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Dual Three Way Catalytic Converters  
Dual Heated Oxygen Sensors (two)  
Exhaust Gas Recirculation  
Sequential 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:

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

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

<u>Miles</u>	<u>Non-Methane Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Carbon Monoxide (20°F)</u>
50,000	0.11	1.1	0.1	5.5
100,000	0.14	1.6	0.1	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 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).

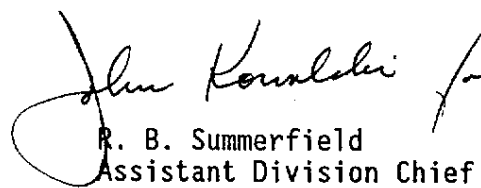
BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned 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 27<sup>th</sup> day of August 1996.

  
R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division



MY 1997

Engine Family VJC4.0VJGKEL 17-18

17.00.00.00 cont'd E.O. # A-220-48 Page 1 of 1

08.02.01 1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

PASSENGER CARS, LIGHT-DUTY TRUCKS & MEDIUM-DUTY VEHICLES

Manufacturer: Jaguar Cars Ltd Exh Eng Fam: VJC4.0VJGKEL Evap Fam: VJC1142AYMA0

Exh Std: CA - Tier-1  TLEV  LEV  ULEV  ZEV  ; US EPA - Tier-1  50ST

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

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

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

Service Accum: Std AMA  Mod AMA  Mfr ADP  Other

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

Hybrid: Type A  B  C  ; APU Cycle

Engine Configuration: V8 Displacement: 4.0 liters 243 cubic inches

Valves per Cylinder: 4 Rated HP: 290 @ 6100

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

Exhaust ECS: EGR:2HO2S(2):2TWC:SFI

Engine Code	Vehicle Models	Trans A- Auto M- Man	ETW	DPA	ECM Part No	EGR System Part No	Catalyst Part No.
4.0HFC-97 (50ST)	XK8						
	Convertible	A	4250	7.5	LJA1410AH LJA1410AK	LCA1550AE	D/P: TCC
	Coupe	A	4000	7.7	LJA1410AH LJA1410AK	LCA1550AE	D/P: TCC



MY 1997

Engine Family VJC4.0VJGKEL 17-18.1

17.00.00.00 cont'd

E.O. # A-220-48

## 08.01.02 1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

## PASSENGER CARS, LIGHT-DUTY TRUCKS &amp; MEDIUM-DUTY VEHICLES

Manufacturer: Jaguar Cars Ltd Exh Eng Fam: VJC4.0VJGKEL Evap Fam: VJC1142AYMA0All 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/AFuel Type(s): Dedicated  Flex-Fuel \_ Dual-Fuel \_ Bi-Fuel \_ Gasoline   
Diesel \_ M85 \_ CNG \_ LNG \_ LPG \_ Other \_Emission Test Fuel(s): Ind  Ph2 \_ M85 \_ CNG \_ LPG \_ Other \_  
Diesel: 13 CRR 2282 \_ 40CFR86.113-90 \_ 40CFR86.113-94 \_Service Accum: Std AMA  Mod AMA \_ Mfr ADP \_ Other \_NMOG Test Procedure: N/A  Std \_ Equiv \_ R/L Test Proc: SHED \_ Pt Source \_

Hybrid: Type A \_ B \_ C \_ ; APU Cycle \_

Engine Configuration: V8 Displacement: 4.0 liters 243 cubic inchesValves per Cylinder: 4 Rated HP: 290 @ 6100Engine: Front  Mid \_ Rear \_ Drive: FWD \_ RWD  4WD-FT \_ 4WD-PT \_Exhaust ECS: EGR:2HO2S(2):2TWC:SFI

Engine Code	Vehicle Models	Trans A- Auto M- Man	ETW	DPA	ECM Part No	EGR System Part No	Catalyst Part No.
4.0HFC-97/1 (50ST)	XK8						
	Convertible	A	4250	7.3	LJA1410AN*	LCA1550AE	D/P: TCC
	Coupe	A	4000	6.8	LJA1410AN*	LCA1550AE	D/P: TCC

\* Introduced by RC #4.0V8-97/1 - see Page 21-1.



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02.01 1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET **1.477**

PASSENGER CARS, LIGHT-DUTY TRUCKS & MEDIUM-DUTY VEHICLES

Manufacturer: Jaguar Cars Ltd Exh Eng Fam: VJC4.0VJGKEL Evap Fam: VJC1142AYMA0

Exh Std: CA - Tier-1  TLEV  LEV  ULEV  ZEV  ; US EPA - Tier-1  **50ST**

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

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

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

Service Accum: Std AMA  Mod AMA  Mfr ADP  Other

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

Hybrid: Type A  B  C  ; APU Cycle

Engine Configuration: V8 Displacement: 4.0 liters 243 cubic inches

Valves per Cylinder: 4 Rated HP: 290 @ 6100

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

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20 Test Vehicle Information	Dur Data Veh	Em Data Veh	Em Data Veh
C/O MY & ID	1995 XJ40/974*		
Vehicle Log Page(s)	on request		
Zero Mile Book Page(s)	on request		
Maint Logs & Engr Eval	on request		

\* Evap DF only.