

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-2-60  
Relating to Certification of New Motor Vehicles

FUJI HEAVY INDUSTRIES 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 1989 model-year Fuji Heavy Industries Ltd. exhaust emission control systems are certified as described below for gasoline-powered passenger cars:

<u>Engine Family</u>	<u>Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
KFJ1.2V2HCCX	1.2 (73)	Air Injection - Valve Exhaust Gas Recirculation Oxygen Sensor ✓ Oxidation Catalyst ✓ Three-Way Catalyst ✓ (On-Board Diagnostics)

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

The following are the emission standards for this engine family:

<u>Hydrocarbons (Grams per Mile)</u>	<u>Carbon Monoxide (Grams per Mile)</u>	<u>Nitrogen Oxides (Grams per Mile)</u>
0.41	7.0	0.7

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

<u>Hydrocarbons (Grams per Mile)</u>	<u>Carbon Monoxide (Grams per Mile)</u>	<u>Nitrogen Oxides (Grams per Mile)</u>
0.23	4.1	0.4

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 lbs. 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 also comply with the "Malfunction 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.).

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 5<sup>th</sup> day of August, 1988.

  
K. D. Drachand, Chief  
Mobile Source Division

1989 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Fuji Heavy Industries Ltd. Engine Family KFJ1.2V2HCCX  
 Evaporative Family JU Engine Type IL3  
 Liters (CID) 1.2 Liters (73)

ABBREVIATIONS

<u>Ignition System</u>	<u>Exhaust Emissions Control System</u>	<u>Special Features</u>
CA-Centrifugal Advance	AIP-Air Injection - Pump	CFI-Central Fuel Injection or Throttle Body Injection
ECU-Electronic Control Unit	AIV-Air Injection - Valve	EPFI-Electronic Port Fuel Injection
EI-Electronic Ignition	EGR-Exhaust Gas Recirculation	MPFI-Mechanical Port Fuel Injection
ESAC-Electronic Spark Advance Control	EIC-Electronic Injection Control (Diesel Only)	SFI-Sequential Fuel Injection
VA-Vacuum Advance	EM-Engine Modification	DID-Diesel Injection-Direct
VR-Vacuum Retard	SPL-Smoke Puff Limiter or Throttle Delay	DIP-Diesel Injection-Prechamber
	TOC-Trap Oxidizer, Continual	TC-Turbocharger
	TOP-Trap Oxidizer, Periodical	SC-Supercharger
	DBC-Dual Bed Catalyst	IC-Intercooler or Aftercooler
	OC-Oxidation Catalyst	CCV-Combustion Chamber Valve
	TWC-Three-Way Catalyst	OBD-On-Board Diagnostics
	WUOC-Warm-Up Oxidation Catalyst	
	WUTWC-Warm-Up Three-Way Catalyst	
	OS-Oxygen Sensor	
	HOS-Heated Oxygen Sensor	

Fuel System

CFI, EPFI, MPFI, SFI,  
 DID, DIP, HOS, OS  
 nV-nVenturi Carburetor  
 VV-Variable Venturi Carburetor

VEHICLE MODELS:

KA7; Justy  
 KA8; Justy 4WD

Engine: Front   x   Mid.        Rear         
 Drive: FWD   x   RWD        4WD Full Time        4WD Part Time   x

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Passenger Cars x Light-Duty Trucks \_\_\_\_\_ Medium-Duty Vehicles \_\_\_\_\_ Gas x Diesel \_\_\_\_\_

Manufacturer Fuji Heavy Industries Ltd. Engine Family KPJ1.2V2HCCX

Liter (CID) 1.2 Liters (73) Eng. Type IL3

Emission Control Sys. (Special Features) AIV, OS, EGR, OC(1), TWC(1), ZV

Engine Code	Vehicle Models (If Coded see attachment) (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU) EI, VA, ESAC Part No.	Fuel System 1-2V Part No.	EGR Valve Part No.	Catalyst Part No.
K1.2V2CCM	KA7 (7.8/8.6)	M5	2125	Distributor: Hitachi D3S87-03	Hitachi DFC328-525 Fuji's Part No. 16010KA850	Hitachi APDQ54-47 Fuji's Part No. 469996800	Fuji's Part No. Front: 20805KA120 Rear: 20805KA050
	KA8 (9.4/10.3)		2250				
K1.2V2CCMA	KA7 (DL) (7.8/8.6)	CVT	2125	Fuji's Part No. 22100KA180 Electronic Control Unit: Fuji's Part No. 22601KA090	Hitachi DFC328-540 Fuji's Part No. 16010KB011	Hitachi APDQ54-124 Fuji's Part No. 14710KA490	
	KA7 (GL) (7.8/8.6)		2250				
	KA8 (9.4/10.3)		2375				
K1.2V2CCC K1.2V2CCCA	KA7 (7.8/8.6)	CVT	2250				

Comments: See page one for abbreviations and evaporative emission family identification. Please refer to manufacturer's HP list for correct dyno test HP settings based on model and equipment. If two test weights are listed, the lower weight will be used for testing.

of Issue June 17, 1988

Revisions: 010-12/29/'88  
011-4/21/'89