

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-2-31  
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 1986 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 Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
GFJ1.8V5HCM9	109 (1.8)	Exhaust Gas Recirculation Three-Way Catalyst with Closed Loop (Central Fuel Injection)

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>
0.17	2.0	0.3

BE IT FURTHER RESOLVED: That the listed models were 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 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 1981 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 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 22<sup>nd</sup> day of July, 1985.

  
K. D. Drachand, Chief  
Mobile Source Division

Manufacturer Fuji Heavy Industries Ltd. Executive Order No. A-2-31  
 Engine Family GFJ1.8V5HCM9 Evaporative Family KU  
 Engine CID (Liters) 109 CID

## ABBREVIATIONS

Ignition System

CA-Centrifugal Advance  
 EEC-Electronic Engine Control  
 EI-Electronic Ignition  
 ESAC-Electronic Spark Advance Control  
 VA-Vacuum Advance  
 VR-Vacuum Retard

Fuel System

CFI, CL, DID, DIP, EFI, MFI  
 nV-nVenturi Carburetor  
 VV-Variable Venturi

Exhaust Emissions Control System

AIP-Air Injection-Pump  
 AIV-Air Injection-Valve  
 CL-Closed Loop  
 EGR-Exhaust Gas Recirculation  
 EM-Engine Modification  
 OC-Oxidation Catalyst System  
 TOC-Trap Oxidizer Continual  
 TOP-Trap Oxidizer Periodical  
 TR-Thermal Reactor  
 TWC-Three-Way Catalyst System

Special Features

CCV-Combustion Chamber Valve  
 CFI-Central Fuel Injection  
 DID-Diesel Injection-Direct  
 DIP-Diesel Injection-Prechamber  
 EFI-Electronic Fuel Injection  
 IC - Intercooler  
 MFI-Mechanical Fuel Injection  
 TC-Turbocharged

VEHICLE MODELS:

AC4: 4-door Sedan  
 AN4: Station Wagon  
 AX4: XT  
 AG4: 3-door

DRIVE SYSTEM: Front Engine/ Front -Wheel Drive

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

E.O. A-2-31

Passenger Cars     Light-Duty Trucks     Medium-Duty Vehicles     Gas     Diesel

Manufacturer Fuji Heavy Industries Ltd.

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Engine Family GFJ1.8V5HCM9

Engine Code G1.8V5CMMM G1.8V5CMMMA G1.8V5CMMA G1.8V5CMAA

ECS (Special Features) CL, EGR, OC, TWC, EFI

CID (Liter)-  
Type

109 CID-H04

Engine Code	Vehicle Models (If Coded see attachment) (Hp)	Trans.	Equiv. Test Weight	Ign. System CA, EI, VA Part No.	Fuel System EFI Part No.	EGR Valve Part No.	Label Ident. Part No.
G1.8V5CMMM	AX4 (DL) (6.2/6.8*)	M5	2625	Nippondenso 100291-1080 Fuji's Part No. 22100AA082	Injector: JECs 0448 Fuji's Part No. 16600AA010 Electronic Control Unit Fuji's Part No. 22611AA071	Hitachi APDQ54-106 Fuji's Part No. 14710AA220	Tune-up: K6 Vacuum Hose Routing: AX
	AX4 (GL) (6.2/6.8*)		2750 (2625)#				
G1.8V5CMMMA	AX4 (DL) (6.2/6.8*)		2625				
	AX4 (GL) (6.2/6.8*)		2750				
G1.8V5CMMA G1.8V5CMAA	AX4 (6.2/6.8*)	A3	2750			Hitachi APDQ54-112 Fuji's Part No. 14710AA320	

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.

\*Add 10% to dyno test HP for air conditioning usage.

#The model is tested at higher ETW in accordance with 40 CFR 86.84-26(a)(2).

Date of Issue -

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

E.O. #A-2-31

Passenger Cars     Light-Duty Trucks     Medium-Duty Vehicles     Gas     Diesel

Manufacturer Fuji Heavy Industries Ltd. Page 1 of 2

Engine Family GFJ1.8V5HCM9 Engine Code G1.8V5CMMM G1.8V5CMM

ECS (Special Features) CL, EGR, OC, TWC, EFI CID (Liter)-Type 109 CID-H04

Engine Code	Vehicle Models (If Coded see attachment) (Hp)	Trans.	Equip. Test Weight	Ign. System CA, EI, VA Part No.	Fuel System EFI Part No.	EGR Valve Part No.	Label Ident. Part No.			
G1.8V5CMMM	AX4 (DL) (6.2/6.8*)	M5	2625	Nippondenso 100291-1080	Injector: JEC5 0448	Hitachi APDQ54-106A	Tune-up: K6			
	AX4 (GL) (6.2/6.8*)		2750 (2625)#	Fuji's Part No. 22100AA082	Fuji's Part No. 16600AA010			Fuji's Part No. 14710AA221	Vacuum Hose Routing AX	
G1.8V5CMMMA	AX4 (DL) (6.2/6.8*)		2625	2750	Fuji's Part No. 22100AA082	Electronic Control Unit:	Hitachi APDQ54-112A			
	AX4 (GL) (6.2/6.8*)	2750	Fuji's Part No. 22611AA071			Fuji's Part No. 14710AA321				
G1.8V5CMMMA	AX4 (6.2/6.8*)	A3	2750							

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.

\*Add 10% to dyno test HP for air conditioning usage. #The model is tested at higher ETW in accordance with 40 CFR 86.84-26(a)(2).

Date of Issue -  
Revised by R/C 86-9

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Passenger Cars  Light-Duty Trucks  Medium-Duty Vehicles  Gas  Diesel

Manufacturer Fuji Heavy Industries Ltd. Page 2 of 2

Engine Family GFJ1.8V5HCM9 Engine Code G1.8V5CMSA G2.8V5C

ECS (Special Features) CL, EGR, DC, TWC, CFI CID (Liter)-Type 109 CID-H04

Engine Code	Vehicle Models (If Coded see attachment) (Hp)	Trans.	Equip. Test Weight	Ign. System EEC Part No.	Fuel System CFI Part No.	EGR Valve Part No.	Label Identification Part
1.8V5CMSA	AC4 (7.0/7.7*) AG4 (6.8/7.5*)	A3	2625	Distributor: Hitachi; D4P84-03 Fuji's Part No.; 22100AA053	Injector: Hitachi RFB42-1 Fuji's Part No. 16118AA380  Electronic Control Unit: Hitachi MECF-001  Fuji's Part No. 22611AA100	Atsugi; AEY78-14  Fuji's Part No.; 14710AA251	Tune-up Kit  Vacuum Hose Routing
	AN4 (7.5/8.2*)		2750				
1.8V5CMSAA	AC4 (7.0/7.7*)		2625				
	AG4 (6.8/7.5*) AN4 (7.5/8.2*) AC4 (7.7*)		2750				
	AN4 (8.2*)	2875					

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.

Add 10% to dyno test HP for air conditioning usage.