

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-2-42  
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 1987 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>
HFJ1.8V5HCW1	109 (1.8)	Exhaust Gas Recirculation Three-Way Catalyst Oxidation Catalyst Oxygen Sensor (Electronic Fuel Injection) (Turbocharger)

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	2.6	0.5

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 15<sup>th</sup> day of July, 1986.



K. D. Drachand, Chief  
Mobile Source Division

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Manufacturer Fuji Heavy Industries Ltd. Engine Family HFJ1.8V5HCW1  
 Evaporative Family MU Engine Type H04  
 Liters (CID) 1.8 Liters

ABBREVIATIONS

Ignition System

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

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  
 SPL-Smoke Puff Limiter or Throttle Delay  
 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 or aftercooler  
 MFI-Mechanical Fuel Injection  
 TC-Turbocharger

Fuel System

CFI, CL, DID, DIP, EFI, MFI  
 nV-nVenturi Carburetor

VEHICLE MODELS:

AC4; 4-door Sedan  
 AC5 & AC7; 4-door Sedan 4WD  
 AG5; 3-door 4WD  
 AN4; Station Wagon  
 AN5 & AN7; Station Wagon 4WD

Engine: Front x Mid. \_\_\_\_\_ Rear \_\_\_\_\_

Drive: FWD x RWD \_\_\_\_\_ 4WD Full Time x 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 HFJ1.8V5HCW1

Liter (CID) 1.8 Liters Eng. Type H04

Emission Control Sys. (Special Features) CL, EGR, OC, TWC, (EFI, TC)

Engine Code	Vehicle Models (If Coded see attachment)  (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU)  EEC Part No.	Fuel System  EFI Part No.	EGR Valve  Part No.	Catalyst  Part No.
H1.8V5CWMA -08	AX4 (6.8)	M5	2875	Distributor: Hitachi D4P84-03  Fuji's Part No. 22100AA053	Injector: JECS 0970  Fuji's Part No. 16600AA000	Hitachi APDQ72-11  Fuji's Part No. 14710AA370	Fuji's Part No.  Front: 20S05AA07 Rear: 20S05AA15
	AX7 (8.1)		3125 (3000)#				
H1.8V5CWAA -08	AX4 (6.8)	A4	3000		Electronic Control Unit: Fuji's Part No. 22611AA290	Hitachi: APDQ72-12  Fuji's Part No. 14710AA380	
	AX7 (8.1)		3125				

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.  
#The model is tested at higher ETW in accordance with 40 CFR 86.084-26(a)(2).

Date of Issue December 15, 1986 Revisions:

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

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Manufacturer Fuji Heavy Industries Ltd. Engine Family HFJ1.8V5HCW1

Liter (CID) 1.8 Liters Eng. Type H04

Emission Control Sys. (Special Features) CL, EGR, OC, TWC, (EFI, TC)

Engine Code	Vehicle Models (If Coded see attachment)  (Dyno Hp)	Trans. Type	Equiv. Test Weight	Ign. System (ECU)  EEC Part No.	Fuel System  EFI Part No.	EGR Valve  Part No.	Catalyst  Part No.
H1.8V5CWMA	AC4 (GL) (7.7)	M5	2750 (2625)#	Distributor: Hitachi D4P84-03  Fuji's Part No. 22100AA053	Injector: JECS 0970  Fuji's Part No. 16600AA000  Electronic Control Unit: Fuji's Part No. 22611AA141	Hitachi APDQ54-46	Fuji's Part No. 20805AA07 Rear: 20805AA151
	AC4 (GL-10) (7.7) AG4 (7.5)		2750				
	AN4 (8.2) AC5 (9.1)		2875				
	AG5 (8.9) AC7 (9.1) AN5 (GL-10) (9.4)		3000				
	AN5 (GL-10) (9.4)		3125 (3000)#				
	H1.8V5CWAA		AC4 (7.7)				
AN4 (8.2) AC7 (9.1)	3000						
AN7 (9.4)	3125						

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.

\*The model is tested at higher ETW in accordance with 40 CFR 86.084-26(a)(2).

Date of Issue June 20, 1986 Revisions: March 27, 1987

Manufacturer Fuji Heavy Industries Ltd. Engine Family HFJ1.8V5HCW1  
 Evaporative Family MU Engine Type H04  
 Liters (CID) 1.8 Liters

## ABBREVIATIONS

Ignition System

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Fuel System

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 nV-nVenturi Carburetor

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 Throttle Delay  
 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  
 or aftercooler  
 MFI-Mechanical  
 Fuel  
 Injection  
 TC-Turbocharger

VEHICLE MODELS:

AC4; 4-door Sedan  
 AC5 & AC7; 4-door Sedan 4WD  
 AG5; 3-door 4WD  
 AN4; Station Wagon  
 AN5 & AN7; Station Wagon 4WD  
 AX4; XT  
 AX7; XT 4WD

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