E O Bo



State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-2-39
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:

| Engine Family | Displacement Cubic Inches | (Liters) | Exhaust Emission Control Systems (Special Features) |
|---|---|---|---|
| HFJ1.8V5HCVO | 109 | (1.8) | Exhaust Gas Recirculation<br>Three-Way Catalyst<br>Oxidation Catalyst<br>Oxygen Sensor<br>(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:

| Hydrocarbons Grams per Mile | Carbon Monoxide Grams per Mile | Nitrogen Oxides Grams per mile |
|---|---|---|
| 0.41 | 7.0 | 0.7 |

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

| Hydrocarbons Grams per Mile | Carbon Monoxide Grams per Mile | Nitrogen Oxides Grams per Mile |
|---|---|---|
| 0.19 | 2.9 | 0.4 |

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 15th day of July, 1986.

K. D. Drachand, Chief
Mobile Source Division

E.O. # A-2-39

# 198 7 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET



Manufacturer Fuji Heavy Industries Ltd. Engine Family HFJ1.8V5HCVO

Evaporative Family KU Engine Type HO4

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
AG4; 3-door
AN4; Station Wagon

Engine: Front x Mid. _____ Rear _____

Drive: FWD x RWD _____ 4WD Full Time _____ 4WD Part Time _____

030186

E.O. # A-2-39

# 198 7 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET



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

Manufacturer Fuji Heavy Industries Ltd. Engine Family HFJ1.8V5HCVC

Liter (CID) 1.8 Liters Eng. Type H04

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

| Engine Code | Vehicle Models (If Coded see attachment) (Dyno Hp) | Trans. Type | Equiv. Test Weight | Ign. System (ECU) EEC Part No. | Fuel System CFI Part No. | EGR Valve Part No. | Catalyst Part No. |
|---|---|---|---|---|---|---|---|
| 1.8V5CVSM | AC4 (DL) (7.0/7.7) | M5 | 2500 | Distributor: Hitachi D4P86-03 Fuji's Part No. 22100AA400 | Injector: Hitachi RF342-2 Fuji's Part No. 16114AA170 Electronic Control Unit: Fuji's Part No. 22611AA201 | Hitachi APDQ72-3 Fuji's Part No. 14710AA241 | Fuji's Part No. Front: 20805AA12 Rear: 20805AA15 |
| | AG4 (DL) (6.8/7.5) | | 2625 (2500)∅ | | | | |
| | AC4 (GL) (7.0/7.7) AG4 (GL) (6.8/7.5) AN4 (DL) (7.5/8.2) | | 2625 | | | | |
| | AN4 (GL) (7.5/8.2) | | 2750 | | | | |
| 1.8V5CVSMA | AC4 (DL) (7.0/7.7) | | 2625 (2500)∅ | | | | |
| | AC4 (GL) (7.0/7.7) AG4 (DL) (6.8/7.5) | | 2625 | | | | |
| | AG4 (GL) (6.8/7.5) AN4 (DL) (7.5/8.2) | | 2750 (2625)∅ | | | | |
| | AN4 (GL) (7.5/8.2) | | 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.
∅The model is tested at higher ETW in accordance with 40 CFR 86.084-26(a)(2).

Date of Issue June 20, 1986 Revisions: 5/22/'87

80188

E.O. # A-2-39

# 1987 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET



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

Manufacturer Fuji Heavy Industries Ltd. Engine Family HFJ1.8V5HCVO

Lit[illegible] (CID) 1.8 Liters Eng. Type H04

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

| Engine Code | Vehicle Models (If Coded see attachment) (Dyno Hp) | Trans. Type | Equiv. Test Weight | Ign. System (ECU) EEC Part No. | Fuel System CFI Part No. | EGR Valve Part No. | Catalyst Part No. |
|---|---|---|---|---|---|---|---|
| 1.8V5CVSA | AC4 (DL) (7.0/7.7) | A3 | 2625 (2500)# | Distributor: Hitachi D4P86-03 Fuji's Part No. 22100AA400 | Injector: Hitachi RF342-2 Fuji's Part No. 16114AA170 Electronic Control Unit: Fuji's Part No. 22611AA201 | Atsugi AEY78-14 Fuji's Part No. 14710AA251 | Fuji's Par No. Front: 20805AA1[illegible] Rear: 20805AA15 |
| | AC4 (GL) (7.0/7.7) | | 2625 | | | | |
| | AG4 (6.8/7.5) AN4 (DL) (7.5/8.2) | | 2750 (2625)# | | | | |
| | AN4 (GL) (7.5/8.2) | | 2750 | | | | |
| 1.8[illegible]VSAA | AC4 (DL) (7.0/7.7) | | 2625 | | | | |
| | AC4 (CL) (7.0/7.7) | | 2750 (2625)# | | | | |
| | AC4 (GL-10) (7.0/7.7) AG4 (6.8/7.5) AN4 (DL) (7.5/8.2) | | 2750 | | | | |
| | AN4 (CL) (7.5/8.2) | | 2875 (2750)# | | | | |
| | AN4 (GL-10) (7.5/8.2) | | 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.
#The model is tested at higher ETW in accordance with 40 CFR 86.084-26(a)(2).

Date of Issue June 20, 1986 Revisions: 5/22/'87

030[illegible]