# State of California AIR RESOURCES BOARD

# EXECUTIVE ORDER A-2-27 Relating to Certification of New Motor Vehicles

### FWI 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 1985 model-year Fuji Heavy Industries Ltd. exhaust emission control systems are certified as described below for gasoline-powered light-duty trucks:

| Engine Family | Displacement<br>Cubic Inches (Liters) |       | Exhaust Emission Control Systems (Special Features)                                       |  |  |
|---------------|---------------------------------------|-------|---|--|--|
| FFJ1.8T2HCGO  | 109                                   | (1.8) | Air Injection - Valve<br>Exhaust Gas Recirculation<br>Three-Way Catalyst with Closed Loop |  |  |

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

The following are the certification emission standards for this engine family to be listed on the window decal required by "California Assembly-Line Test Procedures for 1983 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks and Medium-Duty Vehicles":

| Equivalent<br>Inertia<br>Weight | Hydrocarbons<br>Grams per Mile | Carbon Monoxide<br>Grams per Mile | Nitrogen Oxides<br>Grams per Mile |  |
|---------------------------------|--------------------------------|-----------------------------------|-----------------------------------|--|
| 0-3999                          | 0.41                           | 9.0                               | 1.0                               |  |

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

| Equivalent Inertia Hydrocarbons Weight Grams per Mil |      | Carbon Monoxide<br>Grams per Mile | Nitrogen Oxides<br>Grams per Mile |  |
|--|------|-----------------------------------|-----------------------------------|--|
| 0-3999   | 0.19 | 4.7                               | 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 1960.15 of Title 13, California Administrative Code which includes repair or replacement of 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 Executive Officer has been provided all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

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

K. D. Drachand, Chief Mobile Source Division

| Manufacturer  | Fuji Heavy Industries Ltd. | _ Executive Order No | A-2-27  |
|---------------|----------------------------|----------------------|---------|
| Engine Family | FFJ1.8T2HCG0               | Evaporative Family   | NU      |
|               |                            | Fngine CID (Liters)  | 100 CTD |

### **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 Fue1 Injection IC - Intercooler MFI-Mechanical Fuel Injection TC-Turbocharged

# VEHICLE MODELS:

AF5: 2-door Hatchback 4WD

AT5: 4WD Open M.P.V. (BRAT 4WD)

DRIVE SYSTEM: Front Engine/ Four -Wheel Drive

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CAL LDT CARB

E.O. \*A-2-27

1985 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

| Manu           | facturer <u>Fuji</u>                                   | Heavy I  | ndustrie                 | Ltd.   | Page Frair                                 | e F1.8T2CGM I                            | E1 9E200M                        |
|----------------|--|----------|--------------------------|--|--|--|----------------------------------|
| Engi           | ne Family  | FFJ1.8T2 | HCG0                     |  | Code                                       | F1.8T2CGM I                              | 1.812CGMA<br>1.8T2CGAA           |
| ECS            | (Special Features)                                     | AIV,     | CL, EGR,                 | OC, TWC  | CID (Liter)-<br>Type _                     | 109 CID-H04                              | <u> </u>                         |
| Engine<br>Code | Vehicle Models<br>(If Coded see<br>attachment)<br>(Hp) | Trans.   | Equiv.<br>Test<br>Weight | Ign. System CA, EI, VA Part No.                  | Fuel System 1-2V Part No.                  | EGR Valve                                | Label<br>Ident.<br>Part No       |
| F1.8T2CGM      | AF5 (9.0)<br>AT5 (9.5)                                 | M4       | 2500                     | Nippondenso<br>100291-0300<br>Fuji's Part<br>No. | Hitachi<br>DCP306-24<br>Fuji's Part<br>No. | Atsugi<br>AEY78-11<br>Fuji's Part<br>No. | Tune-up:<br>J3<br>Vacuum<br>Hose |
| F1.8T2CGMA     | AF5 (9.0)<br>AT5 (9.5)                                 |          | 2625                     | 429879000  | 429979550                                  | 469997371                                | Routing:<br>T5                   |
| F1.8T2CGA      | AT5 (9.5)  | А3       | 2500                     | Hitachi<br>D4R83-13                              | Hitachi<br>DCP306-25                       | Hitachi<br>APDQ72-4A                     | Tune-up:<br>J3                   |
| T2CGAA         |  |          | 2625                     | Fuji's Part<br>No.<br>429879100                  | Fuji's Part<br>No.<br>429979650            | Fuji's Part<br>No.<br>469997350          | Vacuum<br>Hose<br>Routing:<br>T4 |
|                |  |          | ·                        |  |  |  |                                  |

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.

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