State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-2-109
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 Order G-45-9;

IT IS ORDERED AND RESOLVED: That 2000 model-year Fuji Heavy Industries, Ltd. exhaust emission control systems are certified as described below for passenger cars:

Emission Standard Category: Low-Emission Vehicle (LEV)

Fuel Type: Gasoline

Engine Family: YFJXV02.5JEH Displacements: 2.2 Liters (135 Cubic Inches)
2.5 Liters (150 Cubic Inches)

Exhaust Emission Control Systems & Special Features:

Three Way Catalytic Converters (two)
Heated Oxygen Sensors (two)
Sequential Multiport Fuel Injection

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

The LEV certification exhaust emission standards for this engine family in grams per mile are:

Miles	Non-Methane Organic Gases	Carbon Monoxide	Oxides of Nitrogen	Formaldehyde	Carbon Monoxide (20°F)
50,000	0.075	3.4	0.2	0.015	10.0
100,000	0.090	4.2	0.3	0.018	n/a

Reactivity Adjustment Factor (RAF) for NMOG Mass Emission: 0.94

The certification exhaust emission values set forth for non-methane organic gases (NMOG) reflect application of a 0.94 RAF for 2000 model-year LEVs. The LEV certification exhaust emission values for this engine family in grams per mile are:

Miles	Non-Methane Organic Gases	Carbon Monoxide	Oxides of Nitrogen	Formaldehyde	Carbon Monoxide (20°F)
50,000	0.046	0.5	0.1	0.001	5.1
100,000	0.046	0.6	0.1	0.001	n/a

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average NMOG exhaust mass emission requirements as set forth 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 under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the running loss and useful life standards applicable to 1995 and subsequent model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles," and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the "California Refueling Emission Standards and Test Procedures for 1998 and Subsequent Model Motor Vehicles," Title 13, California Code of Regulations, Section 1978, and the listed vehicle models comply with those standards.

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" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, 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 vehicle manufacturer has demonstrated compliance with the exhaust emission standards at 50 degrees Fahrenheit 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 Emission Control and Smog Index Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the manufacturer is certifying the listed vehicle models with a partially complying on-board diagnostic system for the aforementioned model year pursuant to Title 13, California Code of Regulations, Section 1968.1(m)(6.2) ("Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines").

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 provisions (Title 13, California Code of Regulations, 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 5th day of May 1999.

R. B. Summerfield, Chief
Mobile Source Operations Division

E.O # A-2-109

2000 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Manufacturer: Fuji Heavy Industries Ltd. Exh Eng Fam: YFJXV02.5JEH Evap Fam: YFJXR01251CC

All Engine Codes in Engine Family: CA__ 49S__ 50S_x_ AB965__, ORVR: YES_x_ NO____

Exh Std: CA Tier-1__ TLEV__ LEV_x_ ULEV__ SULEV__, US EPA Tier-1_____

Veh Class(es): PC_x_ LDT1__ LDT2__ MDV1__ MDV2__ MDV3__ MDV4__ MDV5

Single Cert Std for Multi-Class Eng Fam: ___ (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)

Fuel Type(s): Dedicated_x_ Flex-Fuel__ Dual-Fuel__ Bi-Fuel__ Gasoline_X_ Diesel

CNG__ LNG__ LPG__ M85__ Other (specify)_____

Exh Emiss Test Fuel(s): Indo__ CBG_x_ CNG__ LPG__ M85__ Other (specify)_____

Diesel: 13 CCR 2282 __ 40 CFR 86.113-90 __ 40 CFR 86.113-94 ____

Evaporative Emission Test Procedure: California__ Federal_x_

Service Accum: Std AMA_x_ Mod AMA__ Mfr ADP__ Other (specify)_____

NMOG Test Procedure: N/A__ Std_x_ Equiv__ R/L Test Proc: SHED__ Pt Source_x_

Engine Configuration: 00 Displacement: 2.5 Liters 150 Cubic Inches, 2.2 Liters (135 cu in.)

Valves per Cylinder: 4 Rated HP: 165 @ 5600 RPM

Engine: Front_x_ Mid__ Rear__ Drive: FWD__ RWD__ 4WD-FT_x_ 4WD-PT____

Exhaust ECS (e.g., MFI, EGR, TC, CAC): HO2S(2), TWC(2), SFI

(use abbreviations per SAE J1930 JUN93)

2000 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES

Engine Code	Trans.	Vehicle Models	ETW	DPA	Ignition (ECM/PCM) Part No.	Catalytic Converter Part No.
Y2.5LMA	M-5	LEGACY 4D AWD L	3500	8.1	Electronic Control Unit: Fuji's Part No. 22611AD86B 22611AF60A	Fuji's Part No. Front: 20805AB21A* 20805AB55A* Rear: 20805AB22A* 20805AB56A*
		LEGACY 4D AWD GT	3625 #1	7.6		
		LEGACY SW AWD Brighton	3500	8.7		
		LEGACY SW AWD L	3625	8.7		
		LEGACY SW AWD GT		8.3		
		LEGACY SW AWD Outback		9.0		
Y2.5LAA	A-4	LEGACY 4D AWD L		8.1	Electronic Control Unit: Fuji's Part No. 22611AD84B 22611AF61A	
		LEGACY 4D AWD GT		7.6		
		LEGACY 4D AWD SUS	3750	8.5		
		LEGACY SW AWD Brighton	3625	8.7		
		LEGACY SW AWD L		8.7		
		LEGACY SW AWD GT	3750	8.3		
		LEGACY SW AWD Outback		9.0		
Y2.5LMB	M-5	FORESTER 5D AWD Base	3375	11.0	Electronic Control Unit: Fuji's Part No. 22611AF580 22611AF590 22611AG020 22611AG030	Fuji's Part No. Front: 20805AB210* Rear: 20805AB220*
		FORESTER 5D AWD L	3500			
		FORESTER 5D AWD S	3500	9		
				11.0		
		IMPREZA 2D AWD RS	3125	7.5		
		IMPREZA 4D AWD RS				
Y2.5LAB	A-4	FORESTER 5D AWD L	3500	11.0		
		FORESTER 5D AWD S		9.9		
		IMPREZA 2D AWD RS	3250	8.1		
		IMPREZA 4D AWD RS				
Y2.2LMA	M-5	IMPREZA 2D AWD L	3000	7.4	Electronic Control Unit: Fuji's Part No. 22611AF560 22611AF570	Fuji's Part No. Front: 20805AB210* Rear: 20805AB220*
		IMPREZA 4D AWD L				
		IMPREZA SW AWD L	3125	7.5		
		IMPREZA SW AWD Outback		8.8		
Y2.2LAA	A-4	IMPREZA 2D AWD L		7.6		
		IMPREZA 4D AWD L				
		IMPREZA SW AWD L	3250	8.0		
		IMPREZA SW AWD Outback	3250	8.2		

#The model is tested at higher ETW in accordance with 40 CFR 86.094-26(a)(2).

Date Issued: 3/15/99

Revisions: