State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-154
Relating to Certification of New Motor Vehicles

ISUZU MOTORS LIMITED

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 1997 model-year Isuzu Motors Limited exhaust emission control systems are certified as described below for light-duty trucks:

Fuel Type: Gasoline

Engine Family: VSZ3.22JGKEK Displacement: 3.2 Liters (193 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Exhaust Gas Recirculation
Dual Three Way Catalytic Converters
Dual Heated Oxygen Sensors (two)
Sequential Multiport Fuel Injection

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

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

| Loaded Vehicle Weight(lbs.) | Miles | Non-Methane Hydrocarbons | Carbon Monoxide | Nitrogen Oxides | Carbon Monoxide (20°F) |
|---|---|---|---|---|---|
| 3751-5750 | 50,000 | 0.32 | 4.4 | 0.7 | 12.5 |
| | 100,000 | 0.40 | 5.5 | 0.97 | n/a |

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

| Loaded Vehicle Weight(lbs.) | Miles | Non-Methane Hydrocarbons | Carbon Monoxide | Nitrogen Oxides | Carbon Monoxide (20°F) |
|---|---|---|---|---|---|
| 3751-5750 | 50,000 | 0.13 | 1.1 | 0.4 | 12.1 |
| | 100,000 | 0.14 | 1.3 | 0.48 | 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 non-methane organic gas (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 50,000-mile evaporative emission standards applicable to 1980 through 1994 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, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model 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" 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 listed vehicle models also comply with the "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) 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 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 13th day of June 1996.

R. B. Summerfield
Assistant Division Chief
Mobile Source Division

E.O. # A-20-154

1997 MODEL-YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
PASSENGER CARS, LIGHT-DUTY TRUCKS AND MEDIUM-DUTY VEHICLES



Manufacturer: ISUZU MOTORS LIMITED Exh Eng Fam: VSZ3.22JGKEK Evap Fam: VSZ1058AYMB0

All Eng Codes in Eng Fam: CA ___ 49S ___ 50S X AB965 ___

Exh Std: CA Tier-1 X TLEV ___ LEV___ ULEV___ ZEV___ ; US EPA Tier-1 X

Evap Std: 50K X Useful Life with R/L___ In-Use Exh Std: Full in Use X Alt in Use___

Veh Class(es) : PC___ LDT1___ LDT2 X MDV1___ MDV2___ MDV3___ MDV4___ MDV5___

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

Fuel Type(s): Dedicated___ Flex-Fuel___ Dual-Fuel___ Bi-Fuel___ Gasoline X Diesel___
CNG___ LNG___ LPG___ M85___ Other (specify)___

Emiss Test Fuel(s): Indo X Ph2___ CNG___ LPG___ M85 Other (specify)___
Diesel: 13 CCR 2282___ 40 CFR 86.113-90___ 40 CFR 86.113-94___

Service Accum: Std AMA X Mod AMA___ Mfr ADP___ Other (specify)___

NMOG Test Procedure: N/A X Std___ Equiv___ R/L Test Proc: SHED___ Pt Source___

Hybrid: Type A___ B___ C___, APU Cycle (e.g., Otto, Diesel, Turbine): ___

Engine Configuration: V6 Displacement: 3.2 / ___ Liters 193 / ___ Cubic Inches

Valve per Cylinder: 4 Rated HP: 190 @ 5600 RPM

Engine: Front X Mid___ Rear___ Drive: FWD___ RWD X 4WD-FT___ 4WD-PT X

Exhaust ECS (eg., MFI, EGR, TC, CAC): SFI, EGR, 2TWC, 2HO2S(2)
(use abbreviations per SAE J1930 SEP91)

| Engine Code (also list CA/49ST/50ST) | Vehicle Models (if coded see attachment) | Trans. (M5, A4 etc.) | ETW or Test WT | DPA or RLHP | Ignition (ECM/PCM) Part No. | EGR System Part No. | Catalytic Converter Part No. |
|---|---|---|---|---|---|---|---|
| 322KE-1 (50ST) | UK-S1<br>ZK-S1 | A | 4750 | 15.2 | PCM<br>8162433190<br>8162653190<br>8162662790 | 8971208153<br>8170961780 | 8971208164 |

Vehicle Model UK-S1; TROOPER 4WD, Long Wheelbase
ZK-S1; ACURA SLX 4WD, Long Wheelbase

Date Issued: May 6, 1996

Revisions: 97B-02 97B-AC-02