

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-43
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 Orders G-45-3 and G-45-4;

IT IS ORDERED AND RESOLVED: That 1986 model-year Isuzu Motors Limited exhaust emission control systems are certified as described below for gasoline-powered light-duty trucks:

| <u>Engine Family</u> | <u>Displacement Cubic Inches (Liters)</u> | <u>Exhaust Emission Control Systems (Special Features)</u> |
|----------------------|---|--|
| GSZ138T2FDGX | 138 (2.3) | Air Injection-Pump Exhaust Gas Recirculation Three-Way Catalyst with Closed Loop |

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

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

| <u>Equivalent Inertia Weight</u> | <u>Hydrocarbons Grams per Mile</u> | <u>Carbon Monoxide Grams per Mile</u> | <u>Nitrogen Oxides Grams per Mile</u> |
|--|--|---|---|
| 0-3999 | 0.28 | 1.9 | 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 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.) and Health and Safety Code Section 43204, provided, however, that jurisdiction is hereby reserved to modify these provisions to the extent made necessary by an EPA waiver decision, in order to assure that the listed vehicles comply with the minimum federal requirements applicable in California.

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 January, 1985.


K. D. Drachand, Chief
Mobile Source Division

Manufacturer Isuzu Motors Limited Executive Order No. A-20-43
 Engine Family GSZ138T2FDGX Evaporative Family CAN-E
 Engine CID (Liters) 138(2.3)

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
 V-venturi 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 Fuel Injection
 IC - Intercooler
 MFI-Mechanical Fuel Injection
 TC-Turbocharged

VEHICLE MODELS:Models: Isuzu P'UP

KG-1M : Pick-up 2WD (Short Wheel base)
 KG-2M : Pick-up 2WD (Long Wheel base)
 KG-3M : Pick-up 2WD (Long Wheel base, Extended Cab)
 KG-4M : Pick-up 4WD (Short Wheel base)
 KG-5M : Pick-up 4WD (Long Wheel base)
 KG-6M : Pick-up 4WD (Long Wheel base, Extended Cab)

Models: Isuzu Trooper

UG-7M : Special Purpose Vehicle 4WD
 UG-8M : Special Purpose Vehicle 4WD

Models: Isuzu Trooper II

UG-7L : Special Purpose Vehicle 4WD
 UG-8L : Special Purpose Vehicle 4WD

DRIVE SYSTEM: Front Engine/ Rear & 4 -Wheel Drive

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

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

Manufacturer Isuzu Motors Limited E.O. #A A-20-43

Engine Family GSZ138T2FDGX CID (liter) - Type 138 (2.3) - L4

ECS (Special Features) TWC, CL, AIP and EGR

| Engine Code | Vehicle Models (If Coded see attachment) | Trans. | Equip. Test Weight | Ign. System CA, VA, EI Distributor Part No. | Fuel System 2V Carburetor Part No. | EGR Valve Part No. | Label Ident. Part No. |
|-------------|--|--------|--------------------|---|------------------------------------|--------------------|-----------------------|
| TDG-11 | KG-1M | M-5 | 2,875 | 8941672490 | 8941367640 | 8941224780 | 8941600470 |
| | KG-2M | | 3,000 | | | | |
| | KG-3M | | | | | | |
| TDG-12 | KG-4M | | 3,250 | 8941619730 | | | |
| | KG-5M | | 3,375 | | | | |
| | KG-6M | | | | | | |
| TDG-13 | KG-1M | A-3 | 2,875 | | 8941367630 | | |
| TDG-14 | UG-7M | M-5 | 3,625 | 8941367650 | 8941367640 | | |
| | UG-7L | | | | | | |
| TDG-15 | UG-7M | | | | | | |
| | UG-7L | | | | | 8944281280 | |
| | UG-8L | | | | | | |
| | UG-8M | | | | | | |

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.

Date of Issue -

Revisions: (A) ETW of KG-4M, KG-5M and KG-6M are changed under RC86T08 on 031585.

(B) Engine code TDG-14 is changed to TDG-15 under RC86T11 on 111185.

(C) Vehicle Model UG-8L and UG-8M are added under RC86T12 on 121085.