

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-52  
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 passenger cars:

| <u>Engine-Family</u> | <u>Displacement<br/>Cubic Inches (Liters)</u> | <u>Exhaust Emission Control Systems<br/>(Special Features)</u>                                  |
|----------------------|---|---|
| GSZ119V5FTGO         | 119 (1.9)                                     | Exhaust Gas Recirculation<br>Three-Way Catalyst with Closed Loop<br>(Electronic 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:

| <u>Hydrocarbons<br/>Grams per Mile</u> | <u>Carbon Monoxide<br/>Grams per Mile</u> | <u>Nitrogen Oxides<br/>Grams per mile</u> |
|--|---|---|
| 0.41                                   | 7.0                                       | 0.7                                       |

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

| <u>Hydrocarbons<br/>Grams per Mile</u> | <u>Carbon Monoxide<br/>Grams per Mile</u> | <u>Nitrogen Oxides<br/>Grams per Mile</u> |
|--|---|---|
| 0.30                                   | 2.4                                       | 0.3                                       |

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.) 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 24<sup>th</sup> day of April, 1986.

  
K. D. Drachand, Chief  
Mobile Source Division

Manufacturer Isuzu Motors Limited Executive Order No. A-20-52  
 Engine Family GSZ119V5FTGO Evaporative Family CAN-C  
 Engine CID (Liters) 119 (1.9)

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

VEHICLE MODELS: Isuzu IMPULSE

I2G-3M: 2 Door Hatchback

DRIVE SYSTEM: Front Engine/ Rear -/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 -20-52

Engine Family GSZ119V5FTGO CID (liter) - Type 119 (1.9L)-L4

ECS (Special Features) TWC, CL & EGR (EFI)

| Engine Code | Vehicle Models (If Coded see attachment) | Trans. | Equiv. Test Weight | Ign. System EI Distributor Part No. | Fuel System CL, EFI ECM Part No. | EGR Valve Part No. | Label Ident. Part No. |            |  |
|-------------|--|--------|--------------------|-------------------------------------|----------------------------------|--------------------|-----------------------|------------|--|
| VTG-1       | I2G-3M                                   | M-5    | 3,000              | 8941723460                          | 8944041500                       | 8941224780         | 8944402210            |            |  |
| VTG-2       |  | A-4    |                    |                                     |                                  |                    |                       |            |  |
| VTG-5       |  | M-5    | 3,125              |                                     | 8944316120                       |                    |                       | 8944494970 |  |
| VTG-6       |  | A-4    |                    |                                     |                                  |                    |                       |            |  |
|             |  |        |                    |                                     |                                  |                    |                       |            |  |
|             |  |        |                    |                                     |                                  |                    |                       |            |  |
|             |  |        |                    |                                     |                                  |                    |                       |            |  |

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) Engine Codes VTG-5 and VTG-6 are added by RC86V05 on 042586.