

E. C. Grap

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-17
Relating to Certification of New Motor Vehicle Engines

ISUZU MOTORS LIMITED

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102, and 43103 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-45-3;

IT IS ORDERED AND RESOLVED: That the following Isuzu Motors Limited 1981 model-year diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating greater than 8500 pounds:

<u>Engine Family</u>	<u>Displacement Cubic Inches (Liters)</u>	<u>Exhaust Emission Control Systems (Special Features)</u>
BSZ0235DAA7	235 (3.9)	Engine Modification
BSZ0353DAB5	353 (5.8)	Engine Modification

Engine Models and Codes as listed on attachments.

Section 43200, Part 5, Division 26 of the California Health and Safety Code requires that the engine manufacturer furnish a decal with each engine sold or delivered to a vehicle manufacturer. The decal shall display the applicable model year heavy-duty engine exhaust emission standards and the following certification emission values:

<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Hydrocarbons + Nitrogen Oxides gm/bhp-hr</u>
BSZ0235DAA7	0.8	4	5.0
BSZ0353DAB5	0.8	4	5.0

BE IT FURTHER RESOLVED: That Isuzu Motors Limited has provided to the Executive Officer all material required to demonstrate certification compliance with the Board's emission control system warranty regulations (Title 13, California Administrative Code, Section 2036).

Engines 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 27 day of December, 1980.

K. D. Drachand
K. D. Drachand, Chief
Mobile Source Control Division

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Isuzu Motors Limited Executive Order No. A-20-17 Page 1

Engine Family BSZ0235DAA7 Evaporative Family NA
BSZ0353DAB5

ABBREVIATIONS Engine CID (Liters) 235 (3.9)
353 (5.8)

Ignition System

CA-Centrifugal Advance
 EEC-Electronic Engine Control
 EI-Electronic Ignition
 ESAC-Electronic Spark Advance Control
 VA-Vacuum Advance
 VR-Vacuum Retard

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
 TR-Thermal Reactor
 TWC-Three Way Catalyst System

Special Features

CCV-Combustion Chamber Valve
 CFI-Central Fuel Injection
 DI-Diesel Injection
 EFI-Electronic Fuel Injection
 MFI-Mechanical Fuel Injection
 TC-Turbocharged

Fuel System

CFI, DI, EFI, MFI
 nV-nVenturi Carburetor
 VV-Variable Venturi

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer Isuzu Motors Limited Page 2

Engine Family BSZ0235DAA7 CID (Liter)-Type 235(3.9) - L4

ECS (Special Features) Engine modification

Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm ³ /stroke	Label Ident.
4BD1H	Diesel Kiki 5156011321, 5156011331	Diesel Kiki 5153001130	81 @ 3200	53.9	4BD1H-Calif.

Date of Issue - 123180.

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

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Engine Family BSZ0353DAB5 CID(Liter)-Type 353(5.8)-L6

ECS(Special Features) Engine modification

Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm ³ /stroke	Label Ident.
6BD1H	Diesel Kiki 1156007861, 1156007971	Diesel Kiki 5153001130	121 @ 3200	53.9	6BD1H-Calif.

Date of Issue - 123180.