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:

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

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:

Engine Family	Hydrocarbons gm/bhp-hr	Carbon Monoxide gm/bhp-hr	Hydrocarbons + Nitrogen Oxides gm/bhp-hr
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 $\frac{27}{2}$ day of December, 1980.

K. D. Drachand, Chief Mobile Source Control Division

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

nufacturer _	Isuzu Motors Limited	Executive Order No.	<u>A-20-17</u> Page	1
Engine Family		Evaporative Family	NA	
ABBREVIATIONS	BSZ0353DAB5	Engine CID (Liters)	235 (3.9)	
ADDREVIALIONS		Engine orb (Erecis)	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

Issued: 123180.

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

Manufacturer	Isuzu Motors Limit	ted		Page2_		
Engine Family	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 3HP 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

Manufacturer	Manufacturer Isuzu Motors Limited		Page 3		
Engine Family_	BSZ0353DAB5	C1	D(Liter)-Ty	pe ^{353(5.8)-L6}	
ECS(Special Fea	atures <u>)</u> 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.