State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-20-23 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 1982 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) |
|----------------------------|---------------------------------------|---|
| CSZ0235DAA6 CSZ0353DAB4 | 235 (3.9) 353 (5.8) | Engine Modification 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:

| Engine Family | Hydrocarbons gm/bhp-hr | Carbon Monoxide gm/bhp-hr | Hydrocarbons + Nitrogen Oxides gm/bhp-hr |
|---------------|---------------------------|---------------------------------|--|
| CSZ0235DAA6 | 0.8 | 4 | 5.0 |
| CSZ0353DAB4 | 0.8 | 4 | 5.0 |

BE IT FURTHER RESOLVED: That the Executive Officer has been provided 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 11th day of December , 1981.

K. D. Drachand, Chief

Mobile Source Control Division

1982 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

| Manufacturer <u>Isuzu Motors Limited</u> | Executive Order No. A-20-23 | Page] |
|--|---|--|
| Engine Family <u>CSZ0235DAA6</u> CSZ0353DAB4 | Evaporative Family NA | |
| 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 DID-Diesel Injection- Direct DIP-Diesel |
| Fuel System CFI, CL, DID, DIP, EFI, MFI nV-nVenturi Carburetor VV-Variable Venturi | • | Injection- Prechamber MFI-Mechanical Fuel Injection TC-Turbocharged |

DRIVE SYSTEM: NA (HDDE)

Issued: 121481.

1982 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

| Manufacturer | Manufacturer ISUZU MOTORS LIMITED | | Page 2 | | |
|-----------------|---|---------------------------------|--------------------------------|--|-----------------|
| | CBZ0235DAA6 | | CID(Liter)-T | ype 235 (3.9) | - L4 |
| ECS (Special Fe | atures) Engin | e Modification | | | |
| Engine Model | Fuel Injection Pump Mfr. Part Number | Injector Mfr. Part Number | Maximum Rated HP and RPM | Fuel Rate at Maximum 3 ^{HP} mm ³ /stroke | Label Ident. |
| 4внтн | Diesel Kiki 5156011321, 5156011331 | Diesel Kiki 5153001130 | 81 @ 3200 | 53.9 | 4BH1H-Calif. |
| | | | | | |

Date of Issue -121481.

1982 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

| Manufacturer_ Engine Family_ ECS (Special Fe | | Page 3 _CID(Liter)-Type 353 (5.8) - L6 | | | |
|--|--|---|--------------------------------|--|-----------------|
| 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. |
| 6BD1H | Diesel Kiki 1156007861, 1156007971 | Diesel Kiki 5153001130 | 121 @ 3200 | 53.9 | 6BHTH-Calif. |
| | | | | | |

Date of Issue -121481.