#### State of California AIR RESOURCES BOARD

# EXECUTIVE ORDER A-20-50 Relating to Certification of New Motor Vehicle Heavy-Duty 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 1986 model-year diesel engines have shown compliance with the optional transient test procedure and standards and 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)		
GSZ0513EAB6	513 (8.4)	Engine Modification (Diesel Injection - Direct) (Turbocharged)		

Engine models and codes are listed on attachments.

The following are the certification emission values for these engine families:

Engine Family	Hydrocarbons gm/bhp-hr	Carbon Monoxide gm/bhp-hr	Nitrogen Oxides gm/bhp-hr
GS Z0513E AB6	1.0	2.5	4.5

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.

Executed at El Monte, California this 13th day of November, 1985.

K. D. Drachand, Chief
Mobile Source Division

Manufacturer	ISUZU MOTORS LIMITED	Executive Order No. 1	A-20-50
Engine Family _	GSZ0513EAB6	Evaporative Family	NA
		Engine CID (Liters) _	513 (8.407)

#### **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

VEHICLE MODELS: NA

## 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

CCY-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

DRIVE SYSTEM: NA Engine/ NA -Wheel Drive

# 198 6 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

Manufacturer	ISUZU MOTORS LIMITED Page 2			2			
Engine Family	277(1342) Tune 513(8,407)-L6						
ECS and (Special Features) EM (DID,TC)							
Engine Model	Fuel Injection Pump Mfr. Part Number	Injector Mfr. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm <sup>3</sup> /stroke	Label Ident.		
6SA1TH	DIESEL KIKI CO., LTD. 1156020491 1156021140 1156021150 1156021160 1156021170 1156021180	DIESEL KIKI CO., LTD 1153001860	200 HP 2500 RPM	93.5 mm <sup>3</sup> /stroke	185886322		