State of California AIR RESOURCES BOARD

EXECUTIVE ORDER A-31-16 Relating to Certification of New Motor Vehicle Heavy-Duty Engines

HINO MOTORS, LTD.

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 Hino Motors, Ltd. 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) | | |
|---------------|---------------------------------------|-------|--|--|--|
| GHM0060DAA0 | 367 | (6.0) | Engine Modification (Diesel Injection - Direct) | | |

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 | |
|---------------|---------------------------|----------------------------------|------------------------------|--|
| GHM0060DAA0 | 1.0 | 4.6 | 4.8 | |

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 _____ day of October, 1985.

K. D. Drachand, Chief Mobile Source Division

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: 17.Q0.00.00

| 01.00.00 | 1986 AIR | RESOURCES | BOARD | SUPPLEMENTAL | DATA | SHEET |
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| Manufacturer _ | HINO MOTORS, | LTD | Executive Order No. | A-31-16 |
|----------------|--------------|-----|---------------------|------------|
| Engine Family | GHM0060DAA0 | | Evaporative Family | · NA |
| | | | Engine CID (Liters) | 367(6.014) |

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, NFI
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 IR-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:

| SIVE | SYSTEM: | NA | Engine/ | ' NA | -Wheel | Drive |
|------|---------|----|---------|------|--------|-------|
| | | | • | | - | |

1986 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

| Manufacturer | HINO MOTORS, LTD |) . | | Page | 2 |
|----------------|--------------------------------------|---------------------------------|--------------------------------|---|---------------------------------|
| Engine Family_ | CID(Liter)-Type 367 (6.014) - L6 | | | | |
| | al Features) ENGI | | ON | | |
| 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. |
| W06E-C | Diesel KiKi 22000-4990 | Diesel KiKi 23600-1730 | 150 3,000 | 61 | W06E-C Calif. & 49 States |
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Date of Issue -