

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-31-14  
Relating to Certification of New Motor Vehicle 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. 1985 model-year diesel engines have shown compliance with the optional transient standards and 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>
FHM0065EAA1	396	(6.5)	Engine Modification (Diesel Injection - Direct) (Turbocharged)
FHM0067DAA6	411	(6.7)	Engine Modification (Diesel Injection - Direct)
FHM0094DAA9	575	(9.4)	Engine Modification (Diesel Injection - Direct)

Engine models and codes are listed on attachments.

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

<u>Engine Family</u>	<u>Hydrocarbons gm/bhp-hr</u>	<u>Carbon Monoxide gm/bhp-hr</u>	<u>Nitrogen Oxides gm/bhp-hr</u>
FHM0065EAA1	0.9	1.9	4.8
FHM0067DAA6	0.7	3.2	4.5
FHM0094DAA9	0.6	2.2	4.3

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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 19<sup>th</sup> day of September, 1984.



K. D. Drachand, Chief  
Mobile Source Division

Manufacturer HINO MOTORS, LTD. Executive Order No. A-31-14  
 Engine Family FHM0065EAA1 Evaporative Family NA  
FHM0067DAA6  
FHM0094DAA9 Engine CID (Liters) 396 (6.485)  
411 (6.728)  
575 (9.419)

## 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

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

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:

IVE SYSTEM: NA Engine/ NA -Wheel Drive

1985 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL ENGINESA-31-14Manufacturer HINO MOTORS, LTD.Page 2Engine Family FHM0065EAA1 CID(Liter)-Type 396 (6.485)-L6ECS and (Special Features) ENGINE MODIFICATION (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.
H06C-TD	Nippon Denso 22010-3781	Nippon Denso 23610-1412	175@ 3,000	73	H06C-TD Calif. & 49 States

Date of Issue -

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HEAVY-DUTY DIESEL ENGINES

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Manufacturer HINO MOTORS, LTD.

Engine Family FHM0067DAA6

CID(Liter)-Type 411 (6.728) - L6

ECS(Special Features) ENGINE MODIFICATION (DID)

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.
H07C-C	Nippon Denso 22010-4050	Nippon Denso 23610-1390	155@ 3,000	67	H07C-C Calif. & 49 States

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HEAVY-DUTY DIESEL ENGINES

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Manufacturer HINO MOTORS, LTD.

Engine Family FHM0094DAA9

CID(Liter)-Type 575(9.419) - L6

ECS(Special Features) ENGINE MODIFICATION (DID)

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.
EM100F	Nippon Denso 22010-4100	Nippon Denso 23610-1430	190@ 2,700	88	EM100F Calif. & 49 States

Date of Issue -