State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-236
Relating to Certification of New Motor Vehicle Engines

AVCO INDUSTRIAL ENGINE OPERATION

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 Avco Industrial Engine Operation 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)
HR-H	219 (3.6)	(Smoke Puff Limiter) (Turbocharger)

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
HR-H	0.30	1.25	5.1

BE IT FURTHER RESOLVED: That Avco Industrial Engine Operation 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 8th day of June, 1981.

K. D. Drachand

K. D. Drachand, Chief
Mobile Source Control Division

1981 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

Manufacturer Avco Ind. Engine Operation

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Engine Family -

Evaporative Family -

Engine CID (Liters) 219 (3.6)

ABBREVIATIONS

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

Engine Family	Model
HR-H	HR692HTA

E.O. #A-236

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

Manufacturer Avco Industrial Engine Operation Page 2

Engine Family HR-H CID (Liter)-Type 219 (3.6) L-6

ECS (Special Features) (Smoke Puff Limter, Turbocharged)

Engine Model	Fuel Injection Pump Mfr. Bosh Type VE6 Part Number	Injector Mfr. Bosh Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm^3/stroke	Label Ident.
HR692 HTA	046-04106014	KBE5854-4	130 @ 4000	44.5	See pg. 3

Date of Issue -

051380

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ENGINE EXHAUST
EMISSION CONTROL INFORMATION
AVCO INDUSTRIAL
ENGINE OPERATION
AVCO

ENG FAMILY

SERIAL NO: MODEL MFG DATE

HP RPM FUEL RATE (MM³/STROKE)

STATIC PUMP TIMING — 4° BTDC
COLD INLET VALVE _____ INCH
COLD EXHAUST VALVE _____ INCH
THIS ENGINE CONFORMS TO
19 EPA EMISSION STANDARDS

Lable per Calif. Requirements to follow. Requested [illegible]

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