

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-235
Relating to Certification of New Motor Vehicle Engines

GENERAL MOTORS CORPORATION

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 General Motors Corporation 1982 model-year diesel engines 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</u> <u>Cubic Inches (Liters)</u> | | <u>Exhaust Emission Control Systems</u> <u>(Special Features)</u> |
|----------------------|---|--------|--|
| CGM0426FWFX | 426 | (7.0) | Aftercooler Throttle Delay (Turbocharged) |
| CGM0552FWG5 | 552 | (9.0) | Aftercooler Throttle Delay (Turbocharged) |
| CGM0736FWH2 | 736 | (12.1) | Aftercooler Throttle Delay (Turbocharged) |
| CGM08.2DAB4 | 500 | (8.2) | Engine Modification |
| CGM08.2EAB7 | 500 | (8.2) | Engine Modification (Turbocharged) |

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:

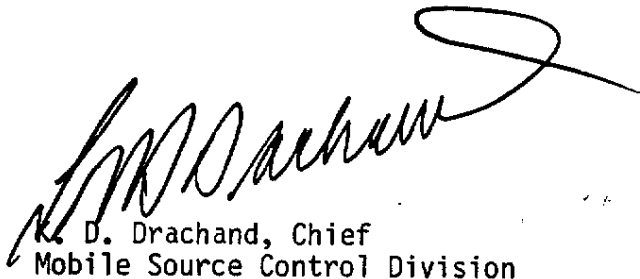
| <u>Engine Family</u> | <u>Hydrocarbons</u> <u>gm/bhp-hr</u> | <u>Carbon</u> <u>Monoxide</u> <u>gm/bhp-hr</u> | <u>Hydrocarbons +</u> <u>Nitrogen Oxides</u> <u>gm/bhp-hr</u> |
|----------------------|---|--|---|
| CGM0426FWFX | 0.8 | 3 | 6.0 |
| CGM0552FWG5 | 0.7 | 3 | 6.0 |
| CGM0736FWH2 | 0.5 | 3 | 6.0 |
| CGM08.2DAB4 | 0.6 | 3 | 5.6 |
| CGM08.2EAB7 | 0.5 | 2 | 5.6 |

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 30th day of November 1981



K. D. Drachand, Chief
Mobile Source Control Division

1982 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHLET

Manufacturer GENERAL MOTORS CORP. Executive Order No. A-6-235 Page 1
Engine Family See Pages 2-6 Evaporative Family NA
Engine CID (Liters) See Pages 2-6

ABBREVIATIONS

Ignition System

CA-Centrifugal Advance
EEC-Electronic Engine Control
EI-Electronic Ignition
ESAC-Electronic Spark Advance Control
VA-Vacuum Advance
VR-Vacuum Retard

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
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
MFI-Mechanical Fuel Injection
TC-Turbocharged

DRIVE SYSTEM: NA

Issued: 113081.

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

Manufacturer General Motors Corporation Page 2
 Engine Family CGM0426FWFX CID-Type 426 - 6L
 ECS (Special Features) Throttle Delay and Aftercooler (Turbocharged)

| 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. |
|--------------|--------------------------------------|-----------------------------------|--------------------------|---|--------------|
| 6L-71TA | None | 7G65 GMC 5229895 | 235 @ 2100 | 69.5 | 8923553 |
| | | 7G70 GMC 5229900 | 250 @ 2100 | 73.6 | |
| | | 7G75 GMC 5229905 | 270 @ 2100 | 79.3 | |
| | | 7G75 Constant Power 5229905 | 180 @ 1800 Min. | 60.8 | |

Date of Issue: 113081.

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

Manufacturer General Motors Corporation Page 3
 Engine Family CGM0552FWG5 CID-Type 552 - V6
 ECS (Special Features) Throttle Delay and Aftercooler (Turbocharged)

| Engine Model | Fuel Injection Pump Mfr. Part Number | Injector Mfr. Part Number | Maximum Rated HP and RPM | | Fuel Rate at Maximum HP | | Label Ident. | |
|--------------|--------------------------------------|-----------------------------------|--------------------------|------|---------------------------------|---------|--------------|------|
| | | | HP | RPM | mm ³ /stroke #1 D.F. | #2 D.F. | | |
| 6V-92TA | None | | | 2100 | | | 8923553 | |
| | | 9F80 5226080 | 288 | | | 82.1 | | |
| | | 9F85 5226085 | 306 | | | 87.1 | | |
| | | 9F90 5226090 | 325 | | | 92.1 | | |
| | | 9F90 Constant Power 5226090 | 240 | 1800 | | | | 76.8 |
| 6V-92TA | | 7G65 5229895 | 216 232 | 2100 | | 69.3 | 71.7 | |
| | | 7G70 5229900 | 236 253 | | | 74.7 | 77.1 | |
| | | 7G75 5229905 | 254 271 | | | 79.5 | 81.9 | |
| | | 9E65 5229970 | 222 240 | | | 2100 | 69.9 | 71.9 |
| | | 9E70 5229975 | 240 260 | 2100 | 74.6 | 76.6 | | |
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Date of Issue: 113081.

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

Manufacturer General Motors Corporation Page 4

Engine Family CGM0736FWH2 CID-Type 736 - V8

ECS (Special Features) Throttle Delay and Aftercooler (Turbocharged)
OR FUEL MODULATOR

| 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. |
|--------------|--------------------------------------|-----------------------------------|--------------------------|---|--------------|
| 8V-92TA | None | 9F80 5226080 | 400 @ 2100 | 82.5 | 8923553 |
| | | 9F85 5226085 | 425 @ 2100 | 87.5 | |
| | | 9F90 5226090 | 440 @ 2100 | 92.5 | |
| | | 9F90 Constant Power 5226090 | 335 @ 1800 Min. | 78.1 | |
| 8V-92TA | None | 7G75 5229905 | 355 @ 1800 | 83.3 | |

Date of Issue: 113081.

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

Manufacturer General Motors Corporation Page 5
 Engine Family CGM08.2DAB4 Liter-Type 8.2 - V8
 CID-Type 500 - V8
 ECS (Special Features) Engine Modification

| 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. |
|--------------|--------------------------------------|---------------------------|--------------------------|---|--------------|
| V8-8.2 | None | 4A53 GMC 5229850 | 165 @ 3000 | 52.5 | 8923634 |

Date of Issue: 113081.

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

Manufacturer General Motors Corporation Page 6
 Engine Family CGM08.2EAB7 Liter-Type 8.2 - V8
 CID-Type 500 - V8
 ECS (Special Features) (Turbocharged) Engine Modification

| 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. |
|--------------|--------------------------------------|---------------------------|--------------------------|---|--------------|
| V8-8.2T | None | 4C65 5229915 | 205 @ 3000 | 64.9 | 8923633 |

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