E.O. Book

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-157
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 1979 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	Exhaust Emission Control Systems (Special Features)
4L-53T	212	Fuel Modulator
6L-71N	426	Engine Modification
8V-71TA	568	Throttle Delay and Aftercooler

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	Nitrogen Oxides gm/bhp-hr
4L-53T	1.0	4	6.9
6L-71N	0.4	6	7.5
8V-71TA	0.5	2	6.2

Engines certified under this Executive Order must conform to all applicable California emission regulations.

The Department of Motor Vehicles, the California Highway Patrol, and the Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 3/ day of October, 1978.

G. C. Hass

G. C. Hass, Chief
Vehicle Emissions Control Division

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1979 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer General Motors Corporation Page 1

Engine Family 4L-53T Engine (CID) 212

Emission Control Systems Fuel Modulator Type TC

Engine Model	Fuel Injection Pump Mfgr. Part Number	Injector Mfg. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm^3/stroke	Basic Initial Timing
4L-53T	None	5A55 GMC 5229676	155 @ 2500	54.0	8
	See page 4 for tune-up label text.	5A60 5229666	170 @ 2500	61.1	8

Date of Issue - 103078

Abbreviations

Type
NA - Natural Aspiration
TC - Turbocharged
TCA - Turbocharged and Aftercooled

Emission Control Systems
AC - Aftercooler
EGR - Exhaust Gas Recirculation
TD - Throttle Delay

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1979 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer General Motors Corporation Page 2

Engine Family 6L-71N Engine (CID) 426

Emission Control Systems None Type N/A

Engine Model	Fuel Injection Pump Mfgr. Part Number	Injector Mfg. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm^3/stroke	Basic Initial Timing Degrees before Top Center
6L-71N	None	71B5 GMC 5229550	190 @ 2300	49.7	13
		B55 GMC 5229555	203 @ 2300	52.3	14, 13
	See page 4 for tune-up label text.	B60 GMC 5229560	219 @ 2300	56.2	15, 14

Date of Issue - 103078. Optional 13° & 14° basic timing added to B55 & B60 versions by RC 6, on 042079.

Abbreviations

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TCA - Turbocharged and Aftercooled

Emission Control Systems
AC - Aftercooler
EGR - Exhaust Gas Recirculation
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1979 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET
HEAVY-DUTY DIESEL ENGINES

Manufacturer General Motors Corporation Page 3

Engine Family 8V-71TA Engine (CID) 568

Emission Control Systems TD & AC Type TCA

Engine Model	Fuel Injection Pump Mfgr. Part Number	Injector Mfg. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP mm^3/stroke	Basic Initial Timing
8V-71TA	None	7A50 GMC 5229690	228 @ 2100	50.8	5
		7A55 GMC 5229685	246 @ 2100	54.3	5
		7A60 GMC 5229680	262 @ 2100	57.4	6
	See page 4 for tune-up label text.	7A65 GMC 5229665	308 @ 2100	67.1	6
		7A70 GMC 5229670	335 @ 2100	72.1	6
		7A75 GMC 5229675	350 @ 2100	75.6	6
8V-71TA Constant Power		7A75 GMC 5229675	305 @ 1900	69.6	6

Date of Issue - 103078

Abbreviations

Type
NA - Natural Aspiration
TC - Turbocharged
TCA - Turbocharged and Aftercooled

Emission Control Systems
AC - Aftercooler
EGR - Exhaust Gas Recirculation
TD - Throttle Delay

1979 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET - GM FORMAT

Manufacturer: General Motors Corporation Executive Order No. A-6-157 Pg. 4

DETROIT DIESEL ALLISON DIVISION

8V-71TA ENGINE FAMILY:

ENGINE EXHAUST EMISSION CONTROL INFORMATION
THIS ENGINE CONFORMS TO U.S. EPA AND
CALIFORNIA REGULATIONS APPLICABLE TO 1979
MODEL YEAR HEAVY-DUTY DIESEL ENGINES.
ENGINE FAMILY/MODEL 8V-71TA; CID 568
MIN. IDLE 500 RPM; ADV HP 350 @ 2100 RPM
FUEL RATE AT ADVERTISED HP 75.6 MM 3/STROKE
INITIAL INJECTION TIMING 6 DEG. BTC
VALVE LASH .016 INCHES; MFG. DATE:
GENERAL MOTORS CORPORATION
CONFORMS TO AUSTRALIAN DESIGN RULE 30

6L-71N ENGINE FAMILY:

ENGINE EXHAUST EMISSION CONTROL INFORMATION
THIS ENGINE CONFORMS TO U.S. EPA AND
CALIFORNIA REGULATIONS APPLICABLE TO 1979
MODEL YEAR HEAVY-DUTY DIESEL ENGINES.
ENGINE FAMILY/MODEL 6L-71N; CID 426
MIN. IDLE 500 RPM; ADV HP 219 @ 2300 RPM
FUEL RATE AT ADVERTISED HP 56.2 MM 3/STROKE
INITIAL INJECTION TIMING 15 DEG. BTC
VALVE LASH .016 INCHES; MFG. DATE:
GENERAL MOTORS CORPORATION
CONFORMS TO AUSTRALIAN DESIGN RULE 30

4L-53T ENGINE FAMILY:

ENGINE EXHAUST EMISSION CONTROL INFORMATION
THIS ENGINE CONFORMS TO U.S. EPA AND
CALIFORNIA REGULATIONS APPLICABLE TO 1979
MODEL YEAR HEAVY-DUTY DIESEL ENGINES.
ENGINE FAMILY/MODEL 4L-53T; CID 212
MIN. IDLE 500 RPM; ADV HP 170 @ 2500 RPM
FUEL RATE AT ADVERTISED HP 61.1 MM 3/STROKE
INITIAL INJECTION TIMING 8 DEG. BTC
VALVE LASH .026 INCHES; MFG. DATE:
GENERAL MOTORS CORPORATION
CONFORMS TO AUSTRALIAN DESIGN RULE 30

ISSUED: 103078