

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-130
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 General Motors Corporation 1978 model-year diesel-powered engines in heavy-duty motor vehicles with manufacturer's gross vehicle weight rating greater than 8500 pounds are certified for the engine families and models described below:

<u>Families</u>	<u>Engine Size (CID)</u>	<u>Type</u>
4L-53T	212	Inline 4, Turbocharged
6L-71N	426	Inline 6, Naturally Aspirated
8V-71TA	568	V-8, Turbocharged and Aftercooled
6V-92TA	552	V-6, Turbocharged and Aftercooled
8V-92TA	736	V-8, Turbocharged and Aftercooled

Engine models as listed in attachment.

Section 43200, Part 5, Division 26 of the California Health and Safety Code requires that the manufacturer affix a decal to the side window to the rear of the driver or, if there is no such window on the driver's side, to the windshield of the motor vehicle.

The decal shall display the applicable model year heavy-duty engine exhaust emission standards and the following recommended values:

<u>Engine Family</u>	<u>HC + NOx gm/bhp-hr</u>	<u>CO gm/bhp-hr</u>	<u>HC gm/bhp-hr</u>	<u>NOx gm/bhp-hr</u>
4L-53T		3	0.7	6.9
6L-71N		6	0.4	7.5
8V-71TA		2	0.5	6.2
6V-92TA		2	0.6	6.4
8V-92TA		2	0.6	7.3

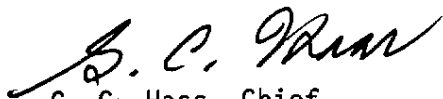
Engines certified under this Executive Order must conform to all applicable California emission regulations.

GENERAL MOTORS CORPORATION

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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 13 day of October, 1977.



G. C. Hass, Chief
Vehicle Emissions Control Division

1978 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

Manufacturer GENERAL MOTORS CORPORATION Executive Order No. A-6-130 Page 1
 Engine Family 4L-53T and 6L-71N Engine (CID) 212 and 426
 Emission Control Systems FM (4L-53T); None (6L-71N) Type TC and NA

Engine Model	CID	Fuel Injection Pump Mfgr. Part Number	Injector Mfg. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP (1)	Basic Initial Timing °BTC
4L-53T	212	None	5A55 GMC 5229676	155 @ 2500	54.0	8
6L-71N	426		71B5 GMC 5229550	190 @ 2300	49.7	13
			B55 GMC 5229555	203 @ 2300	52.3	14
			B60 GMC 5229560	219 @ 2300	56.2	15
4L-53T	212		5A60 GMC 5229666	170@2500	61.1	8

Comments (1) Cubic millimeters per stroke.

Date of Issue 100777, 4L-53T with 5A60 injectors added by RC2, on 121577.

Abbreviations

Type

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

Emission Control Systems

AC - Aftercooler
 EGR - Exhaust Gas Recirculation
 TD - Throttle Delay
 FM - Fuel Modulator

1978 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

Manufacturer GENERAL MOTORS CORPORATION Executive Order No. A-6-130 Page 2Engine Family 8V-71TA Engine (CID) 568Emission Control Systems Throttle Delay & Aftercooler Type TCA

Engine Model	Fuel Injection Pump Mfgr. Part Number	Injector Mfg. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP (1)	Basic Initial Timing °BTC
8V-71TA	None	7A50 GMC 5229690	228 @ 2100	50.8	4
		7A55 GMC 5229685	246 @ 2100	54.3	4
		7A60 GMC 5229680	262 @ 2100	57.4	5
		7A65 GMC 5229665	308 @ 2100	67.1	5
		7A70 GMC 5229670	335 @ 2100	72.1	5
		7A75 GMC 5229675	350 @ 2100	75.6	5
8V-71TA Constant Power		7A75 GMC 5229675	305 @ 1900	69.6 (2)	5

Comments (1) Cubic millimeters per stroke.
(2) Fuel/cycle at 305 HP @ 1900 RPM.

Date of Issue 100777

Abbreviations

Type

NA - Natural Aspiration

TC - Turbocharged

TCA- Turbocharged and Aftercooled

Emission Control Systems

AC - Aftercooler

EGR - Exhaust Gas Recirculation

TD - Throttle Delay

1978 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET HEAVY-DUTY DIESEL ENGINES

Manufacturer GENERAL MOTORS CORPORATION Executive Order No. A-6-130 Page 3
 Engine Family 6V-92TA and 8V-92TA Engine (CID) 552 and 736
 Emission Control Systems Throttle Delay & Aftercooler Type TCA

Engine Model	CID	Fuel Injection Pump Mfgr. Part Number	Injector Mfg. Part Number	Maximum Rated HP and RPM	Fuel Rate at Maximum HP (1)	Basic Initial Timing °BTC
6V-92TA	552	None	9A80 GMC 5229620	280 @ 2100	79.0	9
			9A85 5229625	300 @ 2100	84.0	10
			9A90 5229630	318 @ 2100	89.0	11
6V-92TA Constant Power	552		9A90 5229630	240 @ 1900	72.8 (2)	11
8V-92TA	736	None	9A80 5229620	373 @ 2100	79.0	9
			9A85 5229625	400 @ 2100	84.0	10
			9A90 5229630	424 @ 2100	89.0	11
8V-92TA Constant Power	736		9A90 5229630	335 @ 1800	79.2 (3)	11

Comments (1) Cubic millimeters per stroke.
 (2) Fuel/cycle at 240 HP @ 1900 RPM.
 (3) Fuel/cycle at 335 HP @ 1800 RPM.

Date of Issue 100777

Abbreviations

Type

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

Emission Control Systems

AC - Aftercooler
 EGR - Exhaust Gas Recirculation
 TD - Throttle Delay