

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-6-779

Relating to Certification of New Heavy-Duty 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-45-9;

IT IS ORDERED AND RESOLVED: That the following General Motors Corporation 1997 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>		<u>Exhaust Emission Control Systems and Special Features</u>
VGM6.5C6DABW	6.5	(395)	Indirect Fuel Injection Turbocharger Oxidation Catalytic Converter
VGM6.5C6DAAA	6.5	(395)	Indirect Fuel Injection Oxidation Catalytic Converter
VGM6.5C6DABA	6.5	(395)	Indirect Fuel Injection Turbocharger Oxidation Catalytic Converter

Engine models and codes are listed on attachments.

The certification exhaust emission standards for these engine families in grams per brake horsepower-hour are:

<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.3	15.5	5.0	0.10

The certification exhaust emission values for these engine families in grams per brake horsepower-hour are:

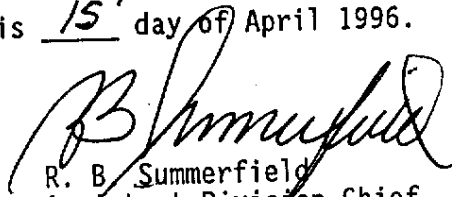
<u>Engine Family</u>	<u>Total Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
VGM6.5C6DABW	0.1	1.2	3.8	0.08
VGM6.5C6DAAA	0.5	3.3	4.0	0.07
VGM6.5C6DABA	0.3	1.7	4.1	0.08

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

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 attachments.

Executed at El Monte, California this 15<sup>th</sup> day of April 1996.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

**1997 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL-STANDARD ENGINES**

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: VGM6.5C6DABW

DISPLACEMENT: 6.5L 395 CUBIC INCHES

ALL ENG CODES IN ENG FAMILY: CA\_\_ 49S\_\_ 50S\_X STROKES/CYCLE: 4 VALVES/CYLINDER: 2

IGNITION: COMPRESSION\_\_ COMPRESSION WITH GLOW PLUG\_X SPARK\_\_

FUEL TYPE(S): DEDICATED\_\_ FLEX-FUEL\_\_ DUAL-FUEL\_\_ BI-FUEL\_\_ DIESEL\_X CNG\_\_  
LNG\_\_ LPG\_\_ M85\_\_ M100\_\_ OTHER \_\_\_\_\_

DIESEL CERT FUEL: 13 CCR 2282\_\_ 40 CFR 86.1313-90\_\_ 40 CFR 86.1313-94\_X

MAXIMUM RATED POWER: 200 HP @ 3400 RPM ENGINE CONFIGURATION: V8

EXHAUST ECS (E.G., OC, EGR, PTOX, IFI, TC, CAC): IFI, OC, TC

ENG MODEL (ENG CODE)	RATED HP @ RPM	FUEL RATE @ RATED HP MM <sup>3</sup> /STROKE (LBS/HR)	FUEL PUMP & INJECTOR P/N	ECM/PCM P/N	EGR VALVE P/N	PTOX/ CATALYTIC CONVERTER P/N
L65 (1)	190 @ 3400	61.2 (92.3)	10225930 & 10233973	16217055	NA	25144421
				16228705		25144427
				16228715		25143882
				16228745		25152218
				16235115		25144425
				16235125		25143891
				16235135		25143901
				16235165		25143188
						15991750
						15991751
L65 (2)				16226895		
				16228725		
				16228735		
				16235145		
				16235155		
L65 (3)	200 @ 3400	64.1 (96.6)		12551834		
L65 (4)		67.0 (101.0)		16217065		15963895 25153008
L65(5)	190 @ 3400	65.1 (98.1)		16235175		

ISSUED: 02-08-96

REV. NO.:

HDD-17

**1997 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL-STANDARD ENGINES**

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: VGM6.5C6DAAA

DISPLACEMENT: 6.5L 395 CUBIC INCHES

ALL ENG CODES IN ENG FAMILY: CA\_\_ 49S\_\_ 50S\_X STROKES/CYCLE: 4 VALVES/CYLINDER: 2

IGNITION: COMPRESSION\_\_ COMPRESSION WITH GLOW PLUG\_X SPARK\_\_

FUEL TYPE(S): DEDICATED\_\_ FLEX-FUEL\_\_ DUAL-FUEL\_\_ BI-FUEL\_\_ DIESEL\_X CNG\_\_

LNG\_\_ LPG\_\_ M85\_\_ M100\_\_ OTHER \_\_\_\_\_

DIESEL CERT FUEL: 13 CCR 2282\_\_ 40 CFR 86.1313-90\_\_ 40 CFR 86.1313-94\_X

MAXIMUM RATED POWER: 160 HP @ 3400 RPM ENGINE CONFIGURATION: V8

EXHAUST ECS (E.G., OC, EGR, PTOX, IFI, TC, CAC): IFI, OC

ENG MODEL (ENG CODE)	RATED HP @ RPM	FUEL RATE @ RATED HP MM <sup>3</sup> /STROKE (LBS/HR)	FUEL PUMP & INJECTOR P/N	ECM/PCM P/N	EGR VALVE P/N	PTOX/ CATALYTIC CONVERTER P/N
L57 (1)	160 @ 3400	50.5 (76.1)	10229115 & 10233972	NA	NA	25143901 25153008 15963895
L57(2)	150 @ 3400	45.5 (68.6)	10229119* & 10233972			
L57 (3)	127 @ 2600	47.0 (54.2)	10238969 & 10233972			

\* High altitude

ISSUED: 02-08-96

REV. NO.:

**1997 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL-STANDARD ENGINES**

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: VGM6.5C6DABA

DISPLACEMENT: 6.5L 395 CUBIC INCHES

ALL ENG CODES IN ENG FAMILY: CA\_\_ 49S\_\_ 50S\_X STROKES/CYCLE: 4 VALVES/CYLINDER: 2

IGNITION: COMPRESSION\_\_ COMPRESSION WITH GLOW PLUG\_X SPARK\_\_

FUEL TYPE(S): DEDICATED\_\_ FLEX-FUEL\_\_ DUAL-FUEL\_\_ BI-FUEL\_\_ DIESEL\_X CNG\_\_

LNG\_\_ LPG\_\_ M85\_\_ M100\_\_ OTHER\_\_\_\_\_

DIESEL CERT FUEL: 13 CCR 2282\_\_ 40 CFR 86.1313-90\_\_ 40 CFR 86.1313-94\_X

MAXIMUM RATED POWER: 190 HP @ 3400 RPM

ENGINE CONFIGURATION: V8

EXHAUST ECS (E.G., OC, EGR, PTOX, IFI, TC, CAC): IFI, OC, TC

ENG MODEL (ENG CODE)	RATED HP @ RPM	FUEL RATE @ RATED HP MM <sup>3</sup> /STROKE (LBS/HR)	FUEL PUMP & INJECTOR P/N	ECM/PCM P/N	EGR VALVE P/N	PTOX/ CATALYTIC CONVERTER P/N
L65 (1)	190 @ 3400	59.5 (89.7)	12551521 & 10233973	NA	NA	25143188
L65 (2)		62.6 (94.4)	10224039 & 10233973			25143109

ISSUED: 02-08-96

REV. NO.: