

State of California  
AIR RESOURCES BOARD

## EXECUTIVE ORDER A-6-822

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 1998 model year 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</u>	<u>(Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
WGMXH06.5521 (L65)	6.5	(395)	Turbocharger Powertrain Control Module Oxidation Catalytic Converter Indirect Fuel Injection
WGMXH06.5522 (L65)	6.5	(395)	Turbocharger Oxidation Catalytic Converter Indirect Fuel Injection
WGMXH06.5526 (L57)	6.5	(395)	Oxidation Catalytic Converter Indirect Fuel Injection

Engine models and codes are listed on attachments.

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

<u>Total Hydrocarbon</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.3	15.5	4.0	0.10

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

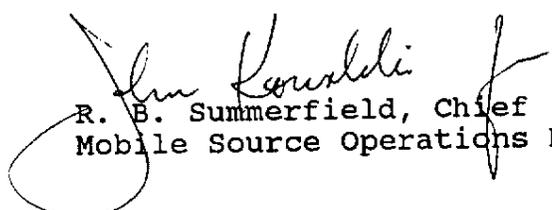
<u>Engine Family</u>	<u>Total Hydrocarbon</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
WGMXH06.5521	0.1	1.4	3.7	0.08
WGMXH06.5522	0.8	2.6	3.5	0.08
WGMXH06.5526	0.5	3.3	4.0	0.07

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 23<sup>rd</sup> day of June 1997.

  
R. B. Summerfield, Chief  
Mobile Source Operations Division

**1998 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL-STANDARD ENGINES**

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: WGMXH06.5521

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\_X 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: 195 HP @ 3400 RPM

ENGINE CONFIGURATION: V8

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

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)	195 @ 3400	64.5 (97.2)	10225930 10233973 12558156	16244335	NA	15963895 25153008
L65(2)	190 @ 3400	63.6 (95.8)		16239155 16239175		
L65 (3)	195 @ 3400	63.1 (95.1)	10225930 10233973 12558156	16240145 16240155 16240185		25144421 25144427 25143882 25152218 25144425 25143891 25143901 25143188 15991750 15991751 15991752 15991753 15991754 15991755
L65 (4)				16240165 16240175		

ISSUED: 04-24-97

REV. NO.:

**1998 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL-STANDARD ENGINES**

MANUFACTURER: GENERAL MOTORS CORPORATION

ENGINE FAMILY: WGMXH06.5522

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\_X 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: 04-24-97

REV. NO.:

**1998 MODEL YEAR AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL-STANDARD ENGINES**

MANUFACTURER: GENERAL MOTORS CORPORATION ENGINE FAMILY: WGMXH06.5526  
 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\_X 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: 04-24-97

REV. NO.: