

*F.elli*

	DETROIT DIESEL CORPORATION	<b>EXECUTIVE ORDER U-R-007-0076</b> New Off-Road Compression-Ignition Engines
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Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 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 compression-ignition engine and emission control system produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2003	3DDXL65.0GTP	32.5, 48.7 and 65.0	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Engine Control Module, Turbocharger, Charge Air Cooler			Generator Set	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbons (HC), oxides of nitrogen (NOx), or non-methane hydrocarbons plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

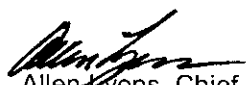
RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
KW > 560	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	N/A	N/A	N/A
		CERT	0.9	7.5	--	0.8	0.20	--	--	--

**BE IT FURTHER RESOLVED:** That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

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

**This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.**

Executed at El Monte, California on this 12<sup>TH</sup> day of March 2002.

  
 Allen Lyons, Chief  
 New Vehicle/Engine Programs Branch

# Engine Model Summary Form

Manufacturer: Detroit Diesel Corporation and MTU  
 Engine category: Nonroad CI  
 EPA Engine Family: 3DDXL65.0GTP  
 Mfr Family Name: SERIES 4000 MDEC  
 Process Code: New Submission

ATTACHMENT

EC U-R-007-007C  
 Page 1 of 4

1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate: mm/stroke @ peak HP (for diesel only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7. Fuel Rate: mm/stroke@peak torque	8. Fuel Rate: (lbs/hr)@peak torque	9. Emission Control Device Per SAE J1930
					GENSET - NA (all ratings)	NA (all ratings)	NA (all ratings)	EC TAW (all ratings)
8GS1 - S	8V-4000	1475 @ 1800	640	496				
8GS2 - P		1341 @ 1800	585	410				
8GS3 - C	V	1005 @ 1800	435	335				
8GS4 - S	8V-4000 SW	1408 @ 1800	622	478				
8GS5 - P		1281 @ 1800	565	430				
8GS6 - C	V	1006 @ 1800	435	338				
12GS1 - S	12V-4000	1998 @ 1800	550	670				
12GS2 - P		1816 @ 1800	500	599				
12GS3 - C		1651 @ 1800	460	551				
12GS4 - S		2199 @ 1800	600	730				
12GS5 - P		1998 @ 1800	550	670				
12GS6 - C	V	1502 @ 1800	405	496				
12GS7 - S	12V-4000 SW	1938 @ 1800	530	637				
12GS8 - P		1756 @ 1800	500	595				
12GS9 - S		2132 @ 1800	580	705				
12GS11 - C	V	1502 @ 1800	400	490				

LDI, ECM, TC, CAC

# Engine Model Summary Form

**Manufacturer:** Detroit Diesel Corporation and MTU  
**Engine category:** Nonroad CI  
**EPA Engine Family:** 3DDXL65.0GTP  
**Mfr Family Name:** SERIES 4000 MDEC  
**Process Code:** New Sub - continued

ATTACHMENT

V-R-007-0026  
V93-2014

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
					GENSET - NA (all ratings)	NA (all ratings)	NA (all ratings)	EC TAW (all ratings)
16GS1 - S	16V-4000	2668 @ 1800	550	875				
16GS4 - S		2937 @ 1800	600	975				
16GS5 - P		2668 @ 1800	550	875				DDI, ECM, TC, CAC
16GS6 - C	V	2005 @ 1800	410	657				
16GS7 - S	16V-4000 SW	2561 @ 1800	536	845				
16GS8 - P		2327 @ 1800	490	765				
16GS9 - S		2816 @ 1800	590	953				
16GS10 - P		2561 @ 1800	536	845				
16GS11 - C	V	2005 @ 1800	415	665				

S - standby  
 P - prime  
 C - continuous  
 SW - switchable

# Engine Model Summary Form

Manufacturer: **Detroit Diesel Corporation and MTU**  
 Engine category: **Nonroad CI**  
 EPA Engine Family: **3DDXL65.0GTP**  
 Mfr Family Name:  
 Process Code: **Correction Revised 3-12-02**

ATTACHMENT

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1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate: mm/stroke @ peak HP (for diesel only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7. Fuel Rate: mm/stroke@peak torque	8. Fuel Rate: (lbs/hr)@peak torque	9. Emission Control Device Per SAE J1930
12GS2 - P	12V-4000	1816 @ 1800	500	599				
12GS3 - C	12V-4000	1651 @ 1800	460	551				DP1, ECM, TC, CAC

# Engine Model Summary Form

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## ATTACHMENT

Manufacturer: Detroit Diesel Corporation and MTU  
 Engine category: Nonroad CI  
 EPA Engine Family: 3DDXL65.0GTP  
 Mfr. Family Name:  
 Process Code: Running Change Nov. 1, 2002

1. Engine Code	2. Engine Model	3. BHP@RPM (SAE Gross)	4. Fuel Rate: mm/stroke @ peak HP (for diesel only)	5. Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6. Torque @ RPM (SEA Gross)	7. Fuel Rate: mm/stroke@peak torque	8. Fuel Rate: (lbs/hr)@peak torque	9. Emission Control Device Per SAE J1930
8GS1 - S	8V-4000	1475 @ 1800	621	496	GENSET - NA (all ratings)	NA (all ratings)	NA (all ratings)	DDI, ECM, TC, CAC (all ratings)
8GS2 - P		1341 @ 1800	559	446				
8GS3 - C	V	1005 @ 1800	418	334				
12GS1 - S	12V-4000	1998 @ 1800	546	654				
12GS2 - P		1816 @ 1800	491	588				
12GS3 - C		1651 @ 1800	448	536				
12GS4 - S		2199 @ 1800	610	730				
12GS5 - P		1998 @ 1800	546	654				
12GS6 - C	V	1502 @ 1800	413	494				
16GS1 - S	16V-4000	2668 @ 1800	547	873				
16GS4 - S		2937 @ 1800	613	978				
16GS5 - P		2668 @ 1800	547	873				
16GS6 - C	V	2005 @ 1800	413	659				

S - standby  
 P - prime  
 C continuous