

File

 AIR RESOURCES BOARD	DETROIT DIESEL CORPORATION	EXECUTIVE ORDER U-R-007-0077 New Off-Road Compression-Ignition Engines
--	-----------------------------------	---

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	3DDXL35.8GRP	23.9, 31.8 and 35.8	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	0.3	7.4	--	1.0	0.08	--	--	--

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 2ND day of April 2002.


 Allen Lyons, Chief
 New Vehicle/Engine Programs Branch

Engine Model Summary Form

ATTACHMENT

EO U-R-007-0077

Page 1 of 3

Manufacturer: Detroit Diesel Corporation
 Engine category: Nonroad CI
 EPA Engine Family: 3DDXL35.8GRP
 Mfr Family Name: SERIES 2000 MDEC
 Process Code: New Submission

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)	DO _i , ECM, TC, CAC (all ratings)
1A	12V-2000 A/A	985 @ 1800	285	341				
2A		1119 @ 1800	323	387				
3A		932 @ 1800	269	322				
4A	V	838 @ 1800	246	295				
1B	12V-2000 SCCC	985 @ 1800	284	340				
2B		1119 @ 1800	322	385				
3B		932 @ 1800	269	322				
4B	V	838 @ 1800	244	292				
1C	16V-2000 A/A	1340 @ 1800	297	474				
2C		1495 @ 1800	329	525				
3C		1240 @ 1800	276	441				
4C	V	1119 @ 1800	252	402				
1D	16V-2000 SCCC	1340 @ 1800	298	476				
2D		1495 @ 1800	330	527				
3D		1240 @ 1800	277	442				
4D	V	1119 @ 1800	253	404				

Engine Model Summary Form

ATTACHMENT

EO U-R-007-0077

Page 2 of 3

Manufacturer: **Detroit Diesel Corporation**
 Engine category: **Nonroad CI**
 EPA Engine Family: **3DDXL35.8GRP**
 Mfr Family Name: **SERIES 2000 MDEC**
 Process Code:

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)	DDI, ECM, TC, CAC (all ratings)
1E	18V-2000 A/A	1676 @ 1800	327	587				
2E		1394 @ 1800	276	496				
3E	V	1206 @ 1800	238	427				
1F	18V-2000 SCCC	1676 @ 1800	326	585				
2F		1394 @ 1800	274	492				
3F	V	1206 @ 1800	237	426				

Engine Model Summary Form

FO U-R-007-0077
 Page 3 of 3

ATTACHMENT

Manufacturer: **Detroit Diesel Corporation**
 Engine category: **Nonroad CI**
 EPA Engine Family: **3DDXL35.8GRP**
 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
1A			276	330				
2A			313	375				
3A			261	312				
4A			238	285				
1B			275	329				
2B			312	374				
3B			260	311				
4B			237	284				
1C			288	460				
2C			318	508				
3C			267	426				
4C			244	389				
1D			289	461				
2D			320	511				
3D			269	429				
4D			244	389				
1E			314	564				
2E			265	476				
3E			230	413				
1F			318	571				
2F			265	476				
3F			230	413				