



EXECUTIVE ORDER: A-290-0192 New On-Road Heavy-Duty Engines Page 1 of 2

Pursuant to the authority vested in the California Air Resources Board by Health and Safety Code Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: The engines and emission control systems produced by the manufacturer as described below are certified for use in on-road motor vehicles with a manufacturer's Gross Vehicle Weight Rating (GVWR) over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

Model Year	Engine Family	Combustion Cycle	Fuel Operation	Fuel Type(s)	Intended Vehicle Service Class	Intended GHG Vehicle Type
2024	RDDXH12.8NXC	Diesel	Dedicated	Diesel	Heavy Heavy-Duty	Vocational and Tractor

Emission Control Systems (ECS)	Special Features
[1]: Electronic Direct Injection (DDI), Charge Air Cooler (CAC), Exhaust Gas Recirculation (EGR), Electronic Control Module (ECM), Turbocharger (TC), Oxidation Catalyst (OC), Periodic Trap Oxidizer (PTOX), Selective Catalyst Reduction - Urea (SCR-U), Ammonia Oxidation Catalyst (AMOX)	None

The certified engine models are attached.

The listed engine models comply with the following: 1) emission standard limits (STD) as demonstrated on the Federal Test Procedure (FTP) and Supplemental Emission Test (SET) test cycles, and on the Low-Load Cycle (LLC) test cycle and 2) Conformity Factors (CF) as demonstrated using the Three-Bin Moving Average Window (3B-MAW) method, as applicable, for exhaust criteria pollutants non-methane hydrocarbons (NMHC), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM), and exhaust greenhouse gas (GHG) pollutants carbon dioxide (CO2), methane (CH4), and nitrous oxide (N2O) as set forth in 13 CCR 1956.8 and the applicable California test procedures for heavy-duty diesel cycle engines, and 3) family emission limits (FEL) and family certification levels (FCL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per brake horsepower-hour (g/bhp-hr), except as noted, or designated as not applicable (*).

		Crit	eria		GHG				
Applicable Standard	NMHC	NOx	СО	РМ	CO2 VOCV	CO2 TRAC	CH4	N2O	
	STD: FTP / SET	0.14	0.050	15.5	0.005	510	442	0.10	0.10
Heavy-Duty Diesel Cycle	STD: LLC	0.14	0.200	15.5	0.005	*	*	*	*
Clean Idle 10g Alternate Phase 2 CO2 Standard	FEL: FTP / SET	*	0.100	*	*	511	453	0.10	0.10
Heavy Heavy Duty Vocational and Tractor	FEL: LLC	*	*	*	*	*	*	*	*
	3B-MAW	2.0	2.0	2.0	2.0	*	*	*	*

BE IT FURTHER RESOLVED: Any declared FEL or FCL is the emission limit to which all engines must comply in lieu of the standard limit for certification purposes, subject to the restrictions of averaging, banking, or trading (ABT) programs allowed by the applicable California test procedures.

BE IT FURTHER RESOLVED: For the listed engine models, the manufacturer has submitted materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1971.1 (on-board diagnostic full or partial compliance), and 13 CCR 2035 et seq. (emission control warranty).

BE IT FURTHER RESOLVED: That the listed engine family is certified on an interim basis pending CARB's submission of the proposed amendments to the California Heavy-Duty Engine and Vehicle Omnibus regulation to the Office of Administrative Law (OAL), and OAL's approval of such amendments. Upon OAL approval of such amendments this Executive Order becomes final.

BE IT FURTHER RESOLVED: For engines in this engine family certified under 13 CCR 1956.8(a)(6)(C) [10 g/hr NOx] and section 11.A.6.3 of the applicable California test procedures, except those in vehicle applications exempted per 13 CCR 1956.8(a)(6)(B), the engine manufacturer shall provide an approved "Certified Clean Idle" label to be affixed to the vehicle into which the engine is installed.



DETROIT DIESEL CORPORATION

EXECUTIVE ORDER: A-290-0192 New On-Road Heavy-Duty Engines Page 2 of 2

BE IT FURTHER RESOLVED: The listed engine models are certified in accordance with 13 CCR Section 1971.1(k) (deficiency and fines provisions for certification of heavy-duty on-board diagnostic (HD OBD) systems with identified deficiencies) and Health and Safety Code Section 43154.

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

Executed on this 4th day of January 2024.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

Golin U. Lang

ATTACHMENT: ENGINE MODELS

Family: RDDXH12.8NXC EO Number: A-290-0192 Date Applicable: 12/27/2023

		Trim		Displacement	Peak Power		Fueling	Peak Torque		Fueling	ECS Num	GHG	Notes
Model	Code		Config		Power	Speed		Torque	Speed				
-	-	-	-	Liters	horsepower	rpm	lb/hr	lb-ft	rpm	lb/hr	-	-	-
DD13	II		16	12.8	450	1500	136.5	1750	1000	151.7	1	Both	
DD13	XX		16	12.8	425	1500	127.8	1750	1000	151.7	1	Both	
DD13	XI		16	12.8	450	1625	139.1	1550	1100	95.5	1	Both	
DD13	XII		16	12.8	470	1625	145.6	1650	1100	101.7	1	Both	
DD13	XIII		16	12.8	450	1625	139.1	1650	1100	101.7	1	Both	
DD13	XIV		16	12.8	525	1625	164.8	1850	1100	114.2	1	Both	
DD13	XVII		16	12.8	410	1625	126.8	1650	1100	101.7	1	Both	
DD13	XVIII		16	12.8	505	1625	158.3	1850	1100	114.2	1	Both	
DD13	XIX		16	12.8	450	1625	139.1	1550	1100	95.5	1	Both	