

Pursuant to the authority vested in California 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-19-095;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems 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)
2022	NDZXL02.9016	2.925	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Exhaust Gas Recirculation, Electronic Control Module, Diesel Oxidation Catalyst			Off-Road Crane, Loader, Tractor, Dozer, Pump, Compressor, Material Handler, Other Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon 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 (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
37 ≤ kW < 56	Tier 4 Final	STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		CERT	--	--	4.6	2.7	0.02	--	--	--

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 on this 18th day of December 2021.



Allen Lyons, Chief
 Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-013-0650

Family: NDZXLO2.9016

Attachment Last Revised: 8/17/2022

Model	Code	Trim	Config	Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel Units	Peak Torque	Peak Torque - Units	Peak Torque - Speed (rpm)	Peak Torque - Fuel Units	OBD	GHG	Special	Notes	
TCD2.9L4	C4DI55C		L4	2.925	Liters	74.2	horsepower	2300	29.1	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI55C		L4	2.925	Liters	74.2	horsepower	2600	29.1	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI55A		L4	2.925	Liters	74.2	horsepower	2500	31.3	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI55B		L4	2.925	Liters	74.2	horsepower	2400	30.2	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI54		L4	2.925	Liters	72.4	horsepower	2200	27.6	lb/hr	191.7	lb-ft	1800	23.5	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI55D		L4	2.925	Liters	74.2	horsepower	2200	27.6	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI50C		L4	2.925	Liters	67.0	horsepower	2300	26.7	lb/hr	199.1	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI45		L4	2.925	Liters	60.3	horsepower	2600	27.1	lb/hr	177	lb-ft	1600	19.1	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI45A		L4	2.925	Liters	60.3	horsepower	2300	25	lb/hr	177	lb-ft	1600	19.1	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI45B		L4	2.925	Liters	60.3	horsepower	2200	23.9	lb/hr	177	lb-ft	1600	19.1	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DT55		L4	2.925	Liters	74.2	horsepower	2200	27.6	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DT50		L4	2.925	Liters	67	horsepower	2200	25.6	lb/hr	200.6	lb-ft	1600	21.8	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DT45		L4	2.925	Liters	60.3	horsepower	2200	23.9	lb/hr	179.9	lb-ft	1600	19.7	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI55I		L4	2.925	Liters	74.2	horsepower	2600	29.1	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI55E		L4	2.925	Liters	74.2	horsepower	2500	31.3	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI55F		L4	2.925	Liters	74.2	horsepower	2400	30.2	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI55G		L4	2.925	Liters	74.2	horsepower	2300	29.1	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI54A		L4	2.925	Liters	72.4	horsepower	2200	27.6	lb/hr	191.7	lb-ft	1800	23.5	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI50G		L4	2.925	Liters	67	horsepower	2300	26.7	lb/hr	199.1	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI45D		L4	2.925	Liters	60.3	horsepower	2600	27.1	lb/hr	177	lb-ft	1600	19.1	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI45E		L4	2.925	Liters	60.3	horsepower	2300	25	lb/hr	177	lb-ft	1600	19.1	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI45F		L4	2.925	Liters	60.3	horsepower	2200	23.9	lb/hr	177	lb-ft	1600	19.1	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI55H		L4	2.925	Liters	74.2	horsepower	2200	27.6	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DT55A		L4	2.925	Liters	74.2	horsepower	2200	27.6	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DT55B		L4	2.925	Liters	74.2	horsepower	2200	27.6	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DT50A		L4	2.925	Liters	67	horsepower	2200	25.6	lb/hr	200.6	lb-ft	1600	21.8	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DT50B		L4	2.925	Liters	67	horsepower	2200	25.6	lb/hr	200.6	lb-ft	1600	21.8	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DT45A		L4	2.925	Liters	60.3	horsepower	2200	23.9	lb/hr	179.9	lb-ft	1600	19.7	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DT45B		L4	2.925	Liters	60.3	horsepower	2200	23.9	lb/hr	179.9	lb-ft	1600	19.7	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DT55C		L4	2.925	Liters	74.2	horsepower	2200	27.6	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DT55D		L4	2.925	Liters	74.2	horsepower	2200	27.6	lb/hr	221.2	lb-ft	1600	23.9	lb/hr	N/A	N/A	N/A	N/A
TCD2.9L4	C4DI36		L4	2.925	Liters	48.8	horsepower	2200	21.2	lb/hr	160.0	lb-ft	1600	18.1	lb/hr	N/A	N/A	N/A	New