

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	NDZXL06.1050	6.057	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Common Rail Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Diesel Oxidation Catalyst, Continuous Trap Oxidizer, Selective Catalytic Reduction-Urea			Off-Road Crane, Loader, Pump, Compressor, Material Handler	

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 (NO_x), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO_x), 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	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.01	0.29	--	1.7	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).

BE IT FURTHER RESOLVED: That the listed engine family is conditionally certified pending submission of additional test data to verify compliance with useful-life emission standards. The manufacturer must submit the necessary data by March 31, 2022 to confirm or correct the certification emissions levels on this conditional certification. Failure to submit the necessary data or resolve concerns by the specified date, shall be cause for the Executive Officer to rescind this conditional certification, in which case all engines covered under this conditional certification and introduced into commerce in the State of California shall be deemed uncertified pursuant to Health and Safety Code Section 43153 and subject to civil penalties pursuant to Health and Safety Code Section 43154.

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 4th day of January 2022.



Allen Lyons, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-013-0655

Family: NDZX106.1050

Attachment Last Revised: 12/28/2021

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	Peak Torque - Fuel Units	OBD	GHG	Special	Notes
TCD6.1L6	CFV1180		L6	6.057	Liters	241.3	horsepower	2300	121	mm3/stroke	737.5	lb-ft	1450	148	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1180A		L6	6.057	Liters	241.3	horsepower	2200	123.5	mm3/stroke	737.5	lb-ft	1450	148	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1180B		L6	6.057	Liters	241.3	horsepower	2100	127	mm3/stroke	737.5	lb-ft	1450	148	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1180C		L6	6.057	Liters	241.3	horsepower	2000	133	mm3/stroke	737.5	lb-ft	1450	148	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1160E		L6	6.057	Liters	214.5	horsepower	1900	120.5	mm3/stroke	663.8	lb-ft	1450	130	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1160		L6	6.057	Liters	214.5	horsepower	1800	126.5	mm3/stroke	663.8	lb-ft	1450	130	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1160A		L6	6.057	Liters	214.5	horsepower	2100	106.7	mm3/stroke	663.8	lb-ft	1450	130	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1160B		L6	6.057	Liters	214.5	horsepower	2300	110	mm3/stroke	663.8	lb-ft	1450	130	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1160C		L6	6.057	Liters	214.5	horsepower	2100	112.7	mm3/stroke	663.8	lb-ft	1450	130	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1160D		L6	6.057	Liters	214.5	horsepower	2000	116.5	mm3/stroke	663.8	lb-ft	1450	130	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1150		L6	6.057	Liters	201.1	horsepower	2300	100	mm3/stroke	645.3	lb-ft	1450	126.5	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1150A		L6	6.057	Liters	201.1	horsepower	2200	102.5	mm3/stroke	645.3	lb-ft	1450	126.5	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1150B		L6	6.057	Liters	201.1	horsepower	2100	105.3	mm3/stroke	645.3	lb-ft	1450	126.5	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1140		L6	6.057	Liters	187.7	horsepower	2100	98	mm3/stroke	608.4	lb-ft	1450	119.3	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1140A		L6	6.057	Liters	187.7	horsepower	2000	101	mm3/stroke	608.4	lb-ft	1450	119.3	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	CFV1180F		L6	6.057	Liters	241.3	horsepower	2000	133	mm3/stroke	737.5	lb-ft	1450	148	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1180		L6	6.057	Liters	241.3	horsepower	2300	121	mm3/stroke	737.5	lb-ft	1450	148	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1180A		L6	6.057	Liters	241.3	horsepower	2200	123.5	mm3/stroke	737.5	lb-ft	1450	148	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1180B		L6	6.057	Liters	241.3	horsepower	2100	127	mm3/stroke	737.5	lb-ft	1450	148	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1180C		L6	6.057	Liters	241.3	horsepower	2000	133	mm3/stroke	737.5	lb-ft	1450	148	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1180F		L6	6.057	Liters	241.3	horsepower	2000	133	mm3/stroke	737.5	lb-ft	1450	148	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1160A		L6	6.057	Liters	214.5	horsepower	2100	106.7	mm3/stroke	663.8	lb-ft	1450	130	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1160B		L6	6.057	Liters	214.5	horsepower	2300	110	mm3/stroke	663.8	lb-ft	1450	130	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1160C		L6	6.057	Liters	214.5	horsepower	2100	112.7	mm3/stroke	663.8	lb-ft	1450	130	mm3/stroke	N/A	N/A	N/A	N/A
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TCD6.1L6	C5V1160E		L6	6.057	Liters	214.5	horsepower	1900	120.5	mm3/stroke	663.8	lb-ft	1450	130	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1160		L6	6.057	Liters	214.5	horsepower	1800	126.5	mm3/stroke	663.8	lb-ft	1450	130	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1150		L6	6.057	Liters	201.1	horsepower	2300	100	mm3/stroke	645.3	lb-ft	1450	126.5	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1150A		L6	6.057	Liters	201.1	horsepower	2200	102.5	mm3/stroke	645.3	lb-ft	1450	126.5	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1150B		L6	6.057	Liters	201.1	horsepower	2100	105.3	mm3/stroke	645.3	lb-ft	1450	126.5	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1140		L6	6.057	Liters	187.7	horsepower	2100	98	mm3/stroke	608.4	lb-ft	1450	119.3	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1140A		L6	6.057	Liters	187.7	horsepower	2000	101	mm3/stroke	608.4	lb-ft	1450	119.3	mm3/stroke	N/A	N/A	N/A	N/A
TCD6.1L6	C5V1180ZU		L6	6.057	Liters	241.3	horsepower	2000	133	mm3/stroke	737.5	lb-ft	1450	148	mm3/stroke	N/A	N/A	N/A	N/A