

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)
2023	PDZXL04.1056	4.038	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, Tractor, Dozer, 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 (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
75 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.02	0.35	--	0.2	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 26th day of September 2022.



Robin U. Lang, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: **U-R-013-0701**

Family: **PDZXL04.1056**

Attachment Last Revised: **9/15/2022**

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	
TCD4.114	CFV1115A		I4	4.038	Liters	154.2	horsepower	2300	59.4	lb/hr	609	N-m	1600	48.7	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV1115B		I4	4.038	Liters	154.2	horsepower	2200	58.1	lb/hr	609	N-m	1600	48.7	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV1115C		I4	4.038	Liters	154.2	horsepower	2100	57.3	lb/hr	609	N-m	1600	48.7	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV1115D		I4	4.038	Liters	154.2	horsepower	2000	55.5	lb/hr	609	N-m	1600	48.7	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV1105A		I4	4.038	Liters	140.8	horsepower	2300	54.6	lb/hr	550	N-m	1600	43.2	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV1105B		I4	4.038	Liters	140.8	horsepower	2200	53.2	lb/hr	550	N-m	1600	43.2	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV1105D		I4	4.038	Liters	140.8	horsepower	2100	52.7	lb/hr	550	N-m	1600	43.2	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV1105C		I4	4.038	Liters	140.8	horsepower	2000	51.1	lb/hr	550	N-m	1600	43.2	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV195A		I4	4.038	Liters	127.3	horsepower	2200	48.1	lb/hr	530	N-m	1600	42.1	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV195B		I4	4.038	Liters	127.3	horsepower	2100	47.1	lb/hr	530	N-m	1600	42.1	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV195C		I4	4.038	Liters	127.3	horsepower	2000	46.2	lb/hr	530	N-m	1600	42.1	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV190		I4	4.038	Liters	120.6	horsepower	2300	46.5	lb/hr	500	N-m	1600	39.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV190A		I4	4.038	Liters	120.6	horsepower	2200	45.4	lb/hr	500	N-m	1600	39.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV185L		I4	4.038	Liters	113.9	horsepower	2200	43.9	lb/hr	500	N-m	1600	39.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV180S		I4	4.038	Liters	107.2	horsepower	2400	43.7	lb/hr	440	N-m	1600	35.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV180A		I4	4.038	Liters	107.2	horsepower	2300	42.4	lb/hr	440	N-m	1600	35.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV180B		I4	4.038	Liters	107.2	horsepower	2200	41.3	lb/hr	440	N-m	1600	35.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV180C		I4	4.038	Liters	107.2	horsepower	2100	40.1	lb/hr	440	N-m	1600	35.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFV180D		I4	4.038	Liters	107.2	horsepower	2000	39.1	lb/hr	440	N-m	1600	35.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT91U		I4	4.038	Liters	122.0	horsepower	2100	46.4	lb/hr	564	N-m	1500	41.9	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT98U		I4	4.038	Liters	131.4	horsepower	2100	50.1	lb/hr	604	N-m	1500	45.3	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT110U		I4	4.038	Liters	146.8	horsepower	2100	55.9	lb/hr	663	N-m	1500	50.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT120U		I4	4.038	Liters	160.9	horsepower	2100	61.4	lb/hr	699	N-m	1500	54.3	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT121U		I4	4.038	Liters	160.9	horsepower	2100	61.4	lb/hr	699	N-m	1500	53.9	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT109U		I4	4.038	Liters	147.2	horsepower	2100	55.9	lb/hr	639	N-m	1500	47.9	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT111U		I4	4.038	Liters	146.8	horsepower	2100	55.9	lb/hr	663	N-m	1500	50.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT96U		I4	4.038	Liters	129.8	horsepower	2100	48.7	lb/hr	564	N-m	1500	41.9	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT89U		I4	4.038	Liters	120.0	horsepower	2100	46.1	lb/hr	522	N-m	1500	34.6	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT119U		I4	4.038	Liters	160.9	horsepower	2100	61.4	lb/hr	699	N-m	1500	53.9	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT108U		I4	4.038	Liters	146.8	horsepower	2100	55.9	lb/hr	663	N-m	1500	50.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT98UB		I4	4.038	Liters	131.4	horsepower	2100	50.1	lb/hr	604	N-m	1500	45.3	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CFVT91UB		I4	4.038	Liters	122.0	horsepower	2100	46.4	lb/hr	564	N-m	1500	41.9	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV1115A		I4	4.038	Liters	154.2	horsepower	2300	59.4	lb/hr	609	N-m	1600	48.7	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV1115B		I4	4.038	Liters	154.2	horsepower	2200	58.1	lb/hr	609	N-m	1600	48.7	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV1115C		I4	4.038	Liters	154.2	horsepower	2100	57.3	lb/hr	609	N-m	1600	48.7	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV1115D		I4	4.038	Liters	154.2	horsepower	2000	55.5	lb/hr	609	N-m	1600	48.7	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV1105A		I4	4.038	Liters	140.8	horsepower	2300	54.6	lb/hr	550	N-m	1600	43.2	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV1105B		I4	4.038	Liters	140.8	horsepower	2200	53.2	lb/hr	550	N-m	1600	43.2	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV1105D		I4	4.038	Liters	140.8	horsepower	2100	52.7	lb/hr	550	N-m	1600	43.2	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV1105C		I4	4.038	Liters	140.8	horsepower	2000	51.1	lb/hr	550	N-m	1600	43.2	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV195A		I4	4.038	Liters	127.3	horsepower	2200	48.1	lb/hr	530	N-m	1600	42.1	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV195B		I4	4.038	Liters	127.3	horsepower	2100	47.1	lb/hr	530	N-m	1600	42.1	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV195C		I4	4.038	Liters	127.3	horsepower	2000	46.2	lb/hr	530	N-m	1600	42.1	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV190		I4	4.038	Liters	120.6	horsepower	2300	46.5	lb/hr	500	N-m	1600	39.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV190A		I4	4.038	Liters	120.6	horsepower	2200	45.4	lb/hr	500	N-m	1600	39.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV185L		I4	4.038	Liters	113.9	horsepower	2200	43.9	lb/hr	500	N-m	1600	39.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV180S		I4	4.038	Liters	107.2	horsepower	2400	43.7	lb/hr	440	N-m	1600	35.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV180A		I4	4.038	Liters	107.2	horsepower	2300	42.4	lb/hr	440	N-m	1600	35.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV180B		I4	4.038	Liters	107.2	horsepower	2200	41.3	lb/hr	440	N-m	1600	35.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV180C		I4	4.038	Liters	107.2	horsepower	2100	40.1	lb/hr	440	N-m	1600	35.5	lb/hr	N/A	N/A	N/A	N/A
TCD4.114	CSV180D		I4	4.038	Liters	107.2	horsepower	2000	39.1	lb/hr	440	N-m	1600	35.5	lb/hr	N/A	N/A	N/A	N/A