

Pursuant to the authority vested in the California Air Resources Board by Health and Safety Code Division 26, Part 5, Chapters 1 and 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 off-road equipment. 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)	Engine Operation
2024	RJDXL06.8302	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Electronic Direct Injection (DDI), Charged Air Cooler (CAC), Exhaust Gas Recirculation (EGR), Electronic Control Module (ECM), Turbocharger (TC), Diesel Oxidation Catalyst (DOC), Periodic Trap Oxidizer (PTOX), Selective Catalytic 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) and Not-To-Exceed (NTE) limits, as applicable, for criteria pollutants non-methane hydrocarbons (NMHC), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM), and for smoke opacity as demonstrated during the Acceleration (ACL) and Lugging (LUG) modes, and the peak value (PEAK) in either mode of the Smoke Opacity cycle, as set forth in 13 CCR 2423 and the applicable California test procedures for off-road compression-ignition engines, and 2) family emission limits (FEL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per kilowatt-hour (g/kWh-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (*).

Applicable Standard		Criteria				Smoke Opacity		
		NMHC	NOx	CO	PM	ACL	LUG	PEAK
Tier 4 Final 130 ≤ kW ≤ 560	STD	0.19	0.40	3.5	0.02	*	*	*
	FEL	*	*	*	0.01	*	*	*
	NTE	0.28	0.60	4.4	0.02	*	*	*

BE IT FURTHER RESOLVED: Any declared FEL 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: That the manufacturer has elected to combine engines from the 56 ≤ kW ≤ 560 power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the 130 ≤ kW ≤ 560 power category in accordance with Section 1039.230(e) of the applicable California test procedures.

BE IT FURTHER RESOLVED: That the manufacturer has elected to include engine models in this engine family which are identified for "emergency vehicle use only". These "emergency vehicle use only" engines are exempt from requirements imposed pursuant to California law and the regulations adopted pursuant thereto for motor vehicle pollution control devices per California Vehicle Code Section 27156.2. The manufacturer must clearly label these engines for "emergency vehicle use only" on the engines' emission control label.

BE IT FURTHER RESOLVED: For the listed engine models, the manufacturer has submitted materials to demonstrate certification compliance with 13 CCR 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control warranty).

BE IT FURTHER RESOLVED: The listed engine models may only be installed in or on equipment such that engine operation is consistent with off-road compression-ignition engines as defined in 13 CCR 2421(a)(39).

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

Executed on this 5th day of September 2023.



Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RJDXL06.8302 EO Number: U-R-004-0675 Date Applicable: 07/31/2023

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	Liters	kilowatt	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
4045	4045CI551A		I-4	4.5	129	2400	122.3	667	1500	142.2	1	N/A	
4045	4045CI551B		I-4	4.5	116	2200	115.3	667	1500	141.7	1	N/A	
4045	4045CI551C		I-4	4.5	116	2400	27	616	1500	130.3	1	N/A	
4045	4045CI551D		I-4	4.5	129	2200	128	667	1500	142.9	1	N/A	
4045	4045CI551E		I-4	4.5	125	2200	125.1	616	1500	130.3	1	N/A	
4045	4045CI551F		I-4	4.5	125	2000	132.2	667	1500	141.7	1	N/A	
4045	4045CI551G		I-4	4.5	125	2000	132.2	667	1500	140.8	1	N/A	
4045	4045HFG09A		I-4	4.5	124	1800	143.8	658	1800	143.8	1	N/A	
4045	4045HFG09B		I-4	4.5	105	1800	121.5	558	1800	121.5	1	N/A	
4045	4045HL503		I-4	4.5	129	2100	132.4	730	1575	156.3	1	N/A	
4045	4045HP076		I-4	4.5	104	2200	103.9	555	1500	119.6	1	N/A	
4045	4045HT084		I-4	4.5	129	2200	128.9	730	1575	156.9	1	N/A	
4045	4045HT091		I-4	4.5	104	2200	103.9	555	1500	119.6	1	N/A	Emergency Vehicle
4045	4045HT092		I-4	4.5	104	2200	103.9	555	1500	119.6	1	N/A	Emergency Vehicle
4045	4045HT093		I-4	4.5	103	2000	110	555	1500	118.7	1	N/A	
4045	4045HT098		I-4	4.5	104	2200	103.9	555	1500	119.6	1	N/A	
4045	4045HT099		I-4	4.5	104	2200	103.9	555	1500	119.6	1	N/A	
6068	6068HPRNT5		I-6	6.8	237	2340	136.5	1309	1600	187.4	1	N/A	