

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	RJDXL04.5316	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), 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 75 ≤ kW < 130	STD	0.19	0.4	5.0	0.02	*	*	*
	FEL	*	*	*	*	*	*	*
	NTE	0.28	0.6	6.2	0.03	*	*	*

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: 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 18th day of August 2023.



Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RJDXL04.5316 EO Number: U-R-004-663 Date Applicable: 07/27/2023

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	4045CG440A		I-4	4.5	125	1800	148	665	1800	148	1	N/A	
4045	4045CG440B		I-4	4.5	107	1500	147.9	676	1500	147.9	1	N/A	
4045	4045HFC06A		I-4	4.5	129	2400	119	667	1600	139	1	N/A	
4045	4045HFC06B		I-4	4.5	129	2200	126.2	667	1600	140	1	N/A	
4045	4045HFC06C		I-4	4.5	116	2400	108	616	1600	127	1	N/A	
4045	4045HFC06D		I-4	4.5	104	2400	100	552	1600	116	1	N/A	
4045	4045HFC06E		I-4	4.5	104	2200	104	600	1600	125	1	N/A	
4045	4045HFC06F		I-4	4.5	93	2400	84	494	1600	104	1	N/A	
4045	4045HFC06G		I-4	4.5	93	2200	94	531	1600	112	1	N/A	
4045	4045HFC06H		I-4	4.5	129	2400	121	667	1600	138	1	N/A	
4045	4045HFC06I		I-4	4.5	129	2200	128	667	1600	144	1	N/A	
4045	4045HFC06J		I-4	4.5	116	2400	113	616	1600	131	1	N/A	