

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	RJDXL09.0308	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 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 21st day of August 2023.



Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RJDXL09.0308 EO Number: U-R-004-0677 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	-	-	-
6090	6090CG550A		I-6	9	345	1800	258.6	1830	1800	258.6	1	N/A	
6090	6090CG550B		I-6	9	304	1500	270.6	1935.2	1500	270.6	1	N/A	
6090	6090CG550C		I-6	9	326	1800	242.6	1730	1800	242.6	1	N/A	
6090	6090CG550D		I-6	9	304	1500	270.4	1935.2	1500	242.6	1	N/A	
6090	6090CG550E		I-6	9	273	1800	227.7	1448	1800	227.7	1	N/A	
6090	6090CG550F		I-6	9	273	1500	241.9	1738	1500	241.9	1	N/A	
6090	6090CI550A		I-6	9	317	2200	202.4	1685	1600	239.9	1	N/A	
6090	6090CI550B		I-6	9	298	2200	188.4	1685	1600	239.1	1	N/A	
6090	6090CI550C		I-6	9	316	2000	221.6	1685	1600	240.1	1	N/A	
6090	6090CI550D		I-6	9	301	2000	228.7	1685	1600	238.3	1	N/A	
6090	6090CI550E		I-6	9	286	2000	195.5	1671	1600	235.6	1	N/A	
6090	6090CI550F		I-6	9	308	2000	213.7	1671	1600	235	1	N/A	
6090	6090CI550G		I-6	9	301	1800	227.6	1685	1600	237.4	1	N/A	
6090	6090CI550H		I-6	9	267	2000	178.1	1563	1600	215.6	1	N/A	
6090	6090CI550I		I-6	9	287	2000	195	1563	1600	216.2	1	N/A	
6090	6090CI550J		I-6	9	287	1800	213.5	1685	1600	236.4	1	N/A	
6090	6090CI550K		I-6	9	248	2000	168.9	1450	1500	204.3	1	N/A	
6090	6090CI550L		I-6	9	265	2000	177.3	1450	1500	203.1	1	N/A	
6090	6090CI550M		I-6	9	266	1800	198.3	1595	1500	224.8	1	N/A	
6090	6090CI550N		I-6	9	230	2000	152	1341	1500	186.9	1	N/A	
6090	6090CI550O		I-6	9	246	2000	163	1341	1500	187.2	1	N/A	
6090	6090CI550P		I-6	9	246	1800	180	1477	1500	207.3	1	N/A	
6090	6090CI550Q		I-6	9	210	2000	143.2	1228	1500	170.8	1	N/A	
6090	6090CI550R		I-6	9	225	2000	153.6	1228	1500	170.8	1	N/A	
6090	6090CI550S		I-6	9	226	1800	168.2	1351	1500	188.7	1	N/A	
6090	6090CI550T		I-6	9	192	2000	130.9	1120	1500	155.5	1	N/A	
6090	6090CI550U		I-6	9	205	2000	138.9	1120	1500	155.4	1	N/A	
6090	6090CI550V		I-6	9	205	1800	152.3	1232	1500	171.4	1	N/A	
6090	6090CP550A		I-6	9	345	1800	258.6	1830	1800	258.6	1	N/A	
6090	6090CP550B		I-6	9	304	1500	270.6	1935.2	1500	270.6	1	N/A	
6090	6090CP550C		I-6	9	326	1800	242.6	1730	1800	242.6	1	N/A	
6090	6090CP550D		I-6	9	304	1500	270.4	1935.2	1500	242.6	1	N/A	
6090	6090CP550E		I-6	9	273	1800	227.7	1448	1800	227.7	1	N/A	
6090	6090CP550F		I-6	9	273	1500	241.9	1738	1500	241.9	1	N/A	
6090	6090HDW33		I-6	9	289	1900	202	1655	1500	226.9	1	N/A	
6090	6090HDW41		I-6	9	286	1800	207	1655	1500	226.9	1	N/A	
6090	6090HDW42		I-6	9	289	1900	202	1655	1500	226.9	1	N/A	
6090	6090HDW43		I-6	9	327	1900	240.2	1749	1600	251.7	1	N/A	
6090	6090HDW44		I-6	9	289	1900	202	1655	1500	226.9	1	N/A	
6090	6090HH029		I-6	9	335	2200	204.4	1817	1600	220	1	N/A	
6090	6090HN020		I-6	9	335	2000	242.2	1749	1600	252.7	1	N/A	
6090	6090HN021A		I-6	9	289	1900	204	1655	1500	233.9	1	N/A	

ATTACHMENT: ENGINE MODELS

Family: RJDXL09.0308 EO Number: U-R-004-0677 Date Applicable: 07/31/2023

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
6090	6090HN021B		I-6	9	335	2000	187.9	1749	1600	252.7	1	N/A	
6090	6090HPRNT6		I-6	9	341	2200	216.5	1886	1600	266.8	1	N/A	
6090	6090HT013		I-6	9	289	2000	195.9	1654	1500	233.5	1	N/A	
6090	6090HT013A		I-6	9	289	2000	179.8	1655	1500	233.5	1	N/A	
6090	6090HT014A		I-6	9	280	1700	221	1654	1500	233.5	1	N/A	
6090	6090HT019		I-6	9	289	2000	196.5	1655	1500	236.9	1	N/A	
6090	6090HT020		I-6	9	289	2000	196.5	1655	1500	236.9	1	N/A	Emergency Vehicle
6090	6090HT809		I-6	9	335	2000	236	1749	1600	251.7	1	N/A	
6090	6090HTJ30		I-6	9	289	1800	211.7	1655	1500	229.6	1	N/A	
6090	6090HTJ31		I-6	9	289	1800	211.7	1655	1500	229.6	1	N/A	
6090	6090HTJ32		I-6	9	286	1800	212.7	1654	1500	233.5	1	N/A	
6090	6090HTJ35		I-6	9	286	1800	212.7	1654	1500	233.5	1	N/A	
6090	6090HTJ39		I-6	9	286	1800	212.7	1654	1500	233.5	1	N/A	
6090	6090HZ027		I-6	9	289	1900	202	1655	1500	226.9	1	N/A	
6090	6090HZ028		I-6	9	335	2200	204.4	1817	1600	220	1	N/A	
6090	6090HZ030		I-6	9	327	1900	240.2	1749	1600	251.7	1	N/A	