

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	RJDXL06.8309	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 21st day of August 2023.



Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RJDXL06.8309 EO Number: U-R-004-0676 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	4045CB551		I-4	4.5	125	2000	132.7	697	1500	151.2	1	N/A	
4045	4045CB551B		I-4	4.5	117	2200	115.5	667	1500	143.3	1	N/A	
4045	4045CB551C		I-4	4.5	129	2200	127.6	667	1500	146.8	1	N/A	
4045	4045CC550A		I-4	4.5	124	2000	133.7	697	1500	151.7	1	N/A	
4045	4045CC550B		I-4	4.5	118	2000	125.1	619	1500	132.8	1	N/A	
4045	4045CC550C		I-4	4.5	104	2000	110.3	562	1500	119.8	1	N/A	
4045	4045CI550A		I-4	4.5	129	2200	127.6	667	1500	146.8	1	N/A	
4045	4045CI550B		I-4	4.5	117	2200	115.5	667	1500	143.3	1	N/A	
4045	4045CI550C		I-4	4.5	124	2000	132	667	1500	143.3	1	N/A	
4045	4045CI550D		I-4	4.5	104	2200	104.4	601	1500	127	1	N/A	
4045	4045CI550E		I-4	4.5	112	2000	117.2	601	1500	127	1	N/A	
4045	4045CI550F		I-4	4.5	93	2200	95.7	537	1500	112.5	1	N/A	
4045	4045CI550G		I-4	4.5	100	2000	102.8	537	1500	112.5	1	N/A	
4045	4045HB551A		I-4	4.5	78	2000	84.8	420	1500	76.1	1	N/A	
4045	4045HB551B		I-4	4.5	103	2000	111.9	555	1500	124	1	N/A	
4045	4045HDW60		I-4	4.5	122	2200	118.3	657	1600	140.4	1	N/A	
4045	4045HE053		I-4	4.5	130	2100	124.2	730	1500	158	1	N/A	
4045	4045HE054		I-4	4.5	116	2200	98.6	667	1600	122.6	1	N/A	
4045	4045HFA01		I-4	4.5	129	2200	127.6	667	1500	146.8	1	N/A	
4045	4045HI550A		I-4	4.5	104	2400	82.8	540	1500	97.5	1	N/A	
4045	4045HI550B		I-4	4.5	104	2200	87	540	1500	98	1	N/A	
4045	4045HI550C		I-4	4.5	93	2400	74.8	494	1500	88.4	1	N/A	
4045	4045HI550D		I-4	4.5	93	2200	93.5	536	1500	117.1	1	N/A	
4045	4045HI550E		I-4	4.5	86	2200	71.6	506	1500	90.9	1	N/A	
4045	4045HI550F		I-4	4.5	74	2200	76.6	427	1500	91.6	1	N/A	
4045	4045HL555		I-4	4.5	124	2000	132.4	670	1500	143.6	1	N/A	
4045	4045HL556		I-4	4.5	135	2100	138.6	730	1500	157.8	1	N/A	
4045	4045HL557		I-4	4.5	135	2100	138.6	730	1500	157.8	1	N/A	
4045	4045HLV81		I-4	4.5	104	2200	102.7	555	1500	119.8	1	N/A	
4045	4045HN054		I-4	4.5	136	2200	134.7	730	1500	158	1	N/A	
4045	4045HN056		I-4	4.5	129	2200	127.6	667	1500	146.8	1	N/A	
4045	4045HT103		I-4	4.5	104	2200	102.7	555	1500	119.8	1	N/A	
4045	4045HT104		I-4	4.5	104	2200	102.7	555	1500	119.8	1	N/A	Emergency Vehicle
4045	4045HT105		I-4	4.5	122	2200	118.3	657	1600	140.4	1	N/A	
4045	4045HT110		I-4	4.5	102	2000	110.6	545	1600	120.7	1	N/A	
4045	4045HT111		I-4	4.5	102	2000	110.6	545	1600	120.7	1	N/A	Emergency Vehicle
4045	4045HTJ19		I-4	4.5	134	2000	140.9	730	1500	155.6	1	N/A	
4045	4045HXU11		I-4	4.5	130.1	1800	153.3	730	1500	160.8	1	N/A	
4045	4045WG503		I-4	4.5	120	2000	127.8	637	1600	138.3	1	N/A	
6068	6068CG550A		I-6	6.8	241	1800	187.8	1279	1800	187.8	1	N/A	
6068	6068CG550B		I-6	6.8	216	1800	160.4	1146	1800	160.4	1	N/A	
6068	6068CG550C		I-6	6.8	202	1500	179	1286	1500	179	1	N/A	

ATTACHMENT: ENGINE MODELS

Family: RJDXL06.8309 EO Number: U-R-004-0676 Date Applicable: 07/31/2023

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
6068	6068CI550A		I-6	6.8	224	2400	127	1141	1600	160	1	N/A	
6068	6068CI550B		I-6	6.8	224	2200	138	1141	1600	161	1	N/A	
6068	6068CI550C		I-6	6.8	207	2200	125.3	1057	1600	147	1	N/A	
6068	6068CI550D		I-6	6.8	205	2200	125	1057	1600	147	1	N/A	
6068	6068CI550E		I-6	6.8	187	2400	106	1026	1600	143	1	N/A	
6068	6068CI550F		I-6	6.8	187	2200	117	1023	1600	147	1	N/A	
6068	6068CI550G		I-6	6.8	185	2100	116.6	995	1600	142	1	N/A	
6068	6068CI550H		I-6	6.8	181	2000	118.1	999	1600	145	1	N/A	
6068	6068CP550A		I-6	6.8	241	1800	187.8	1279	1800	187.8	1	N/A	
6068	6068CP550B		I-6	6.8	216	1800	160.4	1146	1800	160.4	1	N/A	
6068	6068CP550C		I-6	6.8	202	1500	179	1286	1500	179	1	N/A	
6068	6068DW404		I-6	6.8	220	1800	161.7	1245	1600	174.1	1	N/A	
6068	6068DW501		I-6	6.8	163	2000	113	842	1600	140.5	1	N/A	
6068	6068DW503		I-6	6.8	224	2100	142.4	1245	1600	174.1	1	N/A	
6068	6068DW504		I-6	6.8	190	2100	127.9	1025	1600	142.4	1	N/A	
6068	6068HB551A		I-6	6.8	138	2400	87	741	1600	103	1	N/A	
6068	6068HB551B		I-6	6.8	168	2400	101	902	1600	125	1	N/A	
6068	6068HB551C		I-6	6.8	185	2000	124.2	970	1600	136	1	N/A	
6068	6068HB551D		I-6	6.8	152	2100	98.2	809	1600	113	1	N/A	
6068	6068HC550A		I-6	6.8	154	2000	107.6	849	1500	122.8	1	N/A	
6068	6068HC550B		I-6	6.8	151	2000	101.3	833	1500	120.7	1	N/A	
6068	6068HC550C		I-6	6.8	145	2000	101.3	745	1500	107.8	1	N/A	
6068	6068HC550D		I-6	6.8	130	2000	90.4	703	1500	102.4	1	N/A	
6068	6068HC550E		I-6	6.8	116	2000	82.9	640	1500	93.1	1	N/A	
6068	6068HDW88		I-6	6.8	216	1900	152.9	1200	1600	170.2	1	N/A	
6068	6068HDW95		I-6	6.8	224	1900	156.5	1245	1600	174.1	1	N/A	
6068	6068HDW99		I-6	6.8	215	1900	152.2	1209	1600	168.9	1	N/A	
6068	6068HE055		I-6	6.8	190	2000	127.8	1000	1600	140.1	1	N/A	
6068	6068HE056		I-6	6.8	224	2400	128.1	1245	1600	174.1	1	N/A	
6068	6068HFA03		I-6	6.8	224	2400	127	1141	1600	160	1	N/A	
6068	6068HG550A		I-6	6.8	180	1800	135.7	955	1800	135.7	1	N/A	
6068	6068HG550B		I-6	6.8	150	1800	113	796	1800	113	1	N/A	
6068	6068HG550C		I-6	6.8	165	1500	148.5	1050	1500	148.5	1	N/A	
6068	6068HI550A		I-6	6.8	191	2000	127.4	1025	1600	140	1	N/A	
6068	6068HI550AA		I-6	6.8	112	2000	80.6	613	1600	86.5	1	N/A	
6068	6068HI550AB		I-6	6.8	164	1800	121.8	960	1500	135	1	N/A	
6068	6068HI550B		I-6	6.8	191	2000	127.4	999	1600	140	1	N/A	
6068	6068HI550C		I-6	6.8	185	2200	119.9	902	1600	125	1	N/A	
6068	6068HI550D		I-6	6.8	168	2400	101	902	1600	125	1	N/A	
6068	6068HI550E		I-6	6.8	185	2000	124.2	970	1600	136	1	N/A	
6068	6068HI550F		I-6	6.8	185	1800	135.7	1003	1500	140	1	N/A	
6068	6068HI550G		I-6	6.8	164	2100	107	801	1600	112	1	N/A	
6068	6068HI550H		I-6	6.8	149	2400	92	801	1600	112	1	N/A	

ATTACHMENT: ENGINE MODELS

Family: RJDXL06.8309 EO Number: U-R-004-0676 Date Applicable: 07/31/2023

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
6068	6068HI550I		I-6	6.8	164	2000	113	873	1600	121	1	N/A	
6068	6068HI550J		I-6	6.8	164	1800	121.8	960	1500	135	1	N/A	
6068	6068HI550K		I-6	6.8	152	2100	100.1	741	1600	103	1	N/A	
6068	6068HI550L		I-6	6.8	138	2400	87	741	1600	103	1	N/A	
6068	6068HI550M		I-6	6.8	152	2100	98.2	809	1600	113	1	N/A	
6068	6068HI550N		I-6	6.8	152	1800	112	890	1500	119	1	N/A	
6068	6068HI550O		I-6	6.8	187	2000	125	1000	1500	140	1	N/A	
6068	6068HI550P		I-6	6.8	129	2400	81	687	1600	98	1	N/A	
6068	6068HI550Q		I-6	6.8	139	2200	90.5	687	1600	98	1	N/A	
6068	6068HI550R		I-6	6.8	132	2000	92.1	756	1600	108	1	N/A	
6068	6068HI550S		I-6	6.8	139	2000	97.5	756	1600	108	1	N/A	
6068	6068HI550T		I-6	6.8	116	2400	73.8	619	1600	87.6	1	N/A	
6068	6068HI550U		I-6	6.8	125	2200	85.9	619	1600	87.6	1	N/A	
6068	6068HI550V		I-6	6.8	118	2000	83.6	674	1600	96.1	1	N/A	
6068	6068HI550W		I-6	6.8	125	2000	97.5	674	1600	96.1	1	N/A	
6068	6068HI550X		I-6	6.8	112	2200	74.2	555	1600	79.3	1	N/A	
6068	6068HI550Y		I-6	6.8	112	2200	80.6	555	1600	79.3	1	N/A	
6068	6068HI550Z		I-6	6.8	106	2000	75.2	613	1600	86.5	1	N/A	
6068	6068HL550		I-6	6.8	224	1900	156.5	1245	1600	174.1	1	N/A	
6068	6068HL551		I-6	6.8	214	2100	137.1	1209	1600	169.4	1	N/A	
6068	6068HL555		I-6	6.8	163	2000	113	842	1600	121.5	1	N/A	
6068	6068HL557		I-6	6.8	190	2100	123	1025	1600	142.4	1	N/A	
6068	6068HL558		I-6	6.8	190	2100	123	1025	1600	142.4	1	N/A	
6068	6068HN073		I-6	6.8	190	2100	123	1025	1600	142.4	1	N/A	
6068	6068HN075		I-6	6.8	191	2000	127.4	1025	1600	140	1	N/A	
6068	6068HN075A		I-6	6.8	185	2000	124.2	970	1600	136	1	N/A	
6068	6068HN076		I-6	6.8	224	2400	127	1141	1600	160	1	N/A	
6068	6068HN080		I-6	6.8	224	2100	142.4	1245	1600	174.1	1	N/A	
6068	6068HP550A		I-6	6.8	180	1800	135.7	955	1800	135.7	1	N/A	
6068	6068HP550B		I-6	6.8	150	1800	113	796	1800	113	1	N/A	
6068	6068HP550C		I-6	6.8	165	1500	148.5	1050	1500	148.5	1	N/A	
6068	6068HPRNT6		I-6	6.8	238	1950	165.2	1347	1600	188.8	1	N/A	
6068	6068HT098		I-6	6.8	190	1900	134.5	1025	1600	142.7	1	N/A	
6068	6068HT103		I-6	6.8	190	2100	122.6	1000	1700	140.3	1	N/A	
6068	6068HT119		I-6	6.8	190	2100	122.6	1000	1700	140.3	1	N/A	
6068	6068HT120		I-6	6.8	224	1900	156.5	1245	1600	174.1	1	N/A	
6068	6068HT125		I-6	6.8	161	1900	116.2	842	1600	140.5	1	N/A	
6068	6068HT131		I-6	6.8	163	2000	112.9	842	1600	140.5	1	N/A	
6068	6068HT132		I-6	6.8	163	2000	113	842	1600	121.5	1	N/A	
6068	6068HT133		I-6	6.8	163	2000	113	842	1600	121.5	1	N/A	
6068	6068HT134		I-6	6.8	163	2000	112.9	842	1600	140.5	1	N/A	Emergency Vehicle
6068	6068HT134A		I-6	6.8	190	2100	123	1000	1600	142.4	1	N/A	
6068	6068HT137		I-6	6.8	216	1900	152.9	1200	1600	170.2	1	N/A	

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Family: RJDXL06.8309 EO Number: U-R-004-0676 Date Applicable: 07/31/2023

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
6068	6068HT138		I-6	6.8	216	1900	152.9	1200	1600	170.2	1	N/A	
6068	6068HT139A		I-6	6.8	190	2100	122.6	1000	1700	140.3	1	N/A	
6068	6068HT139B		I-6	6.8	163	2000	112.9	842	1600	140.5	1	N/A	
6068	6068HTJ18		I-6	6.8	190	2000	129.1	1025	1500	143.1	1	N/A	
6068	6068HTJ28		I-6	6.8	190	2000	129.1	1025	1500	143.1	1	N/A	
6068	6068HTJ65		I-6	6.8	190	2200	117.9	1025	1600	145.2	1	N/A	
6068	6068HTJ66		I-6	6.8	224	1900	156.5	1245	1600	174.1	1	N/A	
6068	6068HTJ69		I-6	6.8	163	2000	112.9	842	1600	140.5	1	N/A	
6068	6068HXU10A		I-6	6.8	187	1800	140.3	1025	1550	146.4	1	N/A	
6068	6068HXU10B		I-6	6.8	156.5	1800	122.8	842	1600	124	1	N/A	
6068	6068HYN05		I-6	6.8	190	2100	127.9	1025	1600	142.4	1	N/A	
6068	6068HYN09		I-6	6.8	163	2000	113	842	1600	140.5	1	N/A	
6068	6068RW501		I-6	6.8	190	2100	122	1025	1600	142	1	N/A	
6068	6068RW502A		I-6	6.8	214	2100	136	1200	1600	167	1	N/A	
6068	6068RW502B		I-6	6.8	224	2100	142.4	1245	1600	174.1	1	N/A	
6068	6068WG501A		I-6	6.8	187	2000	128.4	1000	1600	143.3	1	N/A	
6068	6068WG501B		I-6	6.8	164	1800	124.1	963	1600	136.4	1	N/A	