

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	RFPXL06.7FR1	Diesel	Dedicated	Diesel	Variable and Constant Speed

Emission Control Systems	Special Features
[1]: Electronic Direct Injection (DDI), Engine Control Module (ECM), Turbocharger (TC), Charge Air Cooler (CAC), Diesel Oxidation Catalyst (DOC), Selective Catalytic Reduction – Urea/Periodic Trap Oxidizer (SCR+DPF), 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	*	*	*	*	*	*	*
	NTE	0.28	0.60	4.4	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:** That the manufacturer has elected to combine engines from the 75 ≤ 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:** 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 22nd day of January 2024.



Robin U. Lang, Chief  
 Emissions Certification and Compliance Division

**ATTACHMENT: ENGINE MODELS**

Family: RFPXL06.7FR1 EO Number: U-R-015-0590 Date Applicable: 12/26/23

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	L	kW	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
F4DGE413C*V	F4DGE413C*V		I4	4.5	114	1800	130	630	1300	132	1	N/A	
F4HGE6137*V	F4HGE6137*V		I6	6.7	154	1800	115	875	1500	122	1	N/A	
F4HGE413A*V	F4HGE413A*V		I4	4.5	79	2000	84	379	1800	82	1	N/A	
F4DGE413F*V	F4DGE413F*V		I4	4.5	92	1800	102	520	1300	109	1	N/A	
F4HGE613N*V	F4HGE613N*V		I6	6.7	165	1800	123	940	1500	128	1	N/A	
F4HGE414N*V	F4HGE414N*V		I4	4.5	106	1900	117	612	1500	127	1	N/A	
F4HGE4133*V	F4HGE4133*V		I4	4.5	114	1800	126	640	1500	131	1	N/A	
F4HGE413K*V	F4HGE413K*V		I4	4.5	127	1900	135	710	1500	146	1	N/A	
F4HGE414W*V	F4HGE414W*V		I4	4.5	129	1900	139	719	1500	146	1	N/A	
F4HGE414Z*V	F4HGE414Z*V		I4	4.5	127	1900	139	710	1500	146	1	N/A	
F4HGE613P*V	F4HGE613P*V		I6	6.7	138	2000	94	659	1800	98	1	N/A	
F4HGE414M*V	F4HGE414M*V		I4	4.5	94	1900	104	550	1500	115	1	N/A	
F4DGE413E*V	F4DGE413E*V		I4	4.5	100	1800	112	551	1300	115	1	N/A	
F4HGE613K*V	F4HGE613K*V		I6	6.7	176	1900	129	1000	1400	140	1	N/A	
F4HGE4135*V	F4HGE4135*V		I4	4.5	129	1900	139	719	1500	147	1	N/A	
F4HGE414X*V	F4HGE414X*V		I4	4.5	98	1900	103	549	1500	113	1	N/A	
F4HGE414P*V	F4HGE414P*V		I4	4.5	121	1900	130	700	1500	121	1	N/A	
F4HGE413B*V	F4HGE413B*V		I4	4.5	97	2200	91	470	1600	93	1	N/A	
F4DGE413S*V	F4DGE413S*V		I4	4.5	88	1700	104	551	1300	115	1	N/A	
F4HGE613M*V	F4HGE613M*V		I6	6.7	230	2000	153	1160	1500	161	1	N/A	
F4DGE413R*V	F4DGE413R*V		I4	4.5	134	1700	114	610	1300	128	1	N/A	
F4HGE413Z*V	F4HGE413Z*V		I4	4.5	106	1800	121	608	1600	126	1	N/A	
F4HGE414R*V	F4HGE414R*V		I4	4.5	129	1900	140	710	1500	123	1	N/A	
F4HGE6138*V	F4HGE6138*V		I6	6.7	204	1900	145	1033	1500	144	1	N/A	
F4HGE613C*V	F4HGE613C*V		I6	6.7	199	1800	146	1160	1500	161	1	N/A	
F4HGE414Y*V	F4HGE414Y*V		I4	4.5	114	1800	97	640	1500	133	1	N/A	
F4DGE413D*V	F4DGE413D*V		I4	4.5	107	1800	121	610	1300	128	1	N/A	
F4HGE613E*V	F4HGE613E*V		I6	6.7	190	1800	141	1300	1300	183	1	N/A	
F4HGE414L*V	F4HGE414L*V		I4	4.5	114	1800	126	640	1500	131	1	N/A	
F4DGE413P*V	F4DGE413P*V		I4	4.5	103	1700	123	630	1300	132	1	N/A	
F4HGE4136*V	F4HGE4136*V		I4	4.5	98	1800	88	549	1500	96	1	N/A	
F4DGE413T*V	F4DGE413T*V		I4	4.5	81	1700	95	520	1300	109	1	N/A	
F4HGE613V*V	F4HGE613V*V		I6	6.7	142	1800	105	802	1500	94	1	N/A	
F4HGE617D*V	F4HGE617D*V		I6	6.7	230	1800	171	1282	1400	178	1	N/A	
F4HGE414K*V	F4HGE414K*V		I4	4.5	147	2100	140	744	1400	155	1	N/A	
F4HGE615C*V	F4HGE615C*V		I6	6.7	175	1800	125	929	1800	128	1	N/A	
F4HGE615D*V	F4HGE615D*V		I6	6.7	230	1800	167	1220	1800	171	1	N/A	
F4HGE617K*V	F4HGE617K*V		I6	6.7	201	1800	146	1173	1400	162	1	N/A	
F4HGE613T*V	F4HGE613T*V		I6	6.7	158	1800	114	891	1500	121	1	N/A	
F4HGE614L*V	F4HGE614L*V		I6	6.7	143	2000	97	850	1400	119	1	N/A	
F4HGE414E*V	F4HGE414E*V		I4	4.5	107	1800	97	590	1500	103	1	N/A	
F4HGE617E*V	F4HGE617E*V		I6	6.7	212	1800	155	1194	1400	170	1	N/A	

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					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	L	kW	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
F4HGE614J*V	F4HGE614J*V		I6	6.7	140	1800	104	805	1500	112	1	N/A	
F4HGE614M*V	F4HGE614M*V		I6	6.7	119	1900	85	725	1500	101	1	N/A	
F4HGE613R*V	F4HGE613R*V		I6	6.7	134	1900	95	739	1500	105	1	N/A	
F4DGE617Z*V	F4DGE617Z*V		I6	6.7	250	1800	183	1398	1400	193	1	N/A	
F4HGE613Z*V	F4HGE613Z*V		I6	6.7	124	1800	91	657	1600	93	1	N/A	