

Pursuant to the authority vested in California Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below 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	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2023	PFPXL06.7FR1	6.7	Diesel	8,000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Engine Control Module, Turbocharger, Charge Air Cooler, Diesel Oxidation Catalyst, Selective Catalytic Reduction – Urea/Periodic Trap Oxidizer, Ammonia Oxidation Catalyst			Tractor, Other Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NO_x), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO_x), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NO _x	NMHC+NO _x	CO	PM	ACCEL	LUG	PEAK
130 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.02	0.24	--	0.4	0.002	--	--	--

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

BE IT FURTHER RESOLVED: That for the listed engine models which include engines from different power categories in the same engine family, the manufacturer is complying with the more stringent set of standards from the 130 ≤ kW ≤ 560 power categories in conformance with the incorporated Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for New 2011 and Later Tier 4 Off-Road Compression Ignition Engines, Part 1-D" adopted October 20, 2005 and last amended October 25, 2012.

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

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed on this 7th day of July 2022.



Allen Lyons, Chief
 Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-015-0553

Family: PFPXL06.7FR1

Attachment Last Revised: 4/17/2023

Model	Code	Trim	Config	Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel Units	Peak Torque	Peak Torque - Units	Peak Torque - Speed (rpm)	Peak Torque - Fuel Units	OBD	GHG	Special	Notes	
F4HGE613E*V	F4HGE613E*V	N/A	I6	6.7	Liters	245.22	horsepower	2000	122	mm3/stroke	962.962963	lb-ft	1300	183	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413C*V	F4DGE413C*V	N/A	I4	4.5	Liters	140.7	horsepower	2200	104	mm3/stroke	466.666667	lb-ft	1300	132	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413D*V	F4DGE413D*V	N/A	I4	4.5	Liters	131.32	horsepower	2200	97	mm3/stroke	452	lb-ft	1300	128	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413E*V	F4DGE413E*V	N/A	I4	4.5	Liters	121.94	horsepower	2200	90	mm3/stroke	408.1481481	lb-ft	1300	115	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413F*V	F4DGE413F*V	N/A	I4	4.5	Liters	111.22	horsepower	2200	84	mm3/stroke	385.1851852	lb-ft	1300	109	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413P*V	F4DGE413P*V	N/A	I4	4.5	Liters	138.02	horsepower	2200	103	mm3/stroke	466.666667	lb-ft	1300	132	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413R*V	F4DGE413R*V	N/A	I4	4.5	Liters	128.64	horsepower	2200	95	mm3/stroke	451.8518519	lb-ft	1300	128	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413S*V	F4DGE413S*V	N/A	I4	4.5	Liters	117.92	horsepower	2200	89	mm3/stroke	408.1481481	lb-ft	1300	115	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413T*V	F4DGE413T*V	N/A	I4	4.5	Liters	108.54	horsepower	2200	83	mm3/stroke	385.1851852	lb-ft	1300	109	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613T*V	F4HGE613T*V	N/A	I6	6.7	Liters	192.96	horsepower	2200	92	mm3/stroke	660	lb-ft	1500	121	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE617D*V	F4HGE617D*V	N/A	I6	6.7	Liters	296.14	horsepower	2100	143	mm3/stroke	949.6296296	lb-ft	1400	178	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE617E*V	F4HGE617E*V	N/A	I6	6.7	Liters	266.66	horsepower	2100	130	mm3/stroke	884.4444444	lb-ft	1400	170	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE617K*V	F4HGE617K*V	N/A	I6	6.7	Liters	246.56	horsepower	2100	121	mm3/stroke	868.8888889	lb-ft	1400	162	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE614L*V	F4HGE614L*V	N/A	I6	6.7	Liters	190.28	horsepower	2100	95	mm3/stroke	629.6296296	lb-ft	1400	119	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE614M*V	F4HGE614M*V	N/A	I6	6.7	Liters	154.1	horsepower	2100	80	mm3/stroke	537.037037	lb-ft	1500	101	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613R*V	F4HGE613R*V	N/A	I6	6.7	Liters	179.56	horsepower	2200	86	mm3/stroke	547.4074074	lb-ft	1500	105	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE615C*V	F4HGE615C*V	N/A	I6	6.7	Liters	234.5	horsepower	1800	128	mm3/stroke	688.1481481	lb-ft	1800	128	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE615D*V	F4HGE615D*V	N/A	I6	6.7	Liters	308.2	horsepower	1800	171	mm3/stroke	903.7037037	lb-ft	1800	171	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613V*V	F4HGE613V*V	N/A	I6	6.7	Liters	172.86	horsepower	2200	71	mm3/stroke	594.0740741	lb-ft	1500	94	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613C*V	F4HGE613C*V	N/A	I6	6.7	Liters	255.94	horsepower	2200	133	mm3/stroke	859.2592593	lb-ft	1500	161	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613M*V	F4HGE613M*V	N/A	I6	6.7	Liters	284.08	horsepower	2200	135	mm3/stroke	859.2592593	lb-ft	1500	161	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE4135*V	F4HGE4135*V	N/A	I4	4.5	Liters	167.5	horsepower	2100	123	mm3/stroke	532.5925926	lb-ft	1500	147	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613K*V	F4HGE613K*V	N/A	I6	6.7	Liters	217.08	horsepower	2200	103	mm3/stroke	740.7407407	lb-ft	1400	140	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE6137*V	F4HGE6137*V	N/A	I6	6.7	Liters	196.98	horsepower	2300	94	mm3/stroke	648.1481481	lb-ft	1500	122	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE614I*V	F4HGE6137*V	N/A	I6	6.7	Liters	182.24	horsepower	2300	85	mm3/stroke	596.2962963	lb-ft	1500	112	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE613N*V	F4DGE613N*V	N/A	I6	6.7	Liters	202.34	horsepower	2200	94	mm3/stroke	696.2962963	lb-ft	1500	128	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE413K*V	F4HGE413K*V	N/A	I4	4.5	Liters	168	horsepower	2200	121	mm3/stroke	526	lb-ft	1500	146	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE4133*V	F4HGE4133*V	N/A	I4	4.5	Liters	138	horsepower	2200	99	mm3/stroke	474	lb-ft	1500	131	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE414Z*V	F4HGE414Z*V	N/A	I4	4.5	Liters	168	horsepower	2200	121	mm3/stroke	526	lb-ft	1500	146	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE6138*V	F4HGE6138*V	N/A	I6	6.7	Liters	273	horsepower	1900	143	mm3/stroke	765	lb-ft	1500	144	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613P*V	F4HGE613P*V	N/A	I6	6.7	Liters	185	horsepower	2000	97	mm3/stroke	488	lb-ft	1800	98	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613Z*V	F4HGE613Z*V	N/A	I6	6.7	Liters	166	horsepower	1800	94	mm3/stroke	487	lb-ft	1600	93	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE414Y*V	F4HGE414Y*V	N/A	I4	4.5	Liters	138	horsepower	2200	102	mm3/stroke	474	lb-ft	1500	133	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX

F4HGE414X*V	F4HGE414X*V	N/A	I4	4.5	Liters	119	horsepower	2200	88	mm3/stroke	407	lb-ft	1500	113	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE414M*V	F4HGE414M*V	N/A	I4	4.5	Liters	126	horsepower	2100	96	mm3/stroke	407	lb-ft	1500	115	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE414N*V	F4HGE414N*V	N/A	I4	4.5	Liters	142	horsepower	2100	105	mm3/stroke	453	lb-ft	1500	127	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE413B*V	F4HGE413B*V	N/A	I4	4.5	Liters	130	horsepower	2200	93	mm3/stroke	348	lb-ft	1600	96	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE413A*V	F4HGE413A*V	N/A	I4	4.5	Liters	106	horsepower	2000	82	mm3/stroke	281	lb-ft	1800	84	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE414L*V	F4HGE414L*V	N/A	I4	4.5	Liters	138	horsepower	2200	99	mm3/stroke	474	lb-ft	1500	131	mm3/stroke	N/A	N/A	new Ratings	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE414P*V	F4HGE414P*V	N/A	I4	4.5	Liters	162	horsepower	2100	102	mm3/stroke	519	lb-ft	1500	121	mm3/stroke	N/A	N/A	new Ratings	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE414R*V	F4HGE414R*V	N/A	I4	4.5	Liters	173	horsepower	2100	109	mm3/stroke	526	lb-ft	1500	123	mm3/stroke	N/A	N/A	new Ratings	DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE414W*V	F4HGE414W*V	N/A	I4	4.5	Liters	168	horsepower	2200	121	mm3/stroke	533	lb-ft	1500	146	mm3/stroke	N/A	N/A	new Ratings	DDI ECM TC CAC DOC SCR+DPF AMOX