

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	PFPXL08.7T4X	8.7	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, Ammonia Oxidation Catalyst			Loader, Tractor, Generator Set, and Other Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) for non-methane hydrocarbon (NMHC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), 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	NOx	NMHC+NOx	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
		FEL	N/A	N/A	N/A	N/A	0.03	--	--	--
		CERT	0.001	0.29	--	0.2	0.02	--	--	--

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

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 the listed engine family is conditionally certified pending submission of additional test data to verify compliance with useful-life emission standards. The manufacturer must submit the necessary data by July 31, 2023 to confirm or correct the certification emissions levels on this conditional certification. Failure to submit the necessary data or resolve concerns by the specified date, shall be cause for the Executive Officer to rescind this conditional certification, in which case all engines covered under this conditional certification and introduced into commerce in the State of California shall be deemed uncertified pursuant to Health and Safety Code Section 43153 and subject to civil penalties pursuant to Health and Safety Code Section 43154.

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 16th day of May 2023.



Robin U. Lang, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-015-0536

Family: PFPXL08.7T4X

Attachment Last Revised: 5/11/2023

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	Peak Torque - Fuel Units	OBD	GHG	Special	Notes
F2CFE613K*B	F2CFE613K*B	N/A	I6	8.7	Liters	412.72	horsepower	2100	200	mm3/stroke	1333	lb-ft	1500	249	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE613A*B	F2CFE613A*B	N/A	I6	8.7	Liters	408.7	horsepower	2100	199	mm3/stroke	1333	lb-ft	1500	248	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE613B*B	F2CFE613B*B	N/A	I6	8.7	Liters	381.9	horsepower	2100	188	mm3/stroke	1241	lb-ft	1500	224	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE613C*B	F2CFE613C*B	N/A	I6	8.7	Liters	355.1	horsepower	2100	175	mm3/stroke	1200	lb-ft	1500	217	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE613E*B	F2CFE613E*B	N/A	I6	8.7	Liters	328.3	horsepower	2100	155	mm3/stroke	1119	lb-ft	1500	212	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE613F*B	F2CFE613F*B	N/A	I6	8.7	Liters	301.5	horsepower	2100	140	mm3/stroke	1000	lb-ft	1500	191	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE613L*B	F2CFE613L*B	N/A	I6	8.7	Liters	368.5	horsepower	2100	181	mm3/stroke	1241	lb-ft	1500	230	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE613J*B	F2CFE613J*B	N/A	I6	8.7	Liters	389.94	horsepower	2200	168	mm3/stroke	1263	lb-ft	1500	225	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE615D*B	F2CFE615D*B	N/A	I6	8.7	Liters	348.4	horsepower	1800	198	mm3/stroke	1022	lb-ft	1800	198	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE615C*B	F2CFE615C*B	N/A	I6	8.7	Liters	377.88	horsepower	1800	213	mm3/stroke	1108	lb-ft	1800	213	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE615B*B	F2CFE615B*B	N/A	I6	8.7	Liters	414.06	horsepower	1800	236	mm3/stroke	1215	lb-ft	1800	236	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE615A*B	F2CFE615A*B	N/A	I6	8.7	Liters	442.2	horsepower	1800	253	mm3/stroke	1297	lb-ft	1800	253	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE613D*B	F2CFE613D*B	N/A	I6	8.7	Liters	335	horsepower	2200	156	mm3/stroke	1148	lb-ft	1500	211	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE613G*B	F2CFE613G*B	N/A	I6	8.7	Liters	281.4	horsepower	2000	143	mm3/stroke	1042	lb-ft	1500	198	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE614T*B	F2CFE614T*B	N/A	I6	8.7	Liters	408.7	horsepower	2000	200	mm3/stroke	1370	lb-ft	1400	248	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE614V*B	F2CFE614V*B	N/A	I6	8.7	Liters	314.9	horsepower	2100	143	mm3/stroke	1188	lb-ft	1400	219	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX
F2CFE614U*B	F2CFE614U*B	N/A	I6	8.7	Liters	289.44	horsepower	2100	131	mm3/stroke	1096	lb-ft	1400	201	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC DOC SCR-u AMOX