

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	PPFXL03.4ASD	3.4	Diesel	8,000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Electronic Control Module, Turbocharger, Charge Air Cooler, Selective Catalytic Reduction - Urea, Ammonia Oxidation Catalyst, Exhaust Gas Recirculation			Loader, Tractor and Dozer	

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
56 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		FEL	N/A	0.30	N/A	N/A	N/A	N/A	N/A	N/A
		CERT	0.03	0.22	--	0.3	0.01	--	--	--

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 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 56 ≤ kW < 130 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-015-0546

Family: PFPXL03.4ASD

Attachment Last Revised: 6/9/2022

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
F5GFL413E*C	F5GFL413E*C	N/A	I4	3.4	Liters	115	horsepower	2200	87	mm3/stroke	375	lb-ft	1500	115	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5BFL413D*C	F5BFL413D*C	N/A	I4	3.4	Liters	90	horsepower	2500	65	mm3/stroke	284	lb-ft	1400	85	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5BFL413A*C	F5BFL413A*C	N/A	I4	3.4	Liters	110	horsepower	2200	86	mm3/stroke	341	lb-ft	1400	103	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5BFL413B*C	F5BFL413B*C	N/A	I4	3.4	Liters	96	horsepower	2200	75	mm3/stroke	336	lb-ft	1400	101	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5BFL413C*C	F5BFL413C*C	N/A	I4	3.4	Liters	90	horsepower	2200	70	mm3/stroke	307	lb-ft	1400	94	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413A*C	F5GFL413A*C	N/A	I4	3.4	Liters	115	horsepower	2300	89	mm3/stroke	349	lb-ft	1500	106	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413B*C	F5GFL413B*C	N/A	I4	3.4	Liters	106	horsepower	2300	82	mm3/stroke	347	lb-ft	1500	101	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413C*C	F5GFL413C*C	N/A	I4	3.4	Liters	98	horsepower	2300	75	mm3/stroke	319	lb-ft	1500	92	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413F*C	F5GFL413F*C	N/A	I4	3.4	Liters	115	horsepower	2300	85	mm3/stroke	361	lb-ft	1500	108	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413G*C	F5GFL413G*C	N/A	I4	3.4	Liters	106	horsepower	2300	78	mm3/stroke	347	lb-ft	1500	102	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413H*C	F5GFL413H*C	N/A	I4	3.4	Liters	98	horsepower	2300	72	mm3/stroke	319	lb-ft	1500	93	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413J*C	F5GFL413J*C	N/A	I4	3.4	Liters	84	horsepower	2300	64	mm3/stroke	276	lb-ft	1500	81	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413U*C	F5GFL413U*C	N/A	I4	3.4	Liters	115	horsepower	2300	89	mm3/stroke	361	lb-ft	1500	106	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413V*C	F5GFL413V*C	N/A	I4	3.4	Liters	106	horsepower	2300	82	mm3/stroke	347	lb-ft	1500	101	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413W*C	F5GFL413W*C	N/A	I4	3.4	Liters	98	horsepower	2300	75	mm3/stroke	319	lb-ft	1500	92	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413K*C	F5GFL413K*C	N/A	I4	3.4	Liters	121	horsepower	2300	88	mm3/stroke	363	lb-ft	1500	110	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413L*C	F5GFL413L*C	N/A	I4	3.4	Liters	113	horsepower	2300	83	mm3/stroke	351	lb-ft	1500	105	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5GFL413M*C	F5GFL413M*C	N/A	I4	3.4	Liters	98	horsepower	2300	72	mm3/stroke	318	lb-ft	1500	94	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR
F5BFL413F*C	F5BFL413F*C	N/A	I4	3.4	Liters	114	horsepower	2500	76	mm3/stroke	339	lb-ft	1400	98	mm3/stroke	N/A	N/A	N/A	DDI ECM TC CAC SCR-u AMOX EGR