

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)
2021	MFPXL03.4BSD	3.4	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Electronic Control Module, Turbocharger, Diesel Oxidation Catalyst, Exhaust Gas Recirculation			Loader, Tractor, Dozer, and Other	

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<sub>x</sub>), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NO<sub>x</sub>), 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 <sub>x</sub>	NMHC+NO <sub>x</sub>	CO	PM	ACCEL	LUG	PEAK
37 ≤ kW < 56	Tier 4 Final	<b>STD</b>	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		<b>CERT</b>	--	--	4.3	1.8	0.03	--	--	--

**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).

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 8th day of December 2020.



Allen Lyons, Chief  
 Emissions Certification and Compliance Division

**Attachment: Engine Models**

**EO #:** U-R-015-0449

**Family:** MFPXL03.4BSD

**Attachment Last Revised:** 11/30/2020

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
F5HFL463 D*G	F5HFL46 3D*G		I4	3.4	Liters	74	horsepower	2200	64	mm3/stroke	236	lb-ft	1400	78				DDI ECM TC DOC EGR
F5HFL463 B*G	F5HFL46 3B*G		I4	3.4	Liters	58	horsepower	2500	48	mm3/stroke	185	lb-ft	1400	64				DDI ECM TC DOC EGR
F5HFL463 C*G	F5HFL46 3C*G		I4	3.4	Liters	64	horsepower	2500	54	mm3/stroke	193	lb-ft	1400	68				DDI ECM TC DOC EGR
F5DFL463 B*G	F5DFL46 3B*G		I4	3.4	Liters	64	horsepower	2300	66	mm3/stroke	204	lb-ft	1500	54				DDI ECM TC DOC EGR
F5DFL463 A*G	F5DFL46 3A*G		I4	3.4	Liters	74	horsepower	2300	61	mm3/stroke	229	lb-ft	1500	76				DDI ECM TC DOC EGR
F5HFL463 A*G	F5HFL46 3A*G		I4	3.4	Liters	74	horsepower	2500	59	mm3/stroke	233	lb-ft	1400	77				DDI ECM TC DOC EGR
F5DFL463 C*G	F5DFL46 3C*G		I4	3.4	Liters	58	horsepower	2300	48	mm3/stroke	181	lb-ft	1500	60				DDI ECM TC DOC EGR
F5DFL413 B*H	F5DFL41 3B*H		I4	3.4	Liters	74	horsepower	2300	60	mm3/stroke	309	lb-ft	1500	70				DDI ECM TC CAC DOC EGR