



FPT INDUSTRIAL S.p.A.

EXECUTIVE ORDER U-R-015-0463
New Off-Road
Compression-Ignition Engines

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	MFPXL12.9TSS	12.9	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 / ALT 5% NOx	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		FEL	N/A	0.23	N/A	N/A	N/A	N/A	N/A	N/A
		CERT	0.004	0.14	--	0.02	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).

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 30th day of December 2020.

Allen Lyons, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-015-0463

Family: MFPXL12.9TSS

Attachment Last Revised: 12/23/2020

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
F3HFE613 B*B	F3HFE61 3B*B		I6	12.9	Liters	545.38	horsepower	2100	270	mm3/stroke	1778.518519	lb-ft	1400	325				DDI ECM TC CAC DOC SCR-u AMOX
F3HFE613 A*B	F3HFE61 3A*B		I6	12.9	Liters	562.8	horsepower	2100	277	mm3/stroke	1740.740741	lb-ft	1500	323				DDI ECM TC CAC DOC SCR-u AMOX
F3HFE613 C*B	F3HFE61 3C*B		I6	12.9	Liters	522.6	horsepower	2100	256	mm3/stroke	1740.740741	lb-ft	1500	322				DDI ECM TC CAC DOC SCR-u AMOX
F3HFE613 D*B	F3HFE61 3D*B		I6	12.9	Liters	514.56	horsepower	2100	254	mm3/stroke	1672.592593	lb-ft	1400	310				DDI ECM TC CAC DOC SCR-u AMOX
F3HFE613 F*B	F3HFE61 3F*B		I6	12.9	Liters	495.8	horsepower	2100	244	mm3/stroke	1715.555556	lb-ft	1500	318				DDI ECM TC CAC DOC SCR-u AMOX
F3HFE613 G*B	F3HFE61 3G*B		I6	12.9	Liters	463.64	horsepower	2100	232	mm3/stroke	1490.37037	lb-ft	1400	272				DDI ECM TC CAC DOC SCR-u AMOX
F3HFE613 H*B	F3HFE61 3H*B		I6	12.9	Liters	428.8	horsepower	2100	215	mm3/stroke	1483.703704	lb-ft	1500	274				DDI ECM TC CAC DOC SCR-u AMOX
F3HFE615 C*B	F3HFE61 5C*B		I6	12.9	Liters	473.02	horsepower	1800	261	mm3/stroke	1388.148148	lb-ft	1800	261				DDI ECM TC CAC DOC SCR-u AMOX
F3HFE615 B*B	F3HFE61 5B*B		I6	12.9	Liters	509.2	horsepower	1800	280	mm3/stroke	1494.074074	lb-ft	1800	280				DDI ECM TC CAC DOC SCR-u AMOX
F3HFE615 A*B	F3HFE61 5A*B		I6	12.9	Liters	568.16	horsepower	1800	313	mm3/stroke	1666.666667	lb-ft	1800	313				DDI ECM TC CAC DOC SCR-u AMOX