

FPT INDUSTRIAL S.p.A.

EXECUTIVE ORDER U-R-015-0458 New Off-Road

New Oπ-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	MFPXL08.7CLA	8.7	Diesel	8,000					
SPECIAL	. FEATURES & EMISSION (CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
Turboc	nic Direct Injection, Engin harger, Charge Air Cooler Selective Catalytic Reduct Oxidation Cataly	, Diesel Oxidation ion - Urea, Ammonia	Loader, Tractor, Generator Set, and 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 (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	EMISSION			ı	EXHAUST (g/kw-l	OPACITY (%)				
CLASS	STANDARD CATEGORY		NMHC	NOx	NMHC+NOx	СО	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	0.005	0.24		0.04	0.02	-		

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-015-0458 Family: MFPXL08.7CLA Attachment Last Revised: 12/14/2020

Model				Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel		Peak Torque -	Peak Torque -	Peak Torque - Fuel					
	Code	Trim	Config							Units	Peak Torque	Units	Speed (rpm)	Peak Torque - Fue		OBD	GHG	Special	Notes
F2CFE614 A*B	F2CFE61 4A*B		16	8.7	Liters	408.7	horsepower	2000	200	mm3/stroke	1370.37037	lb-ft	1400	248	mm3/stroke				DDI ECM TC CAC DOC SCR-u AMOX
F2CFE614J *B	F2CFE61 4J*B		16	8.7	Liters	419.42	horsepower	2000	205	mm3/stroke	1370.37037	lb-ft	1400	244	mm3/stroke				DDI ECM TC CAC DOC SCR-u AMOX
F2CFE614 K*B	F2CFE61 4K*B		16	8.7	Liters	403.34	horsepower	2000	196	mm3/stroke	1334.074074	lb-ft	1400	241	mm3/stroke				DDI ECM TC CAC DOC SCR-u AMOX
F2CFE614 L*B	F2CFE61 4L*B		16	8.7	Liters	379.22	horsepower	2000	184	mm3/stroke	1308.888889	lb-ft	1400	235	mm3/stroke				DDI ECM TC CAC DOC SCR-u AMOX
F2CFE614 M*B	F2CFE61 4M*B		16	8.7	Liters	345.72	horsepower	2000	188	mm3/stroke	1234.814815	lb-ft	1400	221	mm3/stroke				DDI ECM TC CAC DOC SCR-u AMOX
F2CFE614 N*B	F2CFE61 4N*B		16	8.7	Liters	312.22	horsepower	2000	152	mm3/stroke	1163.703704	lb-ft	1400	211	mm3/stroke				DDI ECM TC CAC DOC SCR-u AMOX
F2CFE614 P*B	F2CFE61 4P*B		16	8.7	Liters	432.82	horsepower	2000	216	mm3/stroke	1370.37037	lb-ft	1400	244	mm3/stroke				DDI ECM TC CAC DOC SCR-u AMOX
F2CFE614 R*B	F2CFE61 4R*B		16	8.7	Liters	432.82	horsepower	2000	214	mm3/stroke	1370.37037	lb-ft	1400	247	mm3/stroke				DDI ECM TC CAC DOC SCR-u AMOX