



CALIFORNIA
AIR RESOURCES BOARD

FPT INDUSTRIAL S.p.A.

EXECUTIVE ORDER U-R-015-0474

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	MFPXL06.7SDB	4.5, 6.7	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			Tractor, Loaders, 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 CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW ≤ 560	Tier 4 Final	STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.05	0.30	-	0.02	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).

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 $130 \leq \text{kW} \leq 560$ power category 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 12th day of January 2021.

Allen Lyons, Chief

Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-015-0474

Family: MFPXL06.7SDB

Attachment Last Revised: 12/30/2020

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	Peak Torque - Fuel Units	OBD	GHG	Special	Notes
F4HFE613 T*B	F4HFE61 3T*B		I6	6.7	Liters	194.3	horsepower	2000	99	mm3/stroke	703.7037037	lb-ft	1300	132	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX	
F4HFE613 Y*B	F4HFE61 3Y*B		I6	6.7	Liters	190.28	horsepower	2100	92	mm3/stroke	629.6296296	lb-ft	1400	119	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX	
F4DFE613 N*B	F4DFE61 3N*B		I6	6.7	Liters	172.86	horsepower	2200	86	mm3/stroke	596.2962963	lb-ft	1500	114	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX	
F4DFE613 P*B	F4DFE61 3P*B		I6	6.7	Liters	158.12	horsepower	2200	79	mm3/stroke	555.5555556	lb-ft	1500	107	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX	
F4HFE613 N*B	F4HFE61 3N*B		I6	6.7	Liters	172.86	horsepower	2200	86	mm3/stroke	596.2962963	lb-ft	1500	114	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX	
F4HFE613 3*B	F4HFE61 33*B		I6	6.7	Liters	154.1	horsepower	2100	77	mm3/stroke	537.037037	lb-ft	1400	101	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX	
F4HFE613 W*B	F4HFE61 3W*B		I6	6.7	Liters	162.14	horsepower	2000	83	mm3/stroke	540.7407407	lb-ft	1500	102	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX	
F4DFE613 2*B	F4DFE61 32*B		I6	6.7	Liters	162.14	horsepower	2200	78	mm3/stroke	548.1481481	lb-ft	1500	103	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX	
F4HFE413 Y*B	F4HFE41 3Y*B		I6	6.7	Liters	125.96	horsepower	2100	94	mm3/stroke	407.4074074	lb-ft	1500	115	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX	
F4DFE413 R*B	F4DFE41 3R*B		I6	6.7	Liters	139.36	horsepower	2200	99	mm3/stroke	463.7037037	lb-ft	1500	131	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX	
F4HFE413 R*B	F4HFE41 3R*B		I6	6.7	Liters	139.36	horsepower	2200	99	mm3/stroke	463.7037037	lb-ft	1500	131	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX	
F4DFE413 S*B	F4DFE41 3S*B		I6	6.7	Liters	129.98	horsepower	2200	92	mm3/stroke	430.3703704	lb-ft	1250	123	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX	

F4HFE413 S*B	F4HFE41 3S*B		I6	6.7	Liters	129.98	horsepower	2200	92	mm3/stroke	430.3703704	lb-ft	1250	123	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4DFE413 T*B	F4DFE41 3T*B		I6	6.7	Liters	119.26	horsepower	2200	86	mm3/stroke	399.2592593	lb-ft	1250	115	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE413 T*B	F4HFE41 3T*B		I6	6.7	Liters	119.26	horsepower	2200	86	mm3/stroke	399.2592593	lb-ft	1250	115	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4DFE413 U*B	F4DFE41 3U*B		I6	6.7	Liters	109.88	horsepower	2200	79	mm3/stroke	379.2592593	lb-ft	1250	109	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE413 U*B	F4HFE41 3U*B		I6	6.7	Liters	109.88	horsepower	2200	79	mm3/stroke	379.2592593	lb-ft	1250	109	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE413 N*B	F4HFE41 3N*B		I6	6.7	Liters	140.7	horsepower	2000	112	mm3/stroke	450.3703704	lb-ft	1600	131	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE413 P*B	F4HFE41 3P*B		I6	6.7	Liters	120.6	horsepower	2000	95	mm3/stroke	370.3703704	lb-ft	1400	108	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE415 B*B	F4HFE41 5B*B		I6	6.7	Liters	113.9	horsepower	1800	96	mm3/stroke	334.0740741	lb-ft	1800	96	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4DFE614 B*B	F4DFE61 4B*B		I6	6.7	Liters	147.4	horsepower	2200	72	mm3/stroke	518.5185185	lb-ft	1500	97	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE614 B*B	F4HFE61 4B*B		I4	4.5	Liters	147.4	horsepower	2200	72	mm3/stroke	518.5185185	lb-ft	1500	97	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE613 9*B	F4HFE61 39*B		I4	4.5	Liters	179.56	horsepower	2200	86	mm3/stroke	546.6666667	lb-ft	1500	101	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE613 P*B	F4HFE61 3P*B		I4	4.5	Liters	158.12	horsepower	2200	79	mm3/stroke	555.5555556	lb-ft	1500	107	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE414 H*B	F4HFE41 4H*B		I4	4.5	Liters	138.02	horsepower	2200	98	mm3/stroke	348.8888889	lb-ft	1500	132	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX

F4HFE614 8*B	F4HFE61 48*B		I4	4.5	Liters	172.86	horsepower	2200	86	mm3/stroke	596.2962963	lb-ft	1500	114	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE614 9*B	F4HFE61 49*B		I4	4.5	Liters	158.12	horsepower	2200	79	mm3/stroke	555.5555556	lb-ft	1500	107	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE414 9*B	F4HFE41 49*B		I4	4.5	Liters	128.64	horsepower	2200	94	mm3/stroke	437.7777778	lb-ft	1500	124	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE413 Z*B	F4HFE41 3Z*B		I4	4.5	Liters	119.26	horsepower	2200	86	mm3/stroke	406.6666667	lb-ft	1500	115	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4DFE414 V*B	F4DFE41 4V*B		I4	4.5	Liters	123.28	horsepower	2200	90	mm3/stroke	415.5555556	lb-ft	1500	118	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4HFE414 V*B	F4HFE41 4V*B		I4	4.5	Liters	123.28	horsepower	2200	90	mm3/stroke	415.5555556	lb-ft	1500	118	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4DFE614 W*B	F4DFE61 4W*B		I4	4.5	Liters	162.14	horsepower	2200	78	mm3/stroke	548.1481481	lb-ft	1500	103	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX
F4DFE614 G*B	F4DFE61 4G*B		I4	4.5	Liters	171.52	horsepower	2200	102	mm3/stroke	548.1481481	lb-ft	1500	103	mm3/stroke			DDI ECM TC CAC DOC SCR-u AMOX