



FPT INDUSTRIAL S.p.A.

EXECUTIVE ORDER U-R-015-0476
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	MFPXL06.7FR1	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/Periodic Trap Oxidizer, Ammonia Oxidation Catalyst			Tractor, 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	0.02	0.24	--	0.4	0.002	--	--	--

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 ≤ kW ≤ 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 20th day of January 2021.

Allen Lyons, Chief
Emissions Certification and Compliance Division

Attachment: Engine Models

EO #: U-R-015-0476

Family: MFPXL06.7FR1

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 Units	OBD	GHG	Special	Notes
F4HGE613 E*V	F4HGE613E*V		I6	6.7	Liters	245.22	horsepower	2000	122	mm3/stroke	962.962963	lb-ft	1300	183				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413 C*V	F4DGE413C*V		I4	4.5	Liters	140.7	horsepower	2200	104	mm3/stroke	466.6666667	lb-ft	1300	132				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413 D*V	F4DGE413D*V		I4	4.5	Liters	131.32	horsepower	2200	97	mm3/stroke	451.8518519	lb-ft	1300	128				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413 E*V	F4DGE413E*V		I4	4.5	Liters	121.94	horsepower	2200	90	mm3/stroke	408.1481481	lb-ft	1300	115				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413 F*V	F4DGE413F*V		I4	4.5	Liters	111.22	horsepower	2200	84	mm3/stroke	385.1851852	lb-ft	1300	109				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413 P*V	F4DGE413P*V		I4	4.5	Liters	138.02	horsepower	2200	103	mm3/stroke	466.6666667	lb-ft	1300	132				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413 R*V	F4DGE413R*V		I4	4.5	Liters	128.64	horsepower	2200	95	mm3/stroke	451.8518519	lb-ft	1300	128				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413 S*V	F4DGE413S*V		I4	4.5	Liters	117.92	horsepower	2200	89	mm3/stroke	408.1481481	lb-ft	1300	115				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413 T*V	F4DGE413T*V		I4	4.5	Liters	108.54	horsepower	2200	83	mm3/stroke	385.1851852	lb-ft	1300	109				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE617 D*V	F4DGE617D*V		I6	6.7	Liters	296.14	horsepower	2100	143	mm3/stroke	949.6296296	lb-ft	1400	178				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE617 E*V	F4DGE617E*V		I6	6.7	Liters	266.66	horsepower	2100	130	mm3/stroke	884.4444444	lb-ft	1400	170				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE617 K*V	F4DGE617K*V		I6	6.7	Liters	246.56	horsepower	2100	121	mm3/stroke	868.8888889	lb-ft	1400	162				DDI ECM TC CAC DOC SCR+DPF AMOX

F4DGE613 C*V	F4DGE61 3C*V		l6	6.7	Liters	255.94	horsepower	2200	120	mm3/stroke	858.5185185	lb-ft	1500	160	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE613 Y*V	F4DGE61 3Y*V		l6	6.7	Liters	247.9	horsepower	2300	119	mm3/stroke	815.5555556	lb-ft	1500	148	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE613 U*V	F4DGE61 3U*V		l6	6.7	Liters	233.16	horsepower	2300	112	mm3/stroke	768.8888889	lb-ft	1500	142	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE613 D*V	F4DGE61 3D*V		l6	6.7	Liters	213.06	horsepower	2300	100	mm3/stroke	697.7777778	lb-ft	1500	130	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE613 T*V	F4DGE61 3T*V		l6	6.7	Liters	192.96	horsepower	2200	92	mm3/stroke	660	lb-ft	1500	121	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613 T*V	F4HGE61 3T*V		l6	6.7	Liters	192.96	horsepower	2200	92	mm3/stroke	660	lb-ft	1500	121	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE613 V*V	F4DGE61 3V*V		l6	6.7	Liters	172.86	horsepower	2200	84	mm3/stroke	594.0740741	lb-ft	1500	112	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE617 D*V	F4HGE61 7D*V		l6	6.7	Liters	296.14	horsepower	2100	143	mm3/stroke	949.6296296	lb-ft	1400	178	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE617 E*V	F4HGE61 7E*V		l6	6.7	Liters	266.66	horsepower	2100	130	mm3/stroke	884.4444444	lb-ft	1400	170	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE617 K*V	F4HGE61 7K*V		l6	6.7	Liters	246.56	horsepower	2100	121	mm3/stroke	868.8888889	lb-ft	1400	162	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE614 L*V	F4HGE61 4L*V		l6	6.7	Liters	190.28	horsepower	2100	95	mm3/stroke	629.6296296	lb-ft	1400	119	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE614 M*V	F4HGE61 4M*V		l6	6.7	Liters	154.1	horsepower	2100	80	mm3/stroke	537.037037	lb-ft	1500	101	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613 R*V	F4HGE61 3R*V		l6	6.7	Liters	179.56	horsepower	2200	86	mm3/stroke	547.4074074	lb-ft	1500	105	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX

F4HGE615 C*V	F4HGE61 5C*V		I6	6.7	Liters	234.5	horsepower	1800	128	mm3/stroke	688.1481481	lb-ft	1800	128	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE615 D*V	F4HGE61 5D*V		I6	6.7	Liters	308.2	horsepower	1800	171	mm3/stroke	903.7037037	lb-ft	1800	171	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613 V*V	F4HGE61 3V*V		I6	6.7	Liters	172.86	horsepower	2200	71	mm3/stroke	594.0740741	lb-ft	1500	94	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613 N*V	F4HGE61 3N*V		I6	6.7	Liters	202.34	horsepower	2200	94	mm3/stroke	696.2962963	lb-ft	1500	128	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613 C*V	F4HGE61 3C*V		I6	6.7	Liters	255.94	horsepower	2200	133	mm3/stroke	859.2592593	lb-ft	1500	161	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613 M*V	F4HGE61 3M*V		I6	6.7	Liters	284.08	horsepower	2200	135	mm3/stroke	859.2592593	lb-ft	1500	161	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413 2*V	F4DGE41 32*V		I4	4.5	Liters	142.04	horsepower	2300	103	mm3/stroke	437.037037	lb-ft	1500	125	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE413 5*V	F4HGE41 35*V		I4	4.5	Liters	167.5	horsepower	2100	123	mm3/stroke	532.5925926	lb-ft	1500	147	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613 K*V	F4HGE61 3K*V		I6	6.7	Liters	217.08	horsepower	2200	103	mm3/stroke	740.7407407	lb-ft	1400	140	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE613 7*V	F4HGE61 37*V		I6	6.7	Liters	196.98	horsepower	2300	94	mm3/stroke	648.1481481	lb-ft	1500	122	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4HGE614 J*V	F4HGE61 37*V		I6	6.7	Liters	182.24	horsepower	2300	85	mm3/stroke	596.2962963	lb-ft	1500	112	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE613 N*V	F4DGE61 3N*V		I6	6.7	Liters	202.34	horsepower	2200	94	mm3/stroke	696.2962963	lb-ft	1500	128	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE613 7*V	F4DGE61 37*V		I6	6.7	Liters	196.98	horsepower	2300	94	mm3/stroke	648.1481481	lb-ft	1500	122	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX

F4DGE613 S*V	F4DGE61 3S*V		I6	6.7	Liters	182.24	horsepower	2300	87	mm3/stroke	596.2962963	lb-ft	1500	112	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE613 9*V	F4DGE61 39*V		I6	6.7	Liters	167.5	horsepower	2300	81	mm3/stroke	555.5555556	lb-ft	1500	106	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE614 A*V	F4DGE61 4A*V		I6	6.7	Liters	147.4	horsepower	2200	75	mm3/stroke	518.5185185	lb-ft	1500	99	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413 1*V	F4DGE41 31*V		I4	4.5	Liters	171.52	horsepower	2300	124	mm3/stroke	518.5185185	lb-ft	1500	145	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413 G*V	F4DGE41 3G*V		I4	4.5	Liters	164.82	horsepower	2300	119	mm3/stroke	518.5185185	lb-ft	1500	145	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE413 H*V	F4DGE41 3H*V		I4	4.5	Liters	151.42	horsepower	2300	111	mm3/stroke	474.0740741	lb-ft	1500	135	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE613 6*V	F4DGE61 36*V		I6	6.7	Liters	171.52	horsepower	2300	81	mm3/stroke	546.6666667	lb-ft	1500	104	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX
F4DGE614 H*V	F4DGE61 4H*V		I6	6.7	Liters	160.8	horsepower	2300	77	mm3/stroke	523.7037037	lb-ft	1500	99	mm3/stroke				DDI ECM TC CAC DOC SCR+DPF AMOX