California Environmental Protection Agency **Air Resources Board**	**FPT INDUSTRIAL S.p.A.**	**EXECUTIVE ORDER U-R-015-0322** New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the 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-14-012;

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)
2016	GFPXL06.7SDB	4.5, 6.7	Diesel	8000

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, 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	0.01	0.32	--	0.03	0.02	--	--	--

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has complied with the more stringent set of standards from the various power categories in conformance with Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for 2008 and Later Tier 4 Off-Road Compression-Ignition Engines, Part I-C" adopted October 20, 2005 and last amended October 25, 2012.

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 at El Monte, California on this 29 day of September 2015.

Annette Hebert, Chief
Emissions Compliance, Automotive Regulations and Science Division

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Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
GFPXL06.7SDB	F4HFE613T*B	F4HFE613T*B	194 @ 2000	99	N/A	704 @ 1300	132	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4HFE613Y*B	F4HFE613Y*B	190 @ 2100	92	N/A	630 @ 1400	119	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4DFE613N*B	F4DFE613N*B	173 @ 2200	86	N/A	596 @ 1500	114	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4DFE613P*B	F4DFE613P*B	158 @ 2200	79	N/A	556 @ 1500	107	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4HFE613N*B	F4HFE613N*B	173 @ 2200	86	N/A	596 @ 1500	114	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4HFE6133*B	F4HFE6133*B	154 @ 2100	77	N/A	537 @ 1400	101	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4HFE613W*B	F4HFE613W*B	162 @ 2000	83	N/A	541 @ 1500	102	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4DFE6132*B	F4DFE6132*B	162 @ 2200	78	N/A	548 @ 1500	103	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4HFE413Y*B	F4HFE413Y*B	126 @ 2100	94	N/A	407 @ 1500	115	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4DFE413R*B	F4DFE413R*B	139 @ 2200	99	N/A	464 @ 1500	131	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4HFE413R*B	F4HFE413R*B	139 @ 2200	99	N/A	464 @ 1500	131	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4DFE413S*B	F4DFE413S*B	130 @ 2200	92	N/A	430 @ 1250	123	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4HFE413S*B	F4HFE413S*B	130 @ 2200	92	N/A	430 @ 1250	123	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4DFE413T*B	F4DFE413T*B	119 @ 2200	86	N/A	399 @ 1250	115	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4HFE413T*B	F4DFE413T*B	119 @ 2200	86	N/A	399 @ 1250	115	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4DFE413U*B	F4DFE413U*B	110 @ 2200	79	N/A	379 @ 1250	109	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4HFE413U*B	F4HFE413U*B	110 @ 2200	79	N/A	379 @ 1250	109	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4HFE413N*B	F4HFE413N*B	141 @ 2000	112	N/A	608 @1600	131	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4HFE413P*B	F4HFE413P*B	121 @ 2000	95	N/A	500 @ 1400	108	N/A	DDI ECM TC CAC DOC SCR-u AMOX
GFPXL06.7SDB	F4HFE415B*B	F4HFE415B*B	114 @ 1800	96	N/A	333 @ 1800	96	N/A	DDI ECM TC CAC DOC SCR-u AMOX

tested

Added