California Environmental Protection Agency **Air Resources Board**	**FPT INDUSTRIAL S.p.A.**	**EXECUTIVE ORDER U-R-015-0318** 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	GFPXL03.4ESD	3.4	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Electronic Direct Injection, Turbocharger, Charge Air Cooler, Electronic Control Module, Exhaust Gas Recirculation, Diesel Oxidation Catalyst, Selective Catalytic Reduction - Urea, and Ammonia Oxidation	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
56 ≤ kW < 130	Tier 4 Final	STD	0.19	0.40	N/A	5.0	0.02	N/A	N/A	N/A
		CERT	0.003	0.34	--	0.05	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

SUPERSEDED

Engine Model Summary Template

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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
GFPXL03.4ESD	F5GFL413E*B	F5GFL413E*B	115 @ 2200	87	N/A	374@ 1500	115	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5BFL413F*B	F5BFL413F*B	96 @ 2000	79	N/A	305 @ 1400	93	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5BFL413D*B	F5BFL413D*B	114 @ 2500	80	N/A	340 @ 1400	103	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5BFL413E*B	F5BFL413E*B	90 @ 2500	65	N/A	283 @ 1400	85	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5BFL413A*B	F5BFL413A*B	110 @ 2200	86	N/A	340 @ 1400	103	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5BFL413B*B	F5BFL413B*B	96 @ 2200	75	N/A	335 @ 1400	101	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5BFL413C*B	F5BFL413C*B	90 @ 2200	70	N/A	307 @ 1300	94	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413D*B	F5GFL413D*B	84 @ 2300	64	N/A	271 @ 1500	81	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413A*B	F5GFL413A*B	115 @ 2300	85	N/A	360 @ 1500	108	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413B*B	F5GFL413B*B	106 @ 2300	78	N/A	345 @ 1500	103	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413C*B	F5GFL413C*B	98 @ 2300	72	N/A	313 @ 1500	93	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413F*B	F5GFL413F*B	106 @ 2300	78	N/A	341 @ 1500	102	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413G*B	F5GFL413G*B	115 @ 2300	85	N/A	359 @ 1500	107	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413N*B	F5GFL413N*B	123 @ 2300	91	N/A	370 @ 1500	113	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413M*B	F5GFL413M*B	82 @ 2300	62	N/A	247 @ 1500	72	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413L*B	F5GFL413L*B	90 @ 2300	67	N/A	271 @ 1500	81	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413K*B	F5GFL413K*B	95 @ 2300	70	N/A	271 @ 1500	81	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413J*B	F5GFL413J*B	101 @ 2300	74	N/A	297 @ 1500	88	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413H*B	F5GFL413H*B	103 @ 2300	76	N/A	299 @ 1700	89	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413T*B	F5GFL413T*B	98@2200	72	N/A	313 @ 1500	93	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413S*B	F5GFL413S*B	101 @ 2200	76	N/A	319 @ 1400	95	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413R*B	F5GFL413R*B	94 @ 2200	68	N/A	293 @ 1400	87	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.
GFPXL03.4ESD	F5GFL413P*B	F5GFL413P*B	84 @ 2200	62	N/A	262 @ 1400	78	N/A	DDI ECM TC CAC DOC SCR-u AMOX EGR.

SUPERSEDED