

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)
2017	HFPXL06.7SDB	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			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 CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
75 ≤ kW ≤ 560	Tier 4 Final	OPTIONAL STD	0.19	0.40	N/A	3.5	0.02	N/A	N/A	N/A
		CERT	0.004	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-D" adopted October 20, 2005 and last amended October 25, 2012.

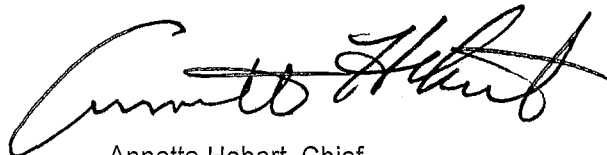
BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

BE IT FURTHER RESOLVED: That the listed engine family is conditionally certified pending submission of additional test data to verify compliance with useful-life emission standards. The manufacturer has until October 15, 2017 to provide test data to confirm or correct the certification emissions levels on this conditional certification. Failure to resolve concerns by the specified date, shall be cause for the Executive Officer to rescind this conditional certification, in which case all engines covered under this conditional certification would be deemed uncertified pursuant to Health and Safety Code Section 43153 and subject to civil penalties pursuant to Health and Safety Code Section 43154.

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 9 day of March 2017.



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

U-12-015-0338

Attachment pg 1/2

11/22/2017

Engine Model Summary Template

Engine Family	1.Engine Code	2.Engine Model	3.BHP @ RPM (SAE Gross)	4.Fuel Rate: mm ³ /stroke @ peak HP (for diesel only)	5.Fuel Rate: (bwhr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm ³ /stroke @ peak torque	8.Fuel Rate: (bwhr) @ peak torque	9.Emission Control Device Par SAE J1930
HFPXL06.7SDB	F4HFE613T*B	F4HFE613T*B	194 @ 2000	99	N/A	704 @ 1300	132	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE613Y*B	F4HFE613Y*B	190 @ 2100	92	N/A	630 @ 1400	119	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4DFE613N*B	F4DFE613N*B	173 @ 2200	86	N/A	596 @ 1500	114	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4DFE613P*B	F4DFE613P*B	158 @ 2200	79	N/A	556 @ 1500	107	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE613N*B	F4HFE613N*B	173 @ 2200	86	N/A	596 @ 1500	114	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE6133*B	F4HFE6133*B	154 @ 2100	77	N/A	537 @ 1400	101	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE613W*B	F4HFE613W*B	162 @ 2000	83	N/A	541 @ 1500	102	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4DFE6132*B	F4DFE6132*B	162 @ 2200	78	N/A	548 @ 1500	103	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE413Y*B	F4HFE413Y*B	128 @ 2100	94	N/A	407 @ 1500	115	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4DFE413R*B	F4DFE413R*B	139 @ 2200	99	N/A	464 @ 1500	131	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE413R*B	F4HFE413R*B	139 @ 2200	99	N/A	464 @ 1500	131	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4DFE413S*B	F4DFE413S*B	130 @ 2200	92	N/A	430 @ 1250	123	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE413S*B	F4HFE413S*B	130 @ 2200	92	N/A	430 @ 1250	123	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4DFE413T*B	F4DFE413T*B	119 @ 2200	86	N/A	399 @ 1250	115	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE413T*B	F4DFE413T*B	119 @ 2200	86	N/A	399 @ 1250	115	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4DFE413U*B	F4DFE413U*B	110 @ 2200	79	N/A	379 @ 1250	109	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE413U*B	F4HFE413U*B	110 @ 2200	79	N/A	379 @ 1250	109	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE413N*B	F4HFE413N*B	141 @ 2000	112	N/A	608 @ 1600	131	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE413P*B	F4HFE413P*B	121 @ 2000	95	N/A	500 @ 1400	108	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE415B*B	F4HFE415B*B	114 @ 1800	96	N/A	333 @ 1800	96	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4DFE6148*B	F4DFE6148*B	147 @ 2200	97	N/A	519 @ 1500	72	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE6148*B	F4HFE6148*B	147 @ 2200	97	N/A	519 @ 1500	72	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE6139*B	F4HFE6139*B	180 @ 2200	107	N/A	547 @ 1500	86	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE613P*B	F4HFE613P*B	158 @ 2200	101	N/A	556 @ 1500	79	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE414H*B	F4HFE414H*B	136 @ 2200	132	N/A	349 @ 1500	98	N/A	DDI ECM TC CAC DOC SCR-4 AMOK
HFPXL06.7SDB	F4HFE6148*B	F4HFE6148*B	173 @ 2200	86	N/A	596 @ 1500	114	N/A	DDI ECM TC CAC DOC SCR-4 AMOK

U-12-015-0338

Attachment pg 2/2

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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: (lb/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lb/hr)@peak torque	9.Emission Control Device Per SAE J1930
HFPXL06.7SDB	F4HFE8149*B	F4HFE8149*B	158 @ 2200	79	N/A	556 @ 1500	107	N/A	DDI ECM TC CAC DOC SCR+AMOX
HFPXL06.7SDB	F4HFE4149*B	F4HFE4149*B	129 @ 2200	94	N/A	436 @ 1500	124	N/A	DDI ECM TC CAC DOC SCR+AMOX
HFPXL06.7SDB	F4HFE413Z*B	F4HFE413Z*B	119 @ 2200	86	N/A	407 @ 1500	115	N/A	DDI ECM TC CAC DOC SCR+AMOX
HFPXL06.7SDB	F4DFE414V*B	F4DFE414V*B	123 @ 2200	90	N/A	416 @ 1500	118	N/A	DDI ECM TC CAC DOC SCR+AMOX
HFPXL06.7SDB	F4HFE414V*B	F4HFE414V*B	123 @ 2200	90	N/A	416 @ 1500	118	N/A	DDI ECM TC CAC DOC SCR+AMOX
HFPXL06.7SDB	F4DFE614W*B	F4DFE614W*B	162 @ 2200	78	N/A	548 @ 1500	103	N/A	DDI ECM TC CAC DOC SCR+AMOX

added