EXECUTIVE ORDER U-R-044-0106 New Off-Road Compression-Ignition Engines

⊘ Air Resources Board

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)			
2014	EDCLL01.8F7T	1.826	Diesel	8000			
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLIC	TYPICAL EQUIPMENT APPLICATION			
Electro Turboch	Electronic Control M nic Direct Injection, Perio arger, Exhaust Gas Reci Catalyst	dic Trap Oxidizer,	Tractor, Other Industrial Equipment				

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), 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	EMISSION		EXHAUST (g/kw-hr)					OPACITY (%)		
CLASS	STANDARD CATEGORY		НС	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
37 ≤ kW < 56	Tier 4 Final	STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		CERT			4.0	0.04	0.003			

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

__ day of April 2014.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

7-12-14

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Engine Model Summary Template

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
3021/2600	3F183T	40.2@2600	36.3@40.2	15.64@40.2	98.1@1700	40:2@98.1	11.32@98.1	EGR, ECM, DDI, OC, PTOX, TC
3420/2600	3F183T	44.9@2600	39.8@44.9	17.14@44.9	109.1@1700	45.1@109.1	12.70@109.1	EGR, ECM, DDI, OC, PTOX, TC
3807/2300	3F183T	50.3@2300	47.3@50.3	18.02@50.3	122.4@1700	50.4@122.4	14.20@122.4	EGR, ECM, DDI, OC, PTOX, TC
3820/2600	3F183T	50.3@2600	44.2@50.3	19.04@50.3	122.4@1700	50.4@122.4	14.20@122.4	EGR, ECM, DDI, OC, PTOX, TC
4120/2600	3F183T	55.0@2600	48.4@55.0	20.85@55.0	133.5@1700	56.5@133.5	15.91@133.5	EGR, ECM, DDI, OC, PTOX, TC
4318/2600	3F183T	57.7@2600	50.0@57.7	21.54@57.7	137.9@1700	57.5@137.9	16.19@137.9	EGR, ECM, DDI, OC, PTOX, TC
	3021/2600 3420/2600 3807/2300 3820/2600 4120/2600	3021/2600 3F183T 3420/2600 3F183T 3807/2300 3F183T 3820/2600 3F183T 4120/2600 3F183T	1.Engine Code 2.Engine Model (SAE Gross) 3021/2600 3F183T 40.2@2600 3420/2600 3F183T 44.9@2600 3807/2300 3F183T 50.3@2300 3820/2600 3F183T 50.3@2600 4120/2600 3F183T 55.0@2600	1.Engine Code 2.Engine Model 3.BHP@RPM (SAE Gross) mm/stroke @ peak HP (for diesel only) 3021/2600 3F183T 40.2@2600 36.3@40.2 3420/2600 3F183T 44.9@2600 39.8@44.9 3807/2300 3F183T 50.3@2300 47.3@50.3 3820/2600 3F183T 50.3@2600 44.2@50.3 4120/2600 3F183T 55.0@2600 48.4@55.0	1.Engine Code 2.Engine Model 3.BHP@RPM (SAE Gross) mm/stroke @ peak HP (Ibs/hr) @ peak HP (for diesel only) (Ibs/hr) @ peak HP (for diesel only) 3021/2600 3F183T 40.2@2600 36.3@40.2 15.64@40.2 3420/2600 3F183T 44.9@2600 39.8@44.9 17.14@44.9 3807/2300 3F183T 50.3@2300 47.3@50.3 18.02@50.3 3820/2600 3F183T 50.3@2600 44.2@50.3 19.04@50.3 4120/2600 3F183T 55.0@2600 48.4@55.0 20.85@55.0	1.Engine Code 2.Engine Model 3.BHP@RPM (SAE Gross) mm/stroke @ peak HP (for diesel only) (for diesels only) 6.Torque @ RPM (SEA Gross) 3021/2600 3F183T 40.2@2600 36.3@40.2 15.64@40.2 98.1@1700 3420/2600 3F183T 44.9@2600 39.8@44.9 17.14@44.9 109.1@1700 3807/2300 3F183T 50.3@2300 47.3@50.3 18.02@50.3 122.4@1700 3820/2600 3F183T 50.3@2600 44.2@50.3 19.04@50.3 122.4@1700 4120/2600 3F183T 55.0@2600 48.4@55.0 20.85@55.0 133.5@1700	1.Engine Code 2.Engine Model 3.BHP@RPM (SAE Gross) mm/stroke@peak HP (for diesel only) (bs/hr) @ peak HP (for diesels only) 6.Torque @ RPM (SEA Gross) mm/stroke@peak torque 3021/2600 3F183T 40.2@2600 36.3@40.2 15.64@40.2 98.1@1700 40.2@98.1 3420/2600 3F183T 44.9@2600 39.8@44.9 17.14@44.9 109.1@1700 45.1@109.1 3807/2300 3F183T 50.3@2300 47.3@50.3 18.02@50.3 122.4@1700 50.4@122.4 3820/2600 3F183T 50.3@2600 44.2@50.3 19.04@50.3 122.4@1700 50.4@122.4 4120/2600 3F183T 55.0@2600 48.4@55.0 20.85@55.0 133.5@1700 56.5@133.5	1.Engine Code 2.Engine Model 3.BHP@RPM (SAE Gross) mm/stroke @ peak HP (for diesels only) (lbs/hr) @ peak HP (for diesels only) 6.Torque @ RPM (SEA Gross) mm/stroke@peak torque (lbs/hr)@peak torque 3021/2600 3F183T 40.2@2600 36.3@40.2 15.64@40.2 98.1@1700 40.2@98.1 11.32@98.1 3420/2600 3F183T 44.9@2600 39.8@44.9 17.14@44.9 109.1@1700 45.1@109.1 12.70@109.1 3807/2300 3F183T 50.3@2300 47.3@50.3 18.02@50.3 122.4@1700 50.4@122.4 14.20@122.4 3820/2600 3F183T 50.3@2600 44.2@50.3 19.04@50.3 122.4@1700 50.4@122.4 14.20@122.4 4120/2600 3F183T 55.0@2600 48.4@55.0 20.85@55.0 133.5@1700 56.5@133.5 15.91@133.5