EXECUTIVE ORDER U-R-008-0084 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-02-003:

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system 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)			
2009	9NHXL04.5DAB	4.5	Diesel	8000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Direct Dies Exhaust	sel Injection, Turbocharge t Gas Recirculation and	er, Charge Air Cooler, Smoke Puff Limiter	Loader, 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 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		EMISSION		EXHAUST (g/kw-hr)					OPACITY (%)		
	POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
-	37 ≤ kW < 75	Tier 3	STD	N/A	N/A	4.7	5.0	0.40	20	15	50
			CERT			4.2	1.1	0.26	13	7	20

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 January 2009.

Annette Hebert, Chief

Mobile Source Operations Division

4-R-015-0084

Manufacturer: CNH UK LTD

Engine category: Nonroad and Stationary CI

EPA Engine Family: 9NHXL04.5DAB

Mfr Family Name: 445TA/MN

Process Code: New Submission

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	ELR. 1	_	_		<u> </u>	_			- >
9.Emission Control Device Per SAE J1930	EM. SPL. CAC. EGIR, TAA	EM. SPL. CAC.							
8.Fuel Rate: (lbs/hr)@peak torque	N/A	A/N	Y/N	A/N	Υ/N	A/N	Y/N	A/N	⇒ ∀N
7.Fuel Rate: mm/stroke@peak torque	66	95	26	92	98	80	84	73	06
6. Torque @ RPM (SEA Gross)	305 @ 1320	305 @ 1260	299 @ 1320	288 @ 1380	277 @ 1500	258 @ 1500	260 @ 1380	229 @ 1380	284 @ 1500
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	A/N	N/A
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	78	82	. 22	75	70	65	29	51	72
3.BHP@RPM (SAE Gross)	99 @ 2200	99 @ 2100	97 @ 2200	95 @ 2300	94 @ 2500	87 @ 2500	84 @ 2300	75 @ 2300	99 @ 2500
1.Engine Code 2.Engine Model	F4GE9484F*J/ F4CE9484F*J	F4GE9484P*J	F4GE9484C*J	F4CE9484M*J	F4CE9487N*J	F4CE9487M*J	F4CE9484N*J	F4CE9484A*J	F4CE9487A*J
1.Engine Code	445TA/MNK	445TA/MNB	445TA/MNC	445TA/MND	445TA/MNE	445TA/MNF	445TA/MNG	445TA/MNJ	445TA/MNL