## **CNH UK Limited**

EXECUTIVE ORDER U-R-008-0035

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) 8000				
2004	4NHXL05.9DTA	5.9	Diesel					
SPECIAL FEATURES & EMISSION CONTROL SYSTEMŞ			TYPICAL EQUIPMENT APPLICATION					
Direct Diesel Injection, Turbocharger, Charge Air Cooler and Smoke Puff Limiter			Loader, Dozer and Excavator					

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 STANDARD				EXHAUST (g/kw-l	OPACITY (%)				
CLASS	CATEGORY		HC	NOx	NMHC+NOx	co	РМ	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 2	STD	N/A	N/A	6.6	5.0	0.30	20	15	50
		CERT			5.6	0.7	0.28	11	4	15

**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 October 2003.

Allen Lyons, Chief

Mobile Source Operations Division

## **Engine Model Summary Form**

ATTACAMENT (B) 10+1

U-R-008-0036

CNH UK LTD Manufacturer:

Nonroad Cl Engine category:

EPA Engine Family: 4NHXL05.9DTA

Mfr Family Name: F4BE0684

New Submission Process Code:

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Taranta .	8.Fuel Rate: 9.Emission Control lbs/hr)@peak torque Device Per SAE J1930		DOZ, EM. SPL. (C, CAC	f EM. SPL.		ElWi. Of L.	dS MH	11/ //1				
:	8.Fuel Rate: (lbs/hr)@peak torqu		Α'X —	N/A		۲ <u>۸</u>	A/N		NA			
	7.Fuel Rate: mm/stroke@peak torque		100	91		- 0	00	0	- 44	2		
	6.Torque @ RPM (SEA Gross)		509 @ 1400	461@1400	AND A STAN	408 @ 1400	KN7 @ 1100	202 (2) 1400	250 F 4100	303 (Q 1400		
	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)		ΝΆ	N/A		A/A	NIA	ζ Ξ	K17A	Y/N		
	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)		96	83		8/	60	S S S	4.	0.7		
	3.BHP@RPM (SAE Gross)		173 @ 2000	158 @ 2150	)	141 @ 2000	- 1	1/3 @ 7100	1000	133 @ 2100		
	1.Engine Code 2.Engine Model		F4BE0684A*D 173 @ 2000	F4BE0684B*D		F4BE0684D*D	The state of the s	F4BEO684H"U	A	F4BE0684K*D		
	1.Engine Code		N/A	N/A		N/A		₹Z		Y/N		