## **CNH UK Limited**

EXECUTIVE ORDER U-R-008-0040 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)			
2004	4NHXL07.5B3A	7.5	Diesel	8000			
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
Direct Dies	el Injection, Turbocharg and Engine Control I	er, Charge Air Cooler Module	Combine				

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 CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
CLASS			нс	NOx	NMHC+NOx	ÇO	РМ	ACCEL	LUG	PEAK
130 ≤ kW < 225	Tier 2	STD	N/A	N/A	6.6	3.5	0.20	20	15	50
225 ≤ kW < 450	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		CERT			6.1	1.1	0.18	5	5	9

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 29th day of October 2003.

Allen Lons, Chief

Mobile Source Operations Division

## Engine Model Summary Form ATHACHMENT PS 104 (

Manufacturer: CNH UK LTD

Engine category: Nonroad CI

EPA Engine Family: 4NHXL07.5B3A

Mfr Family Name: 675TA/A

Process Code: New Submission

9.Emission Control Device Per SAE J1930		EM. EC. I AA.	EM. EC. TAA.	EM. EC. TAA.	EM. EC. TAA.	EM. EC. TAA.	EM EC TAA	/ EM EC (1AA.	EM. ECNIAA.
8.Fuel Rate: (lbs/hr)@peak torque	N/A DOE,	A/N	A/N	A/N	N/A	N/A	٧/X	N/A	> V/N
7.Fuel Rate: mm/stroke@peak torque	193	193	170	150	131	160	174	192	192
6.Torque @ RPM (SEA Gross)	1000 @ 1500	1000 @ 1500	878 @ 1400	765 @ 1400	671 @ 1400	784 @ 1500	853 @ 1500	955 @ 1500	955 @ 1500
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	N/A	N/A	Y/A	N/A	N/A	N/A	N/A	N/A	N/A
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	171	157		127	111	125	135.8	152.7	152.7
3.BHP@RPM (SAE Gross)	322 @ 2100	295 @ 2100	260 @ 2100	227 @ 2100	196 @ 2100	228 @ 2100	248 @ 2100	278@2100	278 @ 2100
2.Engine Model	675TA/AA	675TA/AB	675TA/AC	675TA/AD	- 675TA/AE	675TA/AG	675TA/AH	675TA/AJ	675TA/AK
1.Engine Code	N/A	N/A	A/N	N/A	N/A	N/A	N/A	N/A	N/A