New Holland UK Ltd.

EXECUTIVE ORDER U-R-008-0028 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)
2003	3NHXL05.0A1N	5.0	Diesel	8000
SPECIAL	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection			Loader, Tractor and Other In	dustrial 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		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
37 <u><</u> KW < 75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT		8.3				8	10	11

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 December 2002.

Allen Lyons, Chief

Mobile Source Operations Division

Engine Model Summary Form

U-R-008-0028

CNH UK Ltd Manufacturer:

Nonroad Cl Engine category:

3NHXL05.0A1N EPA Engine Family.

Mfr Family Name: 450/N

New Submission Process Code:

4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP (for diesels only)

3.BHP@RPM (SAE Gross)

2.Engine Model

6.Torque @ RPM (SEA Gross)

9. Emission Control 8.Fuel Rate: (lbs/hr)@peak torq 7.Fuel Rate: mm/stroke@peak torque

E.N. EΜ DOIL, E.M. N/A NA NA 78 8 262 @ 1400 251@1400 248 @ 1400 N/A N/A NA 89 64 88 @ 2170 83 @ 2200 92 @ 2200 450/NB 450/NE 450/NC 1.Engine Code N/A MA MAN

,	⋖	ı	ŀ
=	Per SA	•	
₽	<u>_</u>	1	ł
ŭ	'n	1	į
"	_	1	1
S. FITHSSION	Device		ı
Ц	.≌	1	ı
'n	3	1	
•	ŏ	1	
		1	

ŝ	ı	ļ
9	ı	١
σ.	1	1
8	ı	ļ
2	ı	ļ
Ō	1	1
ē	ı	
	ue Device Per S/	Device

	Ϋ́	ı	ļ
	2	ı	Ì
i	Per SA	1	1
		ı	
	evice	ı	
•	8	1	
		1	

SA	l	
Рег	I	
evice	١	
Dev	ı	
ne	١	Ī

	SA	ı	
	Per SA	I	
i	evice	١	
•	Dev	١	

PerS		
Device		
dne	١	

•	1	ı
SAE	1	
Š	ı	
5	ı	
Per	1	
8	ı	
ž	1	
å	1	

	evice Per SA	ı	
			ι
	ō	1	ļ
	Ω.	1	1
	_	ı	
	<u>8</u>	ı	ŀ
	>	•	П
۰	മ		,
	Ã	1	ľ
	Φ	1	ſ

Š	l	þ
Per	l	١
Device	١	
Ğ	١	4
dne	l	
U		Ł

SAE	١	
Рег	ı	
Device Per SAE		
rque	۱	

Ϋ́	ı	
Per SA	ı	1
	ı	
evice	ı	ĺ
Ã	1	ľ

Š	ı	
Рег	ı).
	ı	1,
evice	ı	ľ
é	١	1
_	Ł	ŀ

C)		-
Per	ı	Ц
8	ı)
ěvić	ı	1
e L	1	ŀ
_		

щ	1	1
SAE	ı	
Pe	١	þ
_	ı	1
<u>vice</u>	ı	l
ခု	1	1

Š	ı	
Per	ı	1
8	ı	
<u>ē</u>	١	
	1	ľ

щ	1	1
SAE	ı	١
2	ı	ŗ
Per	1	ł
4	1	1
8	1	ļ
≅	1	1
~	1	1

Ψ-		- t
_	1	1
ш	1	1
S	ı	
S	ı	ŀ
Per	1	١
ም	1	ŝ
ш.	1	1
ęχ	ı	
.≌	1	1

•	1	•
ш	1	1
SA	ı	H
S	ı	-
Pe	1	Ĺ
ď	1	Г
Φ	ı	١,
evice	1	- 1
≳	1	Ч

SAE	l	
Рег	l	۱
<u>8</u>	١	
Dev	ı	Ì

•	1	
SAE	۱	-
	ı	۲
Рег	ı	
<u>8</u>	١	
<u>ŏ</u>	1	I

÷	•	ı
SAE	1	i
⋖	ı	
S		
_		
മ	1	
Per	1	
	ŧ	
8		
٠Ē	-1	

Щ	۱	١
SA	ı	
ĕ	ı)
	1	1
<u>ş</u>	١	
ó	1	I.