Catifornia Environmental Protection Agency 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-02-003;

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)					
2004	4KBXL02.4ECD	1.826, 2.434	Diesel	5000					
	FEATURES & EMISSION	CONTROL SYSTEMS							
	Direct Diesel Inje		Loader, Other Industria	al 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 CLASS	EMISSION			E	XHAUST (g/kW-	OPACITY (%)				
	STANDARD CATEGORY		HC	NOx	NMHC+Nox	со	PM	ACCEL	LUG	PEAK
19 ≤ kW < 37	Tier 2	STD	N/A	N/A	7.5	5.5	0.60	20	15	50
		CERT			6.5	2.2	0.40	3	4	4

**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 2003.

Allen Lyons, Chief Mobile Source Operations Division

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Mtachurd 1 of 1 Engine Model Sr mary Form OTA Corporation

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KUBOTA Corporat	Nonroad Cl	4KBXL02.4ECD	N/A	New Submission
Manufacturer:	Engine category:	EPA Engine Famly.	Mfr Family Name:	Process Code:

1-12-0-52-0121

LEngine Code   Zengine Model   Streid Rate: (see Conso)		Ĩ						-	·· ·· <del>·</del>	1	n p	 					  					7.5		
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Engline Code   2 Engline Model   BHPerRIM (SKE Onso)   Affent Rate: (so dive e park)   Torque e rim (or dive e rim)   Torque e rim (sex Onso)   Torque e rim   Torque e rim   Torque e rim   Torque e rim	8.Fuc hr)@	-																					 	
Engine Code   2.Engine Model   3BHP@FPM   mutative density   thue Rate:   thue Rate:     1903-MDLES01   0.1803-MDLES   39.2@2600   35.5   15.5   93.3@1600     1803-MDLES01   V2403-MDLES   39.1@2600   36.5   14.9   91.8@1700     2403-MDLES01   V2403-MDLES   38.1@2600   36.5   14.9   91.8@1700     2403-MDLES01   V2403-MDLES   38.1@2600   32.6   14.9   91.3@91700	(lbs/											-										:	-	
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Engline Code   2. Engline Model   3.BHP @FPM   mmatche @ post HP   5.Fuel Rate:     11802-M-DI-ESO1   D1803-M-DI-ES   3.9.2@2600   35.5.5   15.5.5     12803-M-DI-ESO1   D1803-M-DI-ES   3.8.1@2600   35.5.5   14.3     22403-M-DI-ESO1   V2403-M-DI-ES   4.8.8@2600   32.6   18.9     22403-M-DI-ESO1   V2403-M-DI-ES   4.8.8@2600   32.6   18.9	7 MM	:																						
Engine Code   2. Engine Model   3HP @PhN   Mmetore @ pask HP   5. Fuel Rate: (for disease only)   5. Fuel Rate: (for disease only)	-				:	1		1																
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