MAZDA MOTOR CORPORATION

EXECUTIVE ORDER U-R-032-0013 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)		
2005	5TKXL03.0DAA	3.0	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
	Indirect Diesel Inje	ction	Forklift			

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			HC	NOx	NMHC+NO _X	co	PM.	ACCEL	LUG	PEAK
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	0.40	20	15	50
		CERT			5.2	2.4	0.39	4	4	5

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 13

day of December 2004.

Allen Lyons, Chief

Mobile Source Operations Division

ATTACHMENT PS 10+1 Engine Model Summary Form

Manufacturer:

Mazda Motor Corporation

Engine category: EPA Engine Famy

Nonroad Cl 5TKXL03.0DAA

Mfr Family Name: NA

Process Code:

New Submission

7.Fuel Rate: mm/stroke@peak torque 4.Fuel Rate: mm/stroke @ peak HP (for diesel only) 6.Torque @ RPM (SEA Gross) 8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930 3.BHP@RPM (SAE Gross) 1.Engine Code 2.Engine Model 18.64 @ 134 Mechanical MFI - IDI 134 @ 1800 46.1 @ 134 47.5 @ 50 20.80 @ 50 50HP@1950 NA HA

11-R-032-0013