

MITSUBISHI HEAVY INDUSTRIES, LTD.

EXECUTIVE ORDER U-R-035-0030 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-45-9;

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)
2002	2MVXL06.4AAB	4.2 and 6.4	Diesel	8000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT	APPLICATION
Di	rect Diesel Injection and	Turbocharger	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	EMISSION			E	XHAUST (g/kw-l	nr)		OF	PACITY (%	<u>)</u>
POWER CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
37 <kw<130< td=""><td>Tier 1</td><td>STD</td><td>N/A</td><td>9.2</td><td>N/A</td><td>N/A</td><td>N/A</td><td>20</td><td>15</td><td>50</td></kw<130<>	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT		7.8				15	7	30

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 _____ 25755 day of January 2002.

/R. B. Summerfield, Chief

Mobile Source Operations Division

Engine Model S ımary Form

ATT. HMENT 1 OF 1

Mitsubishi Heavy Industries, Ltd. Manufacturer:

Nonroad CI Engine category:

u-A-035-0030

EPA Engine Family: 2MVXL06.4AAB

Mfr Family Name:

New Submission Process Code:

5.Fuel Rate: 7.Fuel Rate: (lbs/hr) @ peak HP 6.Torque @ RPM mm/stroke@peak (for diesels only) (SEA Gross) torque
55 452ft
31 274tlb@1400
33 274ftlb@1400
48 441ftlb@1400
48 416ftlb@1400
50 398ftlb@1400
31 274ftlb@1400
32 257ftlb@1400
48 416ftlb@1400
34
31
48
20
31
32 257ftlb@1400
63.8 409ftlb@1500
43.6
37.9

+ certification Engine