

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) 8000				
2005	5MVXL05.0AAC	3.3, 5.0	Diesel					
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT A	APPLICATION				
	Direct Diesel Injection, Tu	urbocharger	Loader, Tractor, Dozer, Pump, Cor Industrial Equip	mpressor, Generator and oment				

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 STANDARD			f	XHAUST (g/kw-l	OPACITY (%)					
	CATEGORY		нс	NOx	NMHC+NOx	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			6.9	1.1	0.19	4	3	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 ______ day of December 2004.

Allen Lyons, Chief

Mobile Source Operations Division

Engine Model St. mary Form

Mitsubishi Heavy Industries, Ltd. Manufacturer:

Nonroad Cl Engine category:

5MVXL05.0AAC EPA Engine Family:

W-R-035-0161

SS -DT Mfr Family Name:

New Submission Process Code:

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9.Emission Control Device Per SAE J1930	DITC	DITC															
8.Fuel Rate: (lbs/hr)@peak torque	17	17												:			
mm/stroke@peak torque	59	59															The second of the second of the second of
6.Torque @ RPM (SEA Gross)	192ftlb@1350	192ftlb@1350						3									
S.ruel Hate: (lbs/hr) @ peak HP (for diesels only)	22	22							A CONTRACTOR OF THE CONTRACTOR					-			
4.ruer nate: mm/stroke @ peak HP (for diesel only)	56	56															
3.BHP@RPM (SAE Gross)	62HP@1800	62HP@1800	A.				4										The second secon
2.Engine Model	S4S-DT	S4S-DT					· /										
1.Engine Code	S4S-Y2DT31S	S4S-Y2DT31S															