California Environmental Protection Agency

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)					
2007	7ICLL1.50C3D	1.498	Diesel	5000					
	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION						
	Indirect Diesel Inje	ection	Tractor						

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-ł		OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		НС	NOx	NMHC+NOx	со	₽М	ACCEL	LUG	PEAK	
19 <u><</u> KW<37	Tier 2	STD	N/A	N/A	7.5	5.5	0.60	20	15	50	
		CERT			5.9	1.4	0.25	1	3	3	

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 2006.

Raphael Sumowith

Annette Hebert, Chief Mobile Source Operations Division

Engine Model Summary Form

ATTACHMENT 1 OF 1

ISEKI MATSUYAMA MFG. CO., LTD. Manufacturer:

Nonroad Cl Engine category:

71CLL1.50C3D NONE EPA Engine Family. Mfr Family Name:

New Sub - 0 Process Code:

	7. Fuel Rate: 9. Emission Control nm/stroke@peak 8. Fuel Rate: 9. Emission Control inn/stroke@peak 105/n1)@peak torque Device Per SAE J1930 34.1@714 10.3@714 161 ▲ 33.7@720 88@72.0 88@72.0 161 ▲
	6.Torque @ RPM n (SEA Gross) .72,8@1600 .71.4@1800 .72.0@1550
	4. Fuel Rate: 5. Fuel Rate: 4. Fuel Rate: 5. Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP (for diesel only) (for diesels only) 31 8@33.6 1415@335 30 7@30.3 12.9@30.3 37.70@33.0 14.1@33.0
	4.F mm/stro (for (31
- continued	3.BHP@RPM Model (SAE Gross) D 10 33.5@2800 D 30.3@2500

9.00728 10.3071.4 10.3071.4 8.5069.2 7.6067.1 8.1072.8 8.1065.6 1.8.5069.2
34.7072.8 34.1071.4 33.7072.0 33.4069.2 33.6067.1 33.6072.8 32.2068.3 31.5065.6 33.4069.2
(SEA Gross) 72 8@1600 71 4@1800 72 0@1560 67 10 1500 69 2@1500 68 3@1500 65 6@1600 69 2@1560
(for diesels only) 14:5@33.55 12:9@30.3 14:1@32.4 14:0@32.4 11:9@280 13:0@30.4 11:5@27.2 11:5@27.2 11:5@27.2
(for diesel only) 31 8033 5 30 7030 3 33 0032 4 33 0032 4 32 1030 4 32 1030 4 28 4027 2 28 4027 2 28 4027 2
(SAE Gross) 33.5@2800 30.3@2500 33.0@2600 32.4@2600 28.4@2500 28.4@2500 28.4@2500 28.4@2500 28.4@2500 30.4@2500 28.4@2600
2.Engine Model E3CD E3CD E3CD E3CD E3CD E3CD E3CD E3CD
1.Engine Code 2.Engine Model NA E3CD NA E3CD

UR-038-0054

Engine Model Summary Form

Manufacturer: ISEKI MATSUYAMA MFG. CO., LTD.

Engine category: Nonroad Cl EPA Engine Family: 7ICLL1.50C3D

Mfr Family Name: NONE

Process Code: Running Change

Device Per SAE J1930	E	ΙΗ	E	Ľ.	E	H	E	۲ <u>۲</u>	E	E	E	F	E.	E	Ľ.	E.	E
(lbs/hr)@peak torque	9.4@72.8	9.0@72.8	10.3@71.4	8.8@72.0	8.5@69.2	8.5 @ 69.2	7.6@67.1	8.1@72.8	7.8@68.3	8.1@65.6	8.0@62.5	7.6@61.3	10.5@70.1	9.1@56.1	11.2@69.4	11.0@61.9	9.5@61.9
mm/stroke@peak	36.1@72.8	34.7@72.8	34.1@71.4	33.7@72.0	33.4@69.2	33.4@69.2	31.6@67.1	33.6@72.8	32.2@68.3	31.5@65.6	30.6@62.5	29.1@61.3	33.1@70.1	26.7@56.1	34.5@69.4	33.7@67.9	29.1@61.9
6. Torque @ KPM (SEA Gross)	72.8@1600	72.8@1600	71.4@1800	72.0@1560	69.2@1560	69.2 @ 1560	67.1@1500	72.8@1500	68.3@1500	65.6@1600	62.5@1600	61.3@1600	70.1@1950	56.1@2100	69.4@2000	67.9@2000	61.9@2000
(Ibs/hr) @ peak HP (for diesels only)	15.0@34.0	14.5@33.5	12.9@30.3	14.1@33.0	14.0@32.4	14.0@32.4	11.9@28.0	13.0@30.4	11.8@28.4	11.5@27.2	11.4@27.5	10.8@26.0	13.5@31.1	11.2@25.6	14.1@31.4	13.7@30.6	12.3@26.5
mm/stroke @ peak HP (for diesel only)	33.1@34.0	31.8@33.5	30.7@30.3	32.2@33.0	33.0 @ 32.4	33.0 @ 32.4	29.5@28.0	32.1 @ 30.4	29.2@28.4	28.4@27.2	28.1@27.5	26.6@26.0	29.7@31.1	24.6@25.6	28.8@31.4	28.1@30.6	25.2@26.5
3.BHP@RPM (SAE Gross)	34.0@2800	33.5@2800	30.3@2500	33.0@2600	32.4@2600	32.4@2600	28.0@2500	30.4@2500	28.4@2500	27.2 @ 2500	27.5@2500	26.0@2500	31.1@2800	25.6@2800	31.4@3000	30.6@3000	26.5@3000
2.Engine Model	E3CD	E3CD	E3CD	E3CD	E3CD	E3CDG	E3CD	E3CD	E3CD	E3CD	E3CD	E3CD	E3CD	E3CD	E3CD	E3CD	E3CD
1.Engine Code	N/A	N/A	N/A	N/A	NIA	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A

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