

ISHIKAWAJIMA-SHIBAURA MACHINERY CO., LTD.

EXECUTIVE ORDER U-R-026-0057 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.

ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)						
3H3XL.676LCS	0.676	Diesel :							
FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION							
Indirect Diesel Inje	ection	Generator							
	3H3XL.676LCS	ENGINE FAMILY (liters)	3H3XL.676LCS 0.676 Diesel EATURES & EMISSION CONTROL SYSTEMS TYPICAL EQUIPMENT A						

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):

	EMISSION STANDARD	EXTIAGGI (g/kw-III)						OPACITY (%)				
CLASS	CATEGORY		нс	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK		
KW<8	Tier 1	STD	N/A	N/A	10.5	8.0	1.0	N/A	N/A	N/A		
-		CERT			4.3	2.4	0.8					

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 January 2003.

Allen Lyons, Chief

Mobile Source Operations Division

ATTACHMENT 1 OF 1

Engine Model Summary Form

Manufacturer: Ishikawajima-Shibaura Machinery Co., Ltd.

Engine category: Nonroad CI

EPA Engine Family: ,3H3XL.676LCS

Mfr Family Name: N/A

u-R-026-0057

Process Code: New Submission

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8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	IFI	IFI	Ш.		er de land sende en est et martine en e			erren de la deservación de la companya de la compa				and shall be seen to the second secon	A THE PARTY OF THE		Calculation () The control of the c		And the state of t		en e	The second secon	desillement and the second of the second sec		end and the state of the first test of the state of the s	en e
8.Fuel Rate: (lbs/hr)@peak torque	N/A	N/A	N/A			The second secon					And the state of t	***************************************											geringiskiskishinisisisisis di Mangara peringa isanganbana	
7,Fuel Rate: mm/stroke@peak torque	N/A	N/A	N/A			- AA - A			TARREST TO THE RESERVE THE PROPERTY OF THE PRO				tenan manada									A CONTRACTOR OF THE CONTRACTOR		. Martin Carlot Laborate April Carlot April Carlot Harris Martin Carlot
6.Torque @ RPM (SEA Gross)	N/A	N/A	N/A									en benen en en et de de les et décidents à Marque representation en en est est de la collège de la c			A delle Mades and a Made : principal consequence on monthly in a calculation data and							-		manayan basilda Villiandi iyan aplandadiida da araa ay
5.Fuel Rate: (tbs/hr) @ peak HP (for diesels only)	3.5+/-0.2	4.0+/-0.3	4.3+/-0.2	The state of the s	HARRIER AMPRICA MARTINIA MARTINIA ARRIVANTA CARLLERA LA COMPANIONE PROPERTURA COMPANIONE PROPERTURA COMPANIONE				The second secon			AMMATATATATATATATATATATATATATATATATATAT	The second secon			egyppersones and enteres enteres and which the edich to add to a state of the enteres enteres enteres enteres					The state of the s	-		Martyr mys — wys maedene Adelende a can Man Lland in FAT MAR Martyr (1974) con indicate a sea
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	14.1+/-0.8	13.5+/-1.0	14.5+/-0.6		And the state of t		A SAME AND	The state of the s	The second secon			# 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	An an analysis and an absolute the state of						man akkai kakakai Apempengana manda sakakai piripa mena asam asaki. A 1974 wa	man reprint i mandram mad i del Milliaggio man manta i manta i disti i reprint i ma			A CANADA	
3.BHP@RPM (SAE Gross)	7.4@1500	9.1@1800	8.7@1800	W. ()														Market page on a constant of the control of the Capital Market page on the control of the State	and the same of th	AND THE RESERVE AND A PROPERTY OF THE PROPERTY				
2.Engine Model	KL7/1500C	KL9/1800C	9/1800C		A A A A A A A A A A A A A A A A A A A			and the same of th	And the second s	Name of the state							e con l'annuaire de proprie constant de la Colonia de la C	And the common control of the control of the control of the common control of the co		In the second control to the second s	And and the Antonio Company of the Antonio Co		The state of the s	
1.Engine Code	103-07	103-07	E673					A STATE OF THE PARTY OF THE PAR	The state of the s	The state of the s			A DESCRIPTION OF THE PROPERTY	enger of the first			A CONTRACTOR OF THE PROPERTY O	The fact of the property of the fact of th	A Department of the Land Company of the Land Control C	ent of the district of main and main and electrical property of many materials and water personal			THE RESERVE THE PROPERTY OF TH	