

IHI SHIBAURA MACHINERY CORPORATION

EXECUTIVE ORDER U-R-026-0202 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 engines and emission control systems 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)
2008	8H3XL.507E2V	0.507	Diesel	3000
	FEATURES & EMISSION		TYPICAL EQUIPMENT APP	
	Indirect Diesel Inje	ection	Industrial Equipme	ent

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)		OI	ACITY (%	•)
POWER CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
kW < 8	Tier 4	STD	N/A	N/A	7.5	8.0	0.40	20	15	50
		CERT			6.2	2.4	0.30	17	10	20

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 2007.

Annette Hebert, Chief

Mobile Source Operations Division

Engine Model Summary Template

ATTACHMENT 10F 1

			.,	4.Fuel Rate: 5.Fuel Rate: 8.HP@RPM mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM	5.Fuel Rate: (lbs/hr) @ peak HP	6. Torque @ RPM	7.Fuel Rate: mm/stroke@peak		UR-026-020公
Engine Family	1.Engine Code	Engine Family 1.Engine Code 2.Engine Model	- 1	(for diesel only)	(for diesel only) (for diesels only) (SEA Gross)	(SEA Gross)	tordue	(lbs/hr)@peak torque	(lbs/hr)@peak torqueDevice Per SAE J1930
8H3XL,507E2V 2TE67	2TE67L-BV3	11/2400	10.6@2400	16.2+/-1.3	4.3+/-0.3	24.4@2000 17.4+/-0.7	17.4+/-0.7	3.8+/-0.2	IHI
SH3XL.507E2V 2TE67L-FW	2TE67L-FW3	11/2800	10.6@2800	14.9+/-0.6	4.6+/-0.2	22.9@2200	17.4+/-0.7	4.2+/-0.2	H
8H3XL.507E2V	E672L-D	9/2400	8.9@2400	15.4+/-1.0	4.1+/-0.3	20.3@2000	16.8+/-0.8	3.6+/-0.2	Hall