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)	
2003	3KLXL078.AAA	78	Diesel	8000	
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION		
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Engine Control Module			Mine Truck		

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	EXHAUST (g/kw-hr)			OPACITY (%)					
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
KW > 560	Tier 1	STD	1.3	9.2	N/A	11.4	0.54	20	15	50
		CERT	0.2	8.7		1.0	0.13	16	5	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.

1474 day of November 2002. Executed at El Monte, California on this

Allen Lyons, Chief Mobile Source Operations Division

٦	Engine
HTTACHME	Model S
	Summary
(०२)	Form

U-R-005-0142

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Process Code: New Submission

EPA Engine Family: 3KLXL078.AAA

Mfr Family Name: A773

Manufaciurer:

Komatsu Limited

Engine category:

Nonroad CI

8900:FR6302	2967/FR6302	2967 FR6400 8099 FR6400	1.Engine Code
SSDA18V170	SSDA18V170	SSDA18V170 SSDA18V170	2.Engine Model
3500@1900	3500@1900	3650@1900 3650@1900	3.BHP@RPM mr (SAE Gross)
606	608	627 627	4.Fuel Rate: mm/stroke @ peak HP ((for diesel only)
1165	1165	1205 1205	5.Fuel Rate: (lbs/hr) @ peak HP (tor diesels only)
10157@1500		10585@1500 10585@1500	6.Torque @ RPM (SEA Gross)
637	637	656 656	7.Fuel Rate: mm/stroke@peak torque (lb
$\mathcal{I}^{\mathcal{O}} = \frac{396}{396}$			8.Fuel Rate: 9.Emission Control (bs/hr)@peak torque Device Per SAE J1930
$\mathcal{D}\mathcal{T} = M, IC$		UZ EMITO	9.Emission Control Device Per SAE J1930

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