

LISTER-PETTER

EXECUTIVE ORDER U-R-023-0024 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 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	3L5XL3.332DW	3.3	Diesel	8000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT A	PPLICATION
	Indirect Diesel Inje	ction	Crane, Loader, Tractor, Pump, Cor	mpressor, Generator Set

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	EMISSION STANDARD				EXHAUST (g/kw-ł	nr)	,	Oi	PACITY (%	(a)
CLASS	CATEGORY		нс	NOx	NMHC+NOx	со	PM ⁻	ACCEL	LUG	PEAK
37 <u><</u> kW < 75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	-	5.6	-	-	-	6	6	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 7th day of January 2003.

Aller Lyons, Chief

Mobile Source Operations Division

Engine Model Summary Form

Manufacturer: Lister-Petter

Engine category: Nonroad CI

EPA Engine Family: 3L5XL3.332DW

Mfr Family Name: DWS4

Process Code: New Submission

H-200-220 - N-17

1.Engine Code	1.Engine Code 2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930
50 State Codes							
DWS4	301	65.0 @ 2500	50	27.8	148.6 @ 1400	48	
DWS4	302	65.0 @ 2500	50	27.8	148.6 @ 1400	48	
DWS4	304	50.3 @ 1800	50	20.0	N/A	N/A	
DWS4	305	65.0 @ 2500	50	27.8	148.6 @ 1400	48	
DWS4	306	65.0 @ 2500	50	27.8	148.6 @ 1400	48	
DWS4	307	65.0 @ 2500	50	27.8	148.6 @ 1400	48	