## LOMBARDINI S.R.L.

EXECUTIVE ORDER U-R-027-0027

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.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)		
2003	3LBDL1.87911	1.248 and 1.872	Diesel	5000		
SPECIAL F	EATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
Direct Diesel Injection			Loader, Pump, Compressor and Industrial Equipment			

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			i	EXHAUST (g/kw-ł	ır)	<del></del>	OI	PACITY (%	(o)
CLASS	CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
19 <u>&lt;</u> KW<37	Tier 1	STD	N/A	N/A	9.5	5.5	0.80	20	15	50
<del></del>		CERT			7.7	3.1	0.44	2	4	1

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: Lombardini S.R.L.

EPA Engine Family. 3LBDL1.87911 Engine category:

Mfr Family Name: 11LD, 9LD

Process Code:

Nonroad Cl

WR-027-0027

**New Submission** 

EM	FIXED SPEED	FIXED SPEED	FIXED SPEED	10.80	32.5	23.40 <i>@</i> 3000	<b>のドカ のなり</b>	
EM	FIXED SPEED	FIXED SPEED	FIXED SPEED	8./2	32.0	25.19@1000	01 D 835	
EM	10.63	32.0	/2.28@2000	13.19	30.0	25.05@2000	111 D625	
EM	10.63	32.0	72.28@2000	13.98	30.0	33.30@2000	111 D625/626	The contract of the contract o
EM	FIXED SPEED	FIXED SPEED	FIXED SPEED	14./1	29.5	33 50@3000	111 Dece	
EM	10.63	32.0	72.28@2000	14.22	20.5	36 18@3000	111 Dese	
EM	FIXED SPEED	FIXED SPEED	FIXED SPEED	6.48	32.5	34 94 2000	111 D 625	
EM ÞÞI	7.10	32.5	49.42@2000	10.80	32.5	25.46@3000	01 D 825	AND THE RESERVE OF THE PARTY OF
9.Emission Control Device Per SAE J193	8. Fuel Rate: 9. Emission Controt (lbs/hr)@peak torque Device Per SAE J1930	mm/stroke@peak torque	6.Torque @ RPM (SEA Gross)	(lbs/hr) @ peak HP (for diesels only)	mm/stroke @ peak HP (for diesel only)	(SAE Gross)	2.Engine Model	Engine Code