## LOMBARDINI S.R.L.

EXECUTIVE ORDER U-R-027-0020 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	3LBDL1.22FOT	1.221	Diesel	3000 or 5000		
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
Indirect Diesel Injection, Turbocharger			Generator 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				EXHAUST (g/kw-t	ır)		OF	PACITY (%	( <sub>6</sub> )
CLASS	CATEGORY		HC	NOx	NMHC+NO <sub>X</sub>	СО	PM	ACCEL	LUG	PEAK
8 <u>&lt;</u> KW<19	Tier 1	STD	N/A	N/A	9.5	6.6	0.80	20	15	50
19 <u>&lt;</u> KW<37	Tier 1	STD	N/A	N/A	9.5	5.5	0.80	20	15	50
		CERT			5.4	1.5	0.32	6	1	14

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

## ATTACH MENT 1 OF 1

## **Engine Model Summary Form**

Manufacturer: Lombardini S.R.L.

EPA Engine Family: 3LBDL1.22FOT Engine category: Nonroad CI

Mfr Family Name: FOCS - TURBO

u-R-027-0020

Process Code: **New Submission** 

፱	FIXED SPEED	FIXED SPEED	FIXED SPEED	21.15	26.5	38.19@3600	LDW 1204/1	The state of the s
₫	FIXED SPEED	FIXED SPEED	FIXED SPEED	9.37	23.5	20.77@1800	LDW 1204/T	
₫	11.31	25.5	68.59@2000	16.29	24.5	34.84@3000	LDW1204/T B2	
ը, 7 <sub>6</sub>	13.82	26.0	66.38@2400	21.15	26.5	38.19@3600	LDW1204/1	
9.Emission Control Device Per SAE J1930	9.Emission Control (lbs/hr)@peak torque Device Per SAE J193(	torque torque	(SEA Gross)	(for diesels only)	(for diesel only)	(SAE Gross)	2.Engine Model	1.Engine Code
	7	7.Fuel Rate:	S Toronto (S) DOL	5.Fuel Kate:	mm/stroke @ neak HP	3 BHP@BPM		