## DAEDONG INDUSTRIAL CO., LTD.

EXECUTIVE ORDER U-R-044-0054 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)		
2008	8DCLL01.4D80	1.4	Diesel	5000		
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION			
Indirect Diesel Injection			Tractor			

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 STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS			нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
19 < KW < 37	Tier 4 Interim	STD	N/A	N/A	7.5	5.5	0.30	20	15	50
		CERT			5.2	1.0	0.22	5	4	7

**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 l

Annette Hebert, Chief

Mobile Source Operations Division

## ATTACHMENT 10F1

## **Engine Model Summary Template**

## 4-8-044-0054

7.Fuel Rate: 6.Torque @ RPM mrvStroke@peak 8.Fuel Rate: 9.Emission Control (SEA Gross) torque (lbs/hr)@peak torqueDevice Per SAE J1930	800 31.5 9.39 EM, IDI	800 31.5 9.39 EM, IDI	800 31.1 9.28 EM, IDI	800 31.1 9.28 EM, IDI	800 31.1 9.28 EM, IDI	800 31.3 9.33 EM, IDI	800 31.3 9.33 EM, IDI	800 31.5 9.39 EM, IDI	
				64.2@1800	64.2@1800	64.3@1800	64.3@1800	64.9@1800	64 9@1800 31 5
11.97		11.97	11.46	11.46	11.46	11.82	11.82	11.97	11 07
27.8		27.8	26.6	26.6	26.6	27.4	27.4	27.8	27 B
	27.8@2600	27.8@2600	26.7@2600	26.7@2600	26.7@2600	27.8@2700	27.8@2700	27.8@2600	27 R@2600
•	3A139	34139							
I.Engine Code	3A139	3A139LWH	3A139LWBC	3A139LW-LG	3A139LW-LG1	3A139LW-DY	3A139LW-DY1	3A139LWS	3A139I WM
Engine ramily 1. Engine Code 2. Engine Model	8DCLL01.4D80	8DCLL01.4D80	8DCLL01.4D80	8DCLL01.4D80	8DCLL01,4D80	8DCLL01,4D80	8DCLL01,4D80	8DCLL01,4D80	8DC11014D80