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)			
2007	7DCLL02.0D83	2.0 & 1.50	Diesel	5000			
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION				
	Indirect Diesel Inje	ection	Tractor				
		2					

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 CLASS	EMISSION STANDARD CATEGORY			E	EXHAUST (g/kw-ł	OPACITY (%)				
			HC	NOx	NMHC+NOx	со	РМ	ACCEL	LUG	PEAK
19 <u>≤</u> KW < 37	Tier 2	STD	N/A N/A		7.5	5.5	0.60	20	15	50
		CERT			6.8	1.6	0.43	4	5	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

12th day of April 2007.

HAnnette Hebert, Chief Mobile Source Operations Division

Engine Model Summary Form

ATTACHMENT 1 OF 1

Manufacturer: Daedong Industrial Co. Ltd. Engine category: Nonroad Cl EPA Engine Family: 7DCLL02.0D83

Mfr Family Name: NA

Process Code: New Submission

W-R-044- 0045

_	4											
9.Emission Control Device Per SAE J1930	A	NA	A	NA	NA	A	NA	A	NA	M	NA	NA
	TOT NA											>
8.Fuel Rate: (lbs/hr)@peak torque	9.69	9.69	9.69	9.66	12.1	12.81	12.1	12.1	12.81	12.81	12.81	9.69
mm/stroke@peak torque	34.4	34.4	34.4	34.3	32.2	34.1	32.2	32.2	34.1	34.1	34.1	34.4
6.Torque @ RPM (SEA Gross)	72.9@1700	72.9@1700	72.9@1700	71.4@1700	91@1700	97.1@1700	91@1700	91@1700	97.1@1700	97.1@1700	97.1@1700	72.9@1700
or user haus. (Ibs/hr) @ peak HP (for diesels only)	12.41	12.41	12.41	12.75	17,36	17.06	17.36	17.36	17.06	17.06	.17.06	12.41
4.ruei rate. mm/stroke @ peak HP (for diesel only)	28.8	28.8	28.8	28.5	29.1	29.7	29.1	29.1	29.7	29.7	29.7	28.8
3.BHP@RPM (SAE Gross)	30.2@2600	30.2@2600	30.2@2600	30.2 @ 2700	41.2@2700	41.1@2600	41.2@2700	41.2@2700	41.1@2600	41.1@2600	41.1@2600	30.2@2600
2.Engine Model	3A150	3A150	3A150	3A150	4A200	4A200	4A200	4A200	4 A200	4A200	4A200	3A150
1.Engine Code	3A150E	3A150LXE	3A150LXD	3A150LXA	4A200A-DY	4A200B	4A200LXA	4A200LXDY	4A200LXB	4A200LXH	4A200LXM	3A150LXB