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)		
2005	5DCLL01.4D80	1.4	Diesel	5000		
SPECIAL 1	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION			
	Indirect Diesel Inje	ection	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		EXHAUST (g/kw-hr)				OPACITY (%)			
POWER CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	co	PM	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			6.5	1.3	0.38	6	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

__ day of July 2005.

Allen Lyons, Chief

Mobile Source Operations Division

ATTACHMENT 1 OF 1

Engine Model Summary Form

Manufacturer: Daedong Industrial Co. Ltd.

Engine category: Nonroad CI

EPA Engine Family. 5DCLL01.4D80

Mfr Family Name: NA

Process Code: New Submission

U-R-044-0025

HP 6.Torque @ RPM mi (SEA Gross) 62.2@1700 68.6@1700 63.8@1700 62.2@1700 68.6@1700	30	4					
2.Engine Model 3.8HP@RPM (SAE Gross) mm/stroke @ peak HP (for diesels only) (bs/hr) @ peak HP (for diesels only) (bs/hr) @ peak HP (for diesels only) for diesels only) mm/stroke@peak (for diesels only) mm/stroke@peak (SEA Gross) mm/stroke@peak (SEA Gross) proque 3A139 28.2@2700 26.8 11.54 68.6@1700 29.4 3A139 28.2@2700 26.1 11.68 62.2@1700 29.4 3A139 28.2@2700 26.8 11.54 68.6@1700 29.4 3A139 28.1@2600 26.8 11.54 68.6@1700 29.4 3A139 28.1@2600 26.8 11.68 63.8@1700 32.3 3A139 27.3@2600 26.8 11.54 68.6@1700 30.0	9.Emission Control Device Per SAE J19:	TOT W	- A	\$	¥	Ž	⊈ →
2. Engine Model 3.BHP@RPM (SAE Gross) mm/stroke @ peak HP (for diesels only) (for diesels only) 3. Pruel Rate: (for diesel only) 3. Pruel Rate: (for diesel only) 3. Pruel Rate: (for diesels only) 6. Torque @ RPM (SEA Gross) 3A139 28.1@2600 26.8 11.54 68.6@1700 3A139 28.2@2700 26.1 11.68 62.2@1700 3A139 28.1@2600 26.1 11.54 68.6@1700 3A139 28.1@2600 26.6 11.54 68.6@1700 3A139 27.3@2600 25.6 11.54 68.6@1700 3A139 27.3@2600 25.6 11.63 63.8@1700	8.Fuel Rate: (łbs/hr)@peak torque	8.28	9.1	8.45	8.28	9.1	8.45
2.Engine Model 3.BHP@RPM (SAE Gross) mm/stroke @ peak HP (for diesel only) 3.Fuel Rate: (for diesel only) 3.Fuel Rate: (for diesels only) 3A139 28.2@2700 26.8 11.68 3A139 27.3@2600 25.6 11.03 3A139 28.1@2600 26.1 11.68 3A139 28.1@2600 26.8 11.54 3A139 27.3@2600 25.6 11.54	7.Fuel Kate: mm/stroke@peak torque	29.4	32.3	30.0	29.4	32.3	30.0
2.Engine Model (SAE Gross) (for diesel only) 3A139 28.2@2700 26.1 3A139 28.1@2600 26.8 3A139 28.2@2700 25.6 3A139 28.2@2700 26.1 3A139 28.2@2700 26.1 3A139 28.1@2600 26.1	6.Torque @ RPM (SEA Gross)	62.2@1700	68.6@1700	63.8@1700	62.2@1700	68.6@1700	63.8@1700
2.Engine Model (SAE Gross) 3A139 28.2@2700 3A139 28.1@2600 3A139 27.3@2600 3A139 28.2@2700 3A139 28.1@2600	5.Fuel Rate: bs/hr) @ peak HP (for diesels only)		11.54	11.03	11.68	11.54	11.03
2.Engine Model (SAE Gross) 3A139 28.2@2700 3A139 28.1@2600 3A139 27.3@2600 3A139 28.2@2700 3A139 28.1@2600	4. Fuel Rate: mm/stroke @ peak HP (for diesel only)	26.1	26.8	25.6	26.1	26.8	25.6
	3.BHP@RPM (SAE Gross)	28.2@2700	28.1@2600	27.3@2600	28.2@2700	28.1@2600	27.3@2600
1.Engine Code 3A139A-DY 3A139B 3A139LG 3A139LXDY 3A139LXE			3A139	3A139	3A139	3A139	3A139
			9B	9 <u>1</u> G	XDY	IXE	XLG