DAIHATSU MOTOR CO., LTD.

EXECUTIVE ORDER U-R-030-0013 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 engines and emission control systems 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	5DHXL.9532D1	0.953, 0.850	Diesel	3000							
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION								
	Indirect Diesel Inje	ection	Riding Mower								
	Indirect Diesel Inje	ection	Riding Mow	/er							

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-l		OPACITY (%)					
POWER CLASS	STANDARD CATEGORY		HC	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK		
8 ≤ kW < 19	Tier 2	STD	N/A	N/A	7.5	6.6	0.80	20	15	50		
		ÇERT			6.2	3.6	0.62	7	11	13		

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 2005.

Allen Lyons, Chief

Mobile Source Operations Division

E0#U-R-030-0013 ATACHMENT 1 OF 1

Manufacturer: DAIHATSU Motor Co., Ltd.

Engine category: Nonroad CI

EPA Engine Family: 5DHXL.9532D1

Mfr Family Name:

Process Code: Running Change (MODELS ADDED)

9.Emission Control Device Per SAE J1930	ACCOUNTS AND	באין בין	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM. IDI	EM, IDI	EM, DI	EM, IDI	EM, IDI	EM, ID!	EM. IDI	EM, IDI	EM. IDI	EM, ID!	EM. IDI	EM, IDI	EM IDI	FM IDI		EM, IDI
8.Fuel Rate: (lbs/hr)@peak torque_p	10 0 @9800	7.4 @5000	1.4 @2800	9.5 @2800	8.3 @2800	10.0 @2800	9.5 @2800	10.0 @2800	10.5 @2800		10.0 @2800	8.8 @2800		7.3 @2600		8.2 @2600	6.8 @2500	8.8 @2800	8.8 @2800			
ite: peak t	20.6 @2800	15 5 @2000	10.0 @ 2000		17.3 @2800	20.6 @2800	19.6 @2800	20.6 @2800	21.7 @2800		20.6 @2800	18.2 @2800	17.3 @2500	16.2 @2600	14.9 @2500	18.2 @2600	15.9 @2500	18.2 @2800	18.2 @2800			
6.Torque @ RPM (SEA Gross)	41_3ff-1bs @2800	31.8 @3800	01.0 @2000 40 1 @0000		33.9 @2800	41.3 @2800	38.5 @2800	41.3 @2800	44.4 @2800	41.3 @2800	41.3 @2800	36.2 @2800	34.5 @2500	32.1 @2600	30.6 @2500	36.2 @2600	33.3 @2500	36.2 @2800	36.2 @2800	36.2 @2800		
5.Fuel Rate; (lbs/hr) @ peak HP (for diesels only)	11.4 @3600	8 4 @3100	10 1 @3000			11.4 @3600	$10.4 \otimes 3250$	9.5@3150	12.1 @3600	11.2 @3400	11.3 @3500	10.9 @3600	7.7 @2600	8.6@3100	6.5 @2600	8.2 @2600	6.8 @2500	9.1 @2900	9.8@3150	10.0@3250	10.3 @3350	9.4 @3000
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	18.4 @3600	15.7 @3100	19 5 @3000				18.7 @3250	17.4@3150	19.4 @3600	$19.2 \otimes 3400$	18.8 @3500	17.5 @3600	17.0 @2600	16.2 @3100	14.7 @2600	18.2 @2600	15.9 @2500	18.2 @2900	17.9@3150	17.8 @3250	17.8 @3350	18.1 @3000
3.BHP@RPM (SAE Gross)	18.4kW @3600	13.4 @3100	16.0 @3000	15 2 @2250	10.2 @3330	18.4 @3500	17.2 @3250	17.2 @3150	18.8 @3600	18.0 @3400	18.2 @3500	16.3 @3600	12.6 @2600	13.5 @3100	11.0 @2600	13.4 @2600	12.0 @2500	15.0 @2900	15.6 @3150	15.7@3250	16.0@3350	15.2@3000
2.Engine Model	DM950D-C	DM950D-D	DM950D-E	DM(950D-F		DIMBOUL-G	DM950D-H	DM950D-J	DM950D-K	DM950D-P	DM950D-Q	DM850D	DM850D-A	DM850D-B	DM850D-C	DM850D-C1	DM850D-D	DM850D-E	DM850D-F	DM850D-G	DM850D-H	DM850D~J
1.Engine Code	DM950D	DM950D	DM950D	DM950D	CORONA	CONSTANT	CINCAINC	UMSOUD	DM950D	DM950D	DM950D	DMSSOD	DM950D									