## DAIHATSU MOTOR CO., LTD.

EXECUTIVE ORDER U-R-030-0020 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 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)							
2007	7DHXL.9532D1	0.953, 0.850	Diesel	3000							
SPECIAL	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION								
	Indirect Diesel Inje	ection	Tractor and Ridin	g Mower							

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			E	XHAUST (g/kw-l		OPACITY (%)					
POWER CLASS	STANDARD CATEGORY		нс	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		
		CERT			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.

Annette Hebert, Chief

Mobile Source Operations Division

## Engine Model St nary Form

ATACH MENT EO# V-K-030-0020

DAIHATSU Motor Co., Ltd. Manufacturer:

Nonroad Cl Engine category:

EPA Engine Family: 7DHXL.9532D1

DM950D, DM850D Mfr Family Name:

Process Code:

**New Submission** 

9 Emission Control Device Per SAE J1930	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM, IDI	EM, IDI			EM, IDI	EM, IDI	EM, DI	EM, IDI
8.Fuel Rate: 9.En (lbs/hr)@peak torque Device	10.0 @2800	7.4 @2800	9.5 @2800	8.3 @2800	10.0 @2800	9.5 @2800	10.0 @2800	10.5 @2800	10.0 @2800	10.0 @2800	8.8 @2800	7.5 @2500	7.3 @2600	6.5 @2500	8.2 @2600	6.8 @2500	8.8 @2800	8.8 @2800	8.8 @2800	8.8 @2800	8.8 @2800	10.0 @2800
7.Fuel Rate: mm/stroke@peak t orque (lbs	20.6 @2800	15.5 @2800	19.6 @2800	17.3 @2800	20.6 @2800	19.6 @2800	20.6 @2800	21.7 @2800	20.6 @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	18.2 @2800	18.2 @2800	18.2 @2800	21.5 @2800
6.Torque @ RPM (SEA Gross)	11.4 @3600 41.3ft-lbs @2800	8.4 @3100 31.8ft-lbs @2800	10 1 @3000 40 1ft-lbs @2800	9 6 @3350 33.9ft-lbs @2800	14 @3600 41 3ft-lbs @2800	10.4 @3250 38.5ft-lbs @2800	9.5 @3150 41.3ft-lbs @2800	2.1 @3600 44.4ft-lbs @2800	11.2 @3400 41.3ft-lbs @2800	1.3 @3500 41.3ft-lbs @2800	10.9 @3600 36.2ft-lbs @2800	7.7 @2600 34.5ft-lbs @2500	8.6 @3100 32.1ft-lbs @2600	6.5 @2600 30.6ft-lbs @2500	8.2 @2600 36.2ft-lbs @2600	6.8 @2500 33.3ft-lbs @2500	@2900 36.2ft-lbs @2800	@3150 36.2ft-lbs @2800	@3250 36.2ft-lbs @2800	@3350 36.2ft-lbs @2800	9.4 @3000 36.2ft-lbs @2800	11.8 @3600 42.1ft-lbs @2800
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	11.4 @3600	8.4 @3100	10 1 @3000	9 6 @3350	11 4 @3600	10.4 @3250	9.5 @3150	12.1 @3600	11.2 @3400	11.3 @3500	10.9 @3600	7.7 @2600			8.2 @2600	6.8 @2500	9.1	9.6	10.0	10.3	9.4	
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	18.4 @3600	15.7 @3100	19.5 @3000	16.6 @3350	18 4 @3600	18 7 @3250	17.4 @3150	19.4 @3600	19.2 @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				
3.BHP@RPM (SAE Gross)	18 4kW @3600	13 AKW @3100	15.4KV @3100	10.0KW @3000	13.2KVV (\$33300	10.4KVV @3000	17.2kW @3250	18 8kW @3600	18.0kW @3400	18.2kW @3500	16.3kW @3600	12.6kW @2600	13.5kW @3100	11.0kW @2600	13.4kW @2600	12.0kW @2500	15.0kW @2900	15 6kW @3150	15 7kW @3250	16 0kW @3350	15.2kW @3000	18 5kW @3600
2.Engine Model	DM050D.C	D-MOFON D	D-DOSONO	D-GOSMIC	DIAGOD-F		D-Moson -	DM950D-X	DM950D-P	DM950D-Q	DM850D	DM850D-A	DM850D-B	DM850D-C	DM850D-C1	DM850D-D	DM850D-E	DM850D-F	D-00850D-G	D GOOD H	DM850D-1	DM950D-R
1. Engine Code	DAMOFOR	DOSONO	DIMBOUD	DMS20D	DM950D	DMB50D	CONSOCI	DM950D	DM950D	DM950D	DM950D	DM950D	COSCOR	DM950D	COSSINC	COOST	DM950D	COSSUC	DM950D	DMOFOL	CIMEDO	DM950D