DAIHATSU MOTOR CO., LTD.

EXECUTIVE ORDER U-R-030-0022 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)			
2008 8DHXL.9532D1 0.953, 0.850			Diesel 3000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Indirect Diesel Injection			Tractor and Riding 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	EXHAUST (g/kw-hr)				OPACITY (%)				
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
8 ≤ kW < 19	Tier 4	STD	N/A	N/A	7.5	6.6	0.40	20	15	50
		CERT			4.8	2.7	0.33	3	6	9

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, Catifornia on this

Annette Hebert, Chief

Mobile Source Operations Division

28_ day of March 2007.

Engine Model Summary Form

ATTACHMENT EO # U-R-030-0032 Plof2

DAIHATSU Motor Co., Ltd. Manufacturer:

Nonroad Ci Engine category:

EPA Engine Family. 8DHXL.9532D1

Mfr Family Name: DM950D, DM850D

Process Code:

New Submission

٠,	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuei Rate: mm/stroke@peak t orque	8.Fuel Rate: (lbs/hr)@peak torque	8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930
DM950D-R		18.5kW @3600	19.7 @3600	11.8 @3600	11.8 @3600 42.1ft-lbs @2800	21.5 @2800	•	EM, ID!
MOSON-RA		18 2kW @3600	19.7 @3600	11.8 @3600	11.8 @3600 41.0ft-lbs @2800	21.4 @2800	10.0 @2800	EM, IDi
M950D-RB		18 1kW @3500	20.2 @3500	11.8 @3500	1.8 @3500 41.0ft-lbs @2800	21.4 @2800	10.0 @2800	EM, IDI
DM-GOOD-RC		18 OKW @3400	20.5 @3400	11.6 @3400	@3400 41.0ft-lbs @2800	21.4 @2800	10.0 @2800	EM, IDI
OXI-GOSMC		17 9kW @3300	20.7 @3300	11.4 @3300	41.0ft-lbs @2800	21.4 @2800	10.0 @2800	EM, IDI
M950D-RE		17 7kW @3200	20.8 @3200	11.1 @3200	@3200 41.0ft-ibs @2800	21.4 @2800	10.0	EM, ID
M950D-RE		17 5kW @3100	20.8 @3100	10.7 @3100	@3100 41.0ft-lbs @2800	21.4 @2800	10.0 @2800	EM, IDI
DM950D-RG		16 9kW @3000	20.7 @3000	10.4 @3000	@3000 40.8ft-lbs @2800	21.2 @2800		EM, ID
M950D-RH		16 4kW @2900	20.7 @2900	10.0 @2900	@2900 40.6ft-lbs @2700	21.0 @2700		EM, ID
M950D-RI		15.3kW @2800	19.5 @2800	9.1 @2800	@2800 40.6ft-lbs @2700	21.0 @2700	:	EM, ID
LA-GOSEMC		17.2kW @3600	18.7 @3600	11.2 @3600	@3600 40.6ft-lbs @2800	21.0 @2800		EM, ID
M850D-RA		15.7kW @3600		10.0 @3600	35.3ft-lbs @2800	18.2 @2800		EM, ID
M850D-RB		15 6kW @3500	16.9 @3500	9.8 @3500	35.3ft-lbs @2800	18.2 @2800	8.5	EM, IDI
M850D-RC		15.5kW @3400	17.1 @3400	9.7 @3400	35.3ft-lbs @2800	18.2 @2800	8.5 @2800	EM, ID
M850D-RD		15.3kW @3300	17.2 @3300	9.5 @3300	35.3ft-lbs @2800	18.2 @2800	8.5	EM, ID
M850D-RE	111	15.1kW @3200	17.3 @3200	9.2 @3200	35.3ft-lbs @2800	18.2 @2800	8.5	EM, IDI
M850D.RE		14 9kW @3100	17.5 @3100	9.0 @3100	35.3ft-lbs @2800	18.2 @2800	8.5	EM, ID!
	ď	14 5kW @3000	17.5 @3000	@3000	34.9ft-lbs @2800	18.0 @2800	8.4 @2800	EM, IDI
AMBERT DE	٠,-	13 OVW @2900	17.3 @2900	@2900	34.6ft-lbs @2700	17.7 @2700	7.9 @2700	EM, IDI
ומי מספטעוני	_	13.3KW @2800	17 1 @2800	@2800	34.3ft-lbs @2700	17.5 @2700	7.9 @2700	EM IDI
		13.4KW (\$2.500		03100	30 5ft-lbs @2700	15.1 @2700	6.8 @2700	EM, [DI
JM850D-RJ		13.0kW (@3.100	13.7 @29.00 14.7 @29.00	00000	30.5ft-lbs @2700		6.8	EM, IDI
יה מספטוים	,	12.4hvv @2500	16.4 @2500	@2500	32 7#-lhs @2500		6.8 @2500	EM, IDI
DM850D-RL		11.6kW @2500	16.4 @2500	(@<2000	32.711-113 (22.200) (1)	,	

Engine Model Summary Form

4TACHMENT EO# U-R. 030-0022

PZOF2

Manufacturer: DAIHATSU Motor Co., Ltd.

Engine category:

EPA Engine Family: 8DHXL,9532D1

Mfr Family Name:

Process Code: Running Change

9.Emission Control evice Per SAE J1930	EM, IDI
8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	7.9@2700
7.Fuel Rate: mm/stroke@peak t orque	17.5@2700
6.Torque @ RPM (SEA Gross)	7.8 @2750 34.3ft-lbs @2700
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	
4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP (for diesel only) (for diesels only)	17.1 @2750
3.BHP@RPM (SAE Gross)	13.2kW @2750
2.Engine Model	DM850D-RM
1.Engine Code	DM950D