

MITSUBISHI FUSO TRUCK AND BUS CORPORATION

EXECUTIVE ORDER U-R-042-0040 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 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)			
2009	9MFTL12.9M7A	12.882	Diesel	8000			
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION				
Direct Dies Engine	sel Injection, Turbocharg Control Module, Exhaus	er, Charge Air Cooler, t Gas Recirculation	Crane, Forklift, Excavator, Off-Road Vehicle				

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 STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS			нс	NOx	NMHC+NOx	co	РМ	ACCEL	LUG	PEAK
130 <u><</u> KW<225	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
225 <u><</u> KW<450	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	20	15	50
		CERT			3.3	0.7	0.15	10	2	30

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 September 2008.

Annette Hebert, Chief

Mobile Source Operations Division

ATTACHMENT 1 OF 1

Engine Model Summary Template

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Engine Family	1.Engine Code	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.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torqu	9.Emission Control #eDevice Per SAE J1930
9MFTL12,9M7A	6M70TLA3A-US09	6M70-TLA3A	365 @ 2000	202	148.1	1115 @ 1600	238	142.6	DDI EM,ECM,EGR,PGV, TG,GAC
9MFTL12.9M7A	6M70TLA38-US09	6M70-TLA3B	335 @ 2000	183	122.1	978 @ 1600	196	117.7	DDI,EM.ECM.ECR.PCV. TC.CAC
9MFTL12.9M7A	6M70TLA3C-US09	6M70-TLA3C	295 @ 2000	164	109.1	904 @ 1600	180	107.9	DDI.EM.ECM,EGR,PCV. TC,CAD
9MFTL12.9M7A	6M70TLA3D-US09	6M70-TLA3D	255 @ 2000	142	94.6	797 @ 1600	158	94.9	DDI EM.ECM,EGR,PCV. TC,GAC
9MFTL12.9M7A	6M70TLA3E-US09	6M70-TLA3E	215 @ 2000	126	83.7	616 @ 1600	125	74.7	DDIEM ECM EGR PCV TC,CAC