

MITSUBISHI FUSO TRUCK AND BUS CORPORATION

EXECUTIVE ORDER U-R-042-0023 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)			
2005	5MFTL11.9D2A	11.945	Diesel				
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Direct Dies	el Injection, Turbocharg and Engine Control I	er, Charge Air Cooler Module	Crane, Loader and Excavator				

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 POWER	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)			OPACITY (%)				
CLASS			нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
130 <u>≤</u> KW<225	Tier 2	STD	N/A	N/A	6.6	3.5	0.20	20	15	50
225 <u><</u> KW<450	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	20	15	50
		CERT			5.9	0.8	0.16	9	1	33

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 _26TH

day of October 2004.

Allen Loons, Chief

Mobile Source Operations Division

UR-042-0023

Process Code: New Submission

Manufacturer: Mitsubishi Fuso Truck and Bus

LARGE ENGINE MODEL SUMMARY

DDI,EM,ECM,TC,CAC DDI,EM,ECM,TC,C DDI, EM, ECM, TC, C DDI,EM,ECM,TC,C DDI,EM,ECM,TC,C DDI,EM,ECM,TC,C DDI, EM, ECM, TC, C 8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930 76.4 80.7 68.6 76.4 88.7 88.7 mm/stroke@peak 6D24-TLA2A 7.Fuel Rate: torque 173 .190 190 147 191 19 191 6.Torque @ RPM (SAE Gross) 940 @ 1200 890 @ 1400 930 @ 1400 940 @ 1200 745 @ 1400 940 @ 1200 930 @ 1400 Manufacturer Family Name: (lbs/hr) @ peak HP (for diesels only) 5.Fuel Rate: 105.0 122.0 125.7 89.6 120.7 120.7 mm/stroke @ peak HP (for diesel only) 4.Fuel Rate: 150 128 177 181 183 181 3.BHP@RPM (SAE Gross) 335 @ 2130 286 @ 2100 242 @ 2100 332 @ 2000 335 @ 2000 332 @ 2000 335@ 2000 **5MFTL11.9D2A** 2.Engine Model 6D24-TLA2B 6D24-TLA2C 6D24-TLA2D 6D24-TLA2A 6D24-TLA2E 6D24-TLA2K 6D24-TLA2J EPA Engine Family: 6D24TLA2A-US 6D24TLA2B-US 6D24TLA2C-US 6D24TLA2D-US 6D24TLA2E-US 6D24TLA2K-US 6D24TLA2J-US 1.Engine Code

DDI,EM,ECM,TC,C 🎉

940 @ 1500

122.0

335 @ 2000

6D24-TLA2Q

6D24TLA2Q-US