

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER U-R-9-35
Relating to Certification of New Off-Road Compression-Ignition Engines

MITSUBISHI MOTORS CORPORATION

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-45-9;

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:

Model Year: 2002

Typical Equipment Usage: Crane, Pump and Other Industrial Equipment

Fuel Type: Diesel

	Engine		
	Displacement	Useful Life	Emission Control Systems
<u>Engine Family</u>	<u>(liters)</u>	<u>(hours)</u>	<u>and Special Features</u>
2MTXL07.5D6A	7.5	8000	Direct Diesel Injection Turbocharger Charge Air Cooler

Engine models and codes are listed on attachments. Production engines shall be in all material respects the same as those for which certification is granted.

The exhaust emission certification standards and certification values for hydrocarbons (HC), oxides of nitrogen (NOx), or non-methane hydrocarbons plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) (units are expressed in grams per kilowatt-hour (g/kw-hr)), and the opacity-of-smoke certification standards and certification values in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family are as follows (Title 13, California Code of Regulations, Section 2423):

Engine Power <u>Rating (kw)</u>	Emission Standard	<u>Exhaust Emissions (g/kw-hr)</u>					<u>Smoke Opacity (%)</u>			
	<u>Category</u>		<u>HC</u>	<u>NOx</u>	<u>NMHC+NOx</u>	<u>CO</u>	<u>PM</u>	<u>Accel</u>	<u>Lug</u>	<u>Peak</u>
130≤KW<225	Tier 1	Standard	1.3	9.2	N/A	11.4	0.54	20	15	50
		Certification	0.3	7.5	--	0.6	0.15	6	2	17

BE IT FURTHER RESOLVED: That the listed engine models also comply with "Emission Control Labels— 1996 and Later Off-Road Compression-Ignition Engines" (Title 13, California Code of Regulations, Section 2424) for the aforementioned model-year.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Sections 2425 and 2426).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Executed at El Monte, California this 5th day of April 2001.



R. B. Summerfield, Chief
Mobile Source Operations Division

Manufacturer: **Mitsubishi Motors Corporation**

Process Code: **New Submission**

UR-9-35

EPA Engine Family: **2MTXL07.5D6A**

N/A

Manufacturer Family Name:

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 (SAE Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
6D16TLEA-US0	6D16-TLEA	247 @ 2800	101	95.4	521 @ 1400	106	49.4	DDI,EM,TC,CAC
6D16TLEB-US0	6D16-TLEB	251 @ 2200	122	89.4	634 @ 1800	123	74.0	DDI,EM,TC,CAC
6D16TLEC-US0	6D16-TLEC	196 @ 2100	97	68.0	550 @ 1600	106	56.5	DDI,EM,TC,CAC
6D16TLED-US0	6D16-TLED	213 @ 2000	110	73.3	593 @ 1600	117	62.4	DDI,EM,TC,CAC
6D16TLEE-US0	6D16-TLEE	223 @ 2700	100	90.0	520 @ 1300	103	44.6	DDI,EM,TC,CAC
6D16TLEF-US0	6D16-TLEF	196 @ 2100	99	69.3	550 @ 1600	111	59.3	DDI,EM,TC,CAC