

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. 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)
2002	2MVXL01.3AAA	1.1, 1.3 and 1.5	Diesel	3000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Indirect Diesel Injection			Tractor, Generator	

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 CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
8≤KW<19	Tier 1	STD	N/A	N/A	9.5	6.6	0.80	20	15	50
		CERT	--	--	5.4	0.8	0.22	3	3	5

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 25TH day of January 2002.


 R. B. Summerfield, Chief
 Mobile Source Operations Division

Engine Model Summary Form

U-R-0350019

ATTN: NENT 1 DF 1

Manufacturer: Mitsubishi Heavy Industries, Ltd
 Engine category: Nonroad CI
 EPA Engine Family: 2MVXL01.3AAA
 Mfr Family Name: S3L2
 Process Code: New Submission

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 torque	9. Emission Control Device Per SAE J1930
S3L2-W263ES	S3L2	23.3@2200	27.7	10.0	59.3@1800	28.8	8.5	IDI
S3L2-W264ES	S3L2	24.4@2400	26.7	10.6	58.6@1800	28.0	8.3	IDI
S3L2-W261DG	S3L2	18.9@1800	27.1	8.0	59.3@1350	27.5	6.1	IDI
S3L2-W262SD	S3L2	18.9@1800	27.1	8.0	59.3@1350	27.5	6.1	IDI
S3L2-W261W	S3L2	18.9@1800	27.1	8.0	59.3@1350	27.5	6.1	IDI
S3L2-W261CG	S3L2	18.9@1800	27.1	8.0	59.3@1350	27.5	6.1	IDI
S3L-W214R	S3L	20.3@2500	22.1	9.1	47.7@1600	22.5	5.9	IDI
S3L-W214RH	S3L	20.3@2500	22.1	9.1	47.7@1600	22.5	5.9	IDI
S3L-W261DG	S3L	15.2@1800	22.4	6.6	47.7@1350	22.4	5.0	IDI
S3L-W261LG	S3L	15.2@1800	22.4	6.6	47.7@1350	22.4	5.0	IDI
S4L-W261DG	S4L	21.5@1800	23.0	9.1	62.2@1350	23.2	6.9	IDI
S4L-W261LG	S4L	21.5@1800	23.0	9.1	62.2@1350	23.2	6.9	IDI