

Pursuant to the authority vested in California 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-19-095;

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)
2021	MDZXL02.2111	2.193	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Common Rail Direct Injection, Turbocharger, Exhaust Gas Recirculation, Electronic Control Module, Diesel Oxidation Catalyst			Tractor, Dozer, Material Handlers and Other Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for non-methane hydrocarbon (NMHC), 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 (%)		
			NMHC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
19 ≤ kW < 56	Tier 4 Final	STD	N/A	N/A	4.7	5.0	0.03	N/A	N/A	N/A
		CERT	--	--	4.2	0.7	0.02	--	--	--

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).

BE IT FURTHER RESOLVED: That for the listed engine models which include engines from different power categories in the same engine family, the manufacturer is complying with the more stringent set of standards from the 37 ≤ kW < 56 power category in conformance with the incorporated Section 1039.230 (e) of the "California Exhaust Emission Standards and Test Procedures for New 2011 and Later Tier 4 Off-Road Compression Ignition Engines, Part 1-D" adopted October 20, 2005 and last amended October 25, 2012.

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 on this 15th day of October 2020.



Allen Lyons, Chief
Emissions Certification and Compliance Division

Engine Model Summary Template

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 diesel 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
MDZXL02.2111	CFDI44B	TD2.2L3	59.6@2200	62.7	22.9	151.2@1600	64.7	17.2	DDI,TC,ECM,EGR,DOC
MDZXL02.2111	CFDI44A	TD2.2L3	59.6@2300	60.9	23.3	151.2@1600	64.7	17.2	DDI,TC,ECM,EGR,DOC
MDZXL02.2111	CFDI44	TD2.2L3	59.6@2600	58	25.1	151.2@1600	64.7	17.2	DDI,TC,ECM,EGR,DOC
MDZXL02.2111	CFDI37B	TD2.2L3	48.8@2200	51	18.6	132.7@1600	56	14.9	DDI,TC,ECM,EGR,DOC
MDZXL02.2111	CFDI37A	TD2.2L3	48.8@2300	50	19.1	132.7@1600	56	14.9	DDI,TC,ECM,EGR,DOC
MDZXL02.2111	CFDI37	TD2.2L3	48.8@2600	47.7	20.6	132.7@1600	56	14.9	DDI,TC,ECM,EGR,DOC
MDZXL02.2111	CFDI30B	TD2.2L3	40.2@2200	42.5	15.5	110.6@1600	46.4	12.3	DDI,TC,ECM,EGR,DOC
MDZXL02.2111	CFDI30A	TD2.2L3	40.2@2300	41.7	15.9	110.6@1600	46.4	12.3	DDI,TC,ECM,EGR,DOC
MDZXL02.2111	CFDI30	TD2.2L3	40.2@2600	41	17.7	110.6@1600	46.4	12.3	DDI,TC,ECM,EGR,DOC
MDZXL02.2111	CFDI26B	TD2.2L3	34.8@2200	37.3	13.6	95.8@1600	40.3	10.7	DDI,TC,ECM,EGR,DOC
MDZXL02.2111	CFDI26A	TD2.2L3	34.8@2300	36.7	14.0	95.8@1600	40.3	10.7	DDI,TC,ECM,EGR,DOC
MDZXL02.2111	CFDI26	TD2.2L3	34.8@2600	36.5	15.8	95.8@1600	40.3	10.7	DDI,TC,ECM,EGR,DOC
MDZXL02.2111	CFDI30BL	TD2.2L3	40.2@2200	42.5	15.5	96.6@1600	40.7	10.8	DDI,TC,ECM,EGR,DOC