

## ISUZU MOTORS LIMITED

**EXECUTIVE ORDER A-020-0308** New Diesel or Incomplete Medium-Duty Vehicles **Using Certified Engines** Page 1 of 2

Pursuant to the authority vested in California Air Resources Board by Health and Safety Code Division 26, Part 5, Chapter 2; and pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-19-095;

IT IS ORDERED AND RESOLVED: The following diesel or incomplete medium-duty vehicles (MDV) with a manufacturer's GVWR from 10,001 to 14,000 pounds are certified as described below. Production vehicles shall be in all material respects the same as those for which certification is granted.

	ENGINE DESCRIPTION											
MODEL YEAR			EMISSION STD EXECUTIVE ORDER CATEGORY 2 FUEL TYPE 1			STANDARDS & TEST PROCEDURE	ENGINE SIZES	OBD COMPLIANCE				
2021	MGMXE06.6001	GENERAL MOTORS, LLC	A-006-2280	ULEV	Gasoline	Otto	6.6	OBD(F)				
ECS & SPECIAL FEATURES <sup>3</sup>												
	2TWC, 2HO2S(2), DFI											

Gasoline, LPG	or Alcoh Only	ol Vehicles	VEHICLE DESCRIPTION						
EVAPORATI	VE FUEL TANK CAPACITY		VEHICLE MODEL	VEHICLE MAKE & MODELS	ENGINE	ENGINE MODELS / CODES	OBD		
FAMILY	UL (K)	(gallons)	YEAR	VEHICLE WARE & WODELS	(L)	(rated power, in hp)	COMPLIANCE		
MSZXF0217GS3	150	38.6	2021	ISUZU NPR HD GAS CHEVROLET 4500	6.6	L8T / 70 (350)	OBD(F)		
*	*	*	*	*	*	*	*		

<sup>\* =</sup>not applicable; **GVWR**=gross vehicle weight rating; **13 CCR xyz**=Title 13, California Code of Regulations, Section xyz, **40 CFR 86.abc**=Title 40, Code of Federal Regulations, Section 86.abc; L=liter; hp=horsepower; kw=kilowatt;

Following are: 1) the FTP exhaust emission standards or family emission limit(s) as applicable under 13 CCR 1956.8; 2) the SET and NTE limits under the applicable California exhaust emission standards and test procedures for heavyduty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, in g/bhp-hr, for this engine family. "Diesel" CO, SET and NTE certification compliance may have been demonstrated by the manufacturer as provided under the applicable Test Procedures in lieu of testing. (For dual- and flexible-fuel, the CERT values in brackets [] are those when tested on conventional test fuel.)

	NMHC		NOx		NMHC+NOx		co		PM		нсно	
	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET
STD	0.14	*	0.20	0.20	*	*	15.5	*	0.01	*	0.050	*
FEL	*	*	0.12	*	*	*	*	*	*	*	*	*
CERT	0.06	*	0.05	*	*	*	1.7	*	0.002	*	0.000	*
NTE	*			* *		*		*		*		

g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; SET=supplemental emissions testing; NTE=Not-to-Exceed emission limit; STD=standard or emission test cap; FEL=family emission limit; CERT=certification level; NMHC/HC=non-methane/hydrocarbon; NOx=oxides of nitrogen; CO=carbon monoxide; PM=particulate matter; HCHO=formaldehyde; (rev: 2014-01-03)

BE IT FURTHER RESOLVED: Certification to the FEL(s) / FCL(s) listed above, as applicable, is subject to the following terms. limitations and conditions. The FEL(s) / FCL(s) is the emission level declared by the manufacturer and serves in lieu of an emission standard for certification purposes in any averaging, banking, or trading (ABT) programs. It will be used for determining compliance of any engine in this family and compliance with such ABT programs.

BE IT FURTHER RESOLVED: The listed engine models have been certified to the optional emission standards and test procedures in 13 CCR 1956.8 applicable to diesel or incomplete MDV with a 10,001-14,000 pounds GVWR and shall be subject to 13 CCR 2139(c) (in-use testing of engines certified for use in diesel or incomplete MDV with a 10,001-14,000 pounds GVWR).

BE IT FURTHER RESOLVED: For the listed vehicle models the manufacturer has submitted the materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1968.2 (on-board diagnostic, full or partial compliance), 13 CCR 1976(b)(1)(F) {evaporative emission standards}, 13 CCR 2035 et seq. (emission control warranty), and 13 CCR 2235 [fill pipes and openings of motor vehicle fuel tanks].

CNG/LNG=compressed/liquefied natural gas; LPG=liquefied petroleum gas; E85=85% ethanol fuel; MF=multi fuel a.k.a BF=bi fuel; DF=dual fuel; FF=flexible fuel;

SULEV / ULEV / LEV=super ultra / ultra / low emission vehicle;

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SULEV / ULEV / ULEV | SCR-N = selective catalytic reduction – urea / -- ammonia; WU (prefix) = warm-up catalyst; DPF=diesel particulate filter; PTOX=periodic trap oxidizer; HO2S/O2S=heated/oxygen sensor; HAFS/AFS=heated/air-fuel-ratio sensor (a.k.a., universal or linear oxygen sensor);

WR-HO2S=wide range oxygen sensor; TBI=throttle body fuel injection; SFIMFI=sequential/multi port fuel injection; DGI=direct gasoline injection; GCARB=gaseous carburetor;

IDI/DDI=inidirect/direct diesel injection; TC/SC=turbo/ super charger; CAC=charget acrocoler; EGR / EGR - Ce=chaust gas recirculation / cooled EGR; PAR/AIR=pulsed/secondary air injection;

SPI=smoke puff limiter; ECM/PCM=engine/powertrain control module; EM=engine modification; AMOX=Ammonia Oxidation Catalyst; NOXS=NOx sensor; 2 (prefix)=parallel; (2) (suffix)=in series;



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Vehicles certified under this Executive Order shall conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this Executive Order.

Executed on this <u>28th</u> day of December 2020.

Allen Lyons, Chief Emissions Certification and Compliance Division