

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 engine and emission control systems produced by the manufacturer are certified as described below for use in on-road motor vehicles with a manufacturer's GVWR over 14,000 pounds. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	ENGINE SIZES (L)	FUEL TYPE ¹	STANDARDS & TEST PROCEDURE	INTENDED SERVICE CLASS ²	ECS & SPECIAL FEATURES ³	DIAGNOSTIC ⁴
2020	LLDRE07.3BW7	7.3	CNG	Otto	HDO	TWC, SFI, HO2S, 2WR-HO2S	OBD(\$)
PRIMARY ENGINE'S IDLE EMISSIONS CONTROL ⁵		ADDITIONAL IDLE EMISSIONS CONTROL ⁵					
N/A		N/A					
ENGINE (L)	ENGINE MODELS / CODES (rated power, in hp)						
7.3	See attachment						
<small>*=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; hr=hour; ¹ 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; ² L/M/H HDD=light/medium/heavy heavy-duty diesel; UB=urban bus; HDO=heavy duty Otto; ³ ECS=emission control system; TWC/OC=three-way/oxidizing catalyst; NAC=NOx adsorption catalyst; SCR-U / 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); TBI=throttle body fuel injection; SFI/MFI=sequential/multi port fuel injection; DGI=direct gasoline injection; GCARB=gaseous carburetor; IDI/DDI=indirect/direct diesel injection; TC/SC=turbo/super charger; CAC=charge air cooler; EGR / EGR-C=exhaust gas recirculation / cooled EGR; PAIR/AIR=pulsed/secondary air injection; SPL=smoke puff limiter; ECM/PCM=engine/powertrain control module; EM=engine modification; 2 (prefix)=parallel; (2) (suffix)=in series; ⁵ ESS=engine shutdown system (per 13 CCR 1956.8(a)(6)(A)(1)); 30g=30 g/hr NOx (per 13 CCR 1956.8(a)(6)(C)); APS =internal combustion auxiliary power system; ALT=alternative method (per 13 CCR 1956.8(a)(6)(D)); Exempt=exempted per 13 CCR 1956.8(a)(6)(B) or for CNG/LNG fuel systems; N/A=not applicable (e.g., Otto engines and vehicles); ⁶ EMD=engine manufacturer diagnostic system (13 CCR 1971); OBD(F) / (P) / (\$) =full / partial / partial with a fine / on-board diagnostic);</small>							

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 heavy-duty diesel engines and vehicles (Test Procedures); and 3) the corresponding certification levels, 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 flexible- and dual-fueled engines, the CERT values in brackets [] are those when tested on conventional test fuel. For multi-fueled engines, the STD and CERT values for default operation permitted in 13 CCR 1956.8 are in parentheses.). ⁴

in g/bhp-hr	NMHC		NOx		NMHC+NOx		CO		PM		HCHO	
	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET	FTP	SET
STD	0.14	0.14	0.10	0.10	*	*	14.4	14.4	0.01	0.01	0.01	0.01
CERT	0.000	*	0.05	*	*	*	3.9	*	0.001	*	0.000	*
NTE	*		*		*		*		*		*	

⁴ g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; SET=Supplemental emissions testing; NTE=Not-to-Exceed; 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;

BE IT FURTHER RESOLVED: The manufacturer has demonstrated compliance with the Greenhouse Gas Emission Standards as specified in Title 13 CCR 1956.8 and the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy Duty Otto Cycle Engines and Vehicles" (HDOE Test Procedures) adopted December 27, 2000, as last amended December 19, 2018 using the 2014 model year National Heavy-Duty Engine and Vehicle Greenhouse Gas Program as specified in Section 1036.108 of the HDOE Test Procedures. The manufacturer has submitted the required information and therefore has met the criteria necessary to receive a California Executive Order based on the Environmental Protection Agency's Certificate of Conformity for the above listed engine family.

In g/bhp-hr	EPA CERTIFICATE OF CONFORMITY				PRIMARY INTENDED SERVICE CLASS			
	LLDRE07.3BW7-001				Vocational			
	CO ₂				CH ₄		N ₂ O	
	FTP	SET						
STD	*	*			*	*	*	
FCL	*	*			*	*	*	
FEL	*	*			*	*	*	
CERT	*	*			*	*	*	

⁴ g/bhp-hr=grams per brake horsepower-hour; FTP=Federal Test Procedure; SET=Supplemental emissions testing; STD = standard or emission test cap; FEL=family emission limit; FCL=family certification level; CERT=certification level; CO₂=carbon dioxide; CH₄=methane; N₂O=nitrous oxide; VOCATIONAL=vocational engine; TRACTOR=tractor engine

BE IT FURTHER RESOLVED: The listed engine models are conditionally certified in accordance with 13 CCR Section 1971.1 (k) (deficiency and fines provisions for certification of malfunction and diagnostic system) because the heavy duty on-board diagnostic (HD OBD) system of the listed engine models has been determined to have five deficiencies. The listed engine models are approved subject to the manufacturer paying a fine of \$75 per engine for the third, fourth, and fifth deficiencies in the listed engine family that is produced and delivered for sale in California. On a quarterly basis, the manufacturer shall submit to California Air Resources Board reports of the number of engines produced and delivered for sale in California and pay the full fine owed for that quarter pursuant to this conditional certification. Payment shall be made payable to the State Treasurer for deposit in the Air Pollution Control Fund no later than thirty (30) days after the end of each calendar quarter during the 2020 model-year production period. Failure to pay the quality fine, in full, in the time provided, may be cause for the Executive Officer to rescind this conditional certification, effective from the start of the quarter in question, in which case all engines covered under this conditional certification for that quarter and all future quarters would be deemed uncertified and subject to a civil penalty of up to \$37,500 per engine pursuant to HSC Section 43154.

BE IT FURTHER RESOLVED: That the listed engine family is certified to the Optional Low NOx Emission Standards as specified in 13 CCR 1956.8(c)(1)(B) and section 10. B. 1 of the incorporated "California Exhaust Emission Standards and Test Procedures for 2004 and Subsequent Model Heavy-Duty Otto-Cycle Engines and Vehicles" adopted December 27, 2000, as last amended December 19, 2018.

BE IT FURTHER RESOLVED: Per Landi Renzo's request for a conditional Executive Order, the listed engine family is conditionally certified pending the submission of additional test data to verify compliance with useful-life emissions standards. The manufacturer has until March 31, 2021 to provide test data to confirm or correct the certification emissions levels on this conditional certification and must provide an updated application along with test data for HD OBD per communications provided to Landi Renzo. Failure to resolve concerns by the specified date shall be cause for the Executive Officer to revoke the conditional Executive Order ab initio, in which case all engines covered under this conditional certification would be deemed uncertified pursuant to Health and Safety Code Section 43153 and subject to a civil penalty of up to \$37,500 per engine pursuant to Health and Safety Code Section 43154.

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

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

Executed on this 17th day of November 2020.



Allen Lyons, Chief
Emissions Certification and Compliance Division

Attachment 1 of 1: Engine Models

EO #: A-400-0033

Family: LLDRE07.3BW7

Attachment Revised: 11/13/2020

Model	Code	Trim	Config	Displacement	Displacement - Units	Peak Power	Peak Power - Units	Peak Power - Speed (rpm)	Peak Power - Fueling	Peak Power - Fuel Units	Peak Torque	Peak Torque - Units	Peak Torque - Speed (rpm)	Peak Torque - Fuel	Peak Torque - Fuel Units	OBD	GHG	Special	Notes
E-Series	LTE4JOND	N/A	V8	7.3	Liters	274	horsepower	3974	N/A	N/A	368	lb-ft	3809	97.54	lb/hr	Partial with Fines	Vocational	N/A	N/A
E-Series	LTE4JONE	N/A	V8	7.3	Liters	274	horsepower	3974	N/A	N/A	368	lb-ft	3809	97.54	lb/hr	Partial with Fines	Vocational	N/A	N/A
E-Series	LTE4KONL	N/A	V8	7.3	Liters	274	horsepower	3974	N/A	N/A	368	lb-ft	3809	97.54	lb/hr	Partial with Fines	Vocational	N/A	N/A
Medium Duty	LTBCJONL	N/A	V8	7.3	Liters	274	horsepower	3974	N/A	N/A	368	lb-ft	3809	97.54	lb/hr	Partial with Fines	Vocational	N/A	N/A
Medium Duty	LTBCJONM	N/A	V8	7.3	Liters	274	horsepower	3974	N/A	N/A	368	lb-ft	3809	97.54	lb/hr	Partial with Fines	Vocational	N/A	N/A
Medium Duty	LTBCJONN	N/A	V8	7.3	Liters	274	horsepower	3974	N/A	N/A	368	lb-ft	3809	97.54	lb/hr	Partial with Fines	Vocational	N/A	N/A
Super Duty	LTFEJONN	N/A	V8	7.3	Liters	274	horsepower	3974	N/A	N/A	368	lb-ft	3809	97.54	lb/hr	Partial with Fines	Vocational	N/A	N/A
Super Duty	LTFEJONP	N/A	V8	7.3	Liters	274	horsepower	3974	N/A	N/A	368	lb-ft	3809	97.54	lb/hr	Partial with Fines	Vocational	N/A	N/A
Step Van	LTY3JONV	N/A	V8	7.3	Liters	274	horsepower	3974	N/A	N/A	368	lb-ft	3809	97.54	lb/hr	Partial with Fines	Vocational	N/A	N/A
Motor Home	LTY3JONW	N/A	V8	7.3	Liters	274	horsepower	3974	N/A	N/A	368	lb-ft	3809	97.54	lb/hr	Partial with Fines	Vocational	N/A	N/A