

Pursuant to the authority vested in the 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 engines and emission control systems produced by the manufacturer as described below are certified for use in on-road motor vehicles with a manufacturer's Gross Vehicle Weight Rating (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	Combustion Cycle	Fuel Operation	Fuel Type(s)	Intended Vehicle Service Class	Intended GHG Vehicle Type
2024	RVPTH12.8CA1	Diesel	Dedicated	Diesel	Heavy Heavy-Duty	Vocational and Tractor

Emission Control Systems (ECS)	Special Features
[1,2,3]: Turbocharger (TC), Charge Air Cooler (CAC), Exhaust Gas Recirculation (EGR), Electronic Direct Injection (DDI), Electronic Control Module (ECM), Diesel Oxidation Catalyst, (DOC), Periodic Trap Oxidizer (PTOX), Selective Catalytic Reduction - Urea (SCR-U), Ammonia Oxidation Catalyst (AMOX)	None

The certified engine models are attached.

The listed engine models comply with the following: 1) emission standard limits (STD) as demonstrated on the Federal Test Procedure (FTP) and Supplemental Emission Test (SET) test cycles, and on the Low-Load Cycle (LLC) test cycle, as applicable, and 2) Not-To-Exceed limits (NTE) as demonstrated using the Not-To-Exceed test cycle, as applicable, for exhaust criteria pollutants non-methane hydrocarbons (NMHC), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM), and exhaust greenhouse gas (GHG) pollutants carbon dioxide (CO2) for vocational (VOCV) and tractor (TRAC) vehicles, methane (CH4), and nitrous oxide (N2O) as set forth in 13 CCR 1956.8 and the applicable California test procedures for heavy-duty diesel cycle engines, and 3) family emission limits (FEL) and family certification levels (FCL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per brake horsepower-hour (g/bhp-hr), except as noted, or designated as not applicable (*).

Applicable Standard	Criteria	GHG							
		NMHC	NOx	CO	PM	CO2 VOCV	CO2 TRAC	CH4	N2O
Heavy-Duty Diesel Cycle Optional Standard – below 525 bhp Clean Idle 30g Alternate Phase 2 CO2 Standard Heavy Heavy-Duty Vocational and Tractor	STD	0.14	0.050	15.5	0.005	510	442	0.10	0.10
	LLC	*	*	*	*	*	*	*	*
	FEL	*	0.20	*	0.01	512	471	0.10	0.10
	NTE	0.21	0.30	19.4	0.02	*	*	*	*

BE IT FURTHER RESOLVED: Any declared FEL or FCL is the emission limit to which all engines must comply in lieu of the standard limit for certification purposes, subject to the restrictions of averaging, banking, or trading (ABT) programs allowed by the applicable California test procedures.

BE IT FURTHER RESOLVED: For the listed engine models, the manufacturer has submitted materials to demonstrate certification compliance with 13 CCR 1965 (emission control labels), 13 CCR 1971.1 (on-board diagnostic full or partial compliance), and 13 CCR 2035 et seq. (emission control warranty).

BE IT FURTHER RESOLVED: That the listed engine family is certified to the optional standard for engines below 525 brake horsepower as specified in 13 CCR 1956.8(a)(2)(C)3 and section 11.B.5.3.5 of the applicable California test procedures.

BE IT FURTHER RESOLVED: That the listed engine family is certified on an interim basis pending CARB's submission of the proposed amendments to the California Heavy-Duty Engine and Vehicle Omnibus regulation to the Office of Administrative Law (OAL), and OAL's approval of such amendments. Upon OAL approval of such amendments this Executive Order becomes final.

BE IT FURTHER RESOLVED: For engines in this engine family certified under 13 CCR 1956.8(a)(6)(C) [30 g/hr NOx] and section 35.B.4 of the applicable California test procedures, except those in vehicle applications exempted per 13 CCR 1956.8(a)(6)(B), the engine manufacturer shall provide an approved "Certified Clean Idle" label to be affixed to the vehicle into which the engine is installed.

BE IT FURTHER RESOLVED: The listed engine models are certified in accordance with 13 CCR Section 1971.1(k) (deficiency and fines provisions for certification of heavy-duty on-board diagnostic (HD OBD) systems with identified deficiencies) and Health and Safety Code Section 43154.

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

Executed on this 8th day of December 2023.



Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RVPTH12.8CA1 EO Number: A-242-0242 Date Applicable: 11/21/2023

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	Liters	horsepower	rpm	mm3/stroke	lb-ft	rpm	mm3/stroke	-	-	-
D13N-405	V		L6	12.8	405	1700	229	1500	1200	260	1	Both	
MP8-455C	V		L6	12.8	455	1700	258	1770	1200	309	1	Both	
MP8-505C (LT)	F		L6	12.8	505	1700	279	1650	1200	287	1	Both	
D13N-435P	V		L6	12.8	435	1700	248	1700	1200	296	1	Vocational	
MP8-505C	VET_XE		L6	12.8	505	1700	279	1850	1200	326	1	Both	
MP8-445C	VET_XE		L6	12.8	445	1700	258	1850	1200	326	1	Both	
MP8-445E	VET_XE		L6	12.8	445	1700	258	1850	1200	326	1	Both	
MP8-455C (LT)	F		L6	12.8	455	1700	258	1650	1200	287	1	Both	
MP8-505E	VET_XE		L6	12.8	505	1700	279	1850	1200	326	1	Both	
MP8-425C	V		L6	12.8	425	1700	241	1600	1200	278	1	Both	
D13N-425	VET_XE		L6	12.8	425	1700	241	1770	1200	308	1	Both	
D13N-500	F		L6	12.8	500	1700	279	1650	1200	287	1	Both	
MP8-415C	VDT		L6	12.8	415	1700	236	1700	1200	296	1	Both	
D13N-425	VBC VET_XE		L6	12.8	425	1700	241	1770	1200	308	1	Vocational	
D13N-435	V		L6	12.8	435	1700	248	1700	1200	296	1	Both	
MP8-415E	VDT		L6	12.8	415	1700	236	1700	1200	296	1	Both	
D13N-500	SE		L6	12.8	500	1700	279	1900	1200	335	1	Both	
D13N-455	F		L6	12.8	455	1700	258	1650	1200	287	1	Both	
D13N-500	STL		L6	12.8	500	1700	279	1850	1200	326	1	Both	
D13N-455	VET_XE		L6	12.8	455	1700	258	1850	1200	326	1	Both	
D13N-500	STH		L6	12.8	500	1700	279	1900	1200	335	1	Both	
D13N-500	VET_XE		L6	12.8	500	1700	279	1850	1200	326	1	Both	
D13N-425	VET_XE		L6	12.8	425	1700	241	1770	1200	308	2	Both	
D13N-425	VET_XE		L6	12.8	425	1700	241	1770	1200	308	3	Both	
D13N-405	VDT		L6	12.8	405	1700	236	1700	1200	296	1	Both	
D13N-425	V		L6	12.8	425	1700	241	1600	1200	278	3	Both	
D13N-425	V		L6	12.8	425	1700	241	1600	1200	278	1	Both	
D13N-500P	VET_XE		L6	12.8	500	1700	279	1850	1200	326	1	Vocational	
D13N-405	VDT		L6	12.8	405	1700	236	1700	1200	296	2	Both	
D13N-435	VBC V		L6	12.8	435	1700	248	1700	1200	296	1	Vocational	
D13N-455	V		L6	12.8	455	1700	258	1770	1200	309	1	Both	
MP8-455C	C		L6	12.8	455	1700	258	1770	1200	309	1	Vocational	
MP8-505E+	SE		L6	12.8	505	1700	279	1900	1200	335	1	Both	
MP8-505C	C		L6	12.8	505	1700	279	1850	1200	326	1	Vocational	
MP8-505C+	SE		L6	12.8	505	1700	279	1900	1200	335	1	Both	
MP8-505C (LT)	C		L6	12.8	505	1700	279	1650	1200	287	1	Vocational	
MP8-425C	C		L6	12.8	425	1700	241	1600	1200	278	1	Vocational	
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