

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	RCEXH0912XEC	Diesel	Dedicated	Diesel	Heavy Heavy-Duty	Vocational and Tractor

Emission Control Systems (ECS)							
[1]: Electronic Direct Injection (DDI), Turbocharger (TC), Charged Air Cooler (CAC), Engine Control Module (ECM), Cooled Exhaust Gas Recirculation (EGR-C), Diesel Oxidation Catalyst (DOC), Selective Catalytic Reduction-Urea (SCR-U), Ammonia Slip Catalyst (AMOX), Periodic Trap Oxidizer (PTOX)	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 (*).

		Crit	eria		GHG				
Applicable Standard		NMHC	NOx	СО	PM	CO2 VOCV	CO2 TRAC	CH4	N2O
Hanny Duty Discal Cycle	STD	0.14	0.050	15.5	0.005	506	436	0.10	0.10
Heavy-Duty Diesel Cycle Optional Standard – at or above 525 bhp	LLC	*	*	*	*	*	*	*	*
Heavy Heavy-Duty Vocational and Tractor	FEL	*	0.20	*	0.008	542	473	0.10	0.10
Clean Idle 30g	NTE	0.21	0.30	19.4	0.012	*	*	*	*

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 at or above 525 brake horsepower as specified in 13 CCR 1956.8(a)(2)(C)2 and section 11.B.5.3.4 of the applicable California test procedures.

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 11.A.6.3 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 <u>23rd</u> day of October 2023.

Robin U. Lang Robin U. Lang

Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RCEXH0912XEC EO Number: A-021-0785 Date Applicable: 10/11/2023

					Peak Power			Peak Torque	<u>!</u>				
Model	Code	Trim	Config	Displacement	Power	Speed	Fueling	Torque	Speed	Fueling	ECS Num	GHG	Notes
-	-	-	-	L	hp	rpm	mm3/stroke	lb-ft	rpm	mm3/stroke	-	-	-
X15 605V	XH1		16	15	605	1950	320	1850	1000	327	1	Both	N/A
X15 605V	XH2		16	15	605	1950	320	2050	1000	364	1	Both	N/A
X15 605RV	XH3		16	15	605	1800	337	1950	1000	347	1	Both	N/A