

DAEDONG CORPORATION

EXECUTIVE ORDER: U-R-044-0197 New Off-Road Compression-Ignition Engines Page 1 of 1

Pursuant to the authority vested in the California Air Resources Board by Health and Safety Code Division 26, Part 5, Chapters 1 and 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 off-road equipment. 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)	Engine Operation			
2024	RDCLL03.8JAV	Diesel	Dedicated	Diesel	Variable and Constant Speed			

Emission Control Systems	Special Features
[1]: Electronic Direct Injection (DDI), Charged Air Cooler (CAC), Exhaust Gas Recirculation (EGR), Electronic Control Module (ECM), Turbocharger (TC), 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) and Not-To-Exceed (NTE) limits, as applicable, for criteria pollutants non-methane hydrocarbons (NMHC), nitrogen oxides (NOx), carbon monoxide (CO), and particulate matter (PM), and for smoke opacity as demonstrated during the Acceleration (ACL) and Lugging (LUG) modes, and the peak value (PEAK) in either mode of the Smoke Opacity cycle, as set forth in 13 CCR 2423 and the applicable California test procedures for off-road compression-ignition engines, and 2) family emission limits (FEL) declared by the manufacturer as allowed by the applicable California test procedures, stated in units of gram per kilowatt-hour (g/kWh-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (*).

		Crit	eria	Smoke Opacity				
Applicable Standard	NMHC	NOx	СО	PM	ACL	LUG	PEAK	
	STD	0.19	0.40	5.0	0.02	*	*	*
Tier 4 Final 75 ≤ kW < 130	FEL	*	*	*	*	*	*	*
70 = KVV - 100	NTE	0.28	0.60	6.2	0.03	*	*	*

BE IT FURTHER RESOLVED: Any declared FEL 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: That the manufacturer has elected to combine engines from the $56 \le kW < 130$ power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the $75 \le kW < 130$ power category in accordance with Section 1039.230(e) of 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 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control warranty).

BE IT FURTHER RESOLVED: The listed engine models may only be installed in or on equipment such that engine operation is consistent with off-road compression-ignition engines as defined in 13 CCR 2421(a)(39).

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

Executed on this 20th day of October 2023.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: RDCLL03.8JAV EO Number: U-R-044-0197 Date Applicable: 10/06/2023

Model		Trim			Peak Power			Peak Torque		Fueling	ECS Num	GHG	Notes
	Code		Config	Displacement	Power	Speed	Fueling	Torque	Speed				
-	-	-	-	L	kW	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
4JTA4	A519-2284	N/A	14	3.833	104.5	2200	105	540	1400	120	1	N/A	
4JTA4	9726-2284	N/A	14	3.833	97	2200	96.3	530	1400	116.9	1	N/A	
4JTA4	9425-2284	N/A	14	3.833	93.5	2200	93.8	508	1400	111.7	1	N/A	
4JTA4	8630-2284	N/A	14	3.833	86	2200	85.3	486	1400	106.3	1	N/A	
4JTA4	8625-2284	N/A	14	3.833	86	2200	85.3	468	1400	104	1	N/A	
4JTA4	8225-2284	N/A	14	3.833	82	2200	83	446	1400	99.5	1	N/A	
4JTA4	7530-2284	N/A	14	3.833	74.5	2200	74.8	422	1400	93.7	1	N/A	
4JTA4	7830-2284	N/A	14	3.833	78	2200	77.2	442	1400	96.2	1	N/A	
4JTA4	7425-2284	N/A	14	3.833	73.5	2200	74.4	400	1400	88.9	1	N/A	
4JTA4	6730-2284	N/A	14	3.833	67.1	2200	66.6	380	1400	81.1	1	N/A	
4JTA4	7130-2284	N/A	14	3.833	71	2200	70.6	402	1400	87.2	1	N/A	