## FCA ITALY S.P.A.

EXECUTIVE ORDER: U-R-068-0021 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	RFTGL02.2R3N	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), Oxidation Catalytic Converter (OC), Periodic Trap Oxidizer (PTOX)	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 hydrocarbon plus oxides of nitrogen (NMHC+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 kilowatthour (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	4.7	5.0	0.03	*	*	*
Tier 4 Final 37 ≤ kW < 56	FEL	*	*	*	*	*	*
07 = KVV + 00	NTE	5.9	6.2 0.0	0.04	*	*	*

**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  $19 \le kW < 56$  power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the  $37 \le kW < 56$  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 /4th day of November 2023.

Robin U. Lang, Chief

Emissions Certification and Compliance Division

Folin U. Lang

## ATTACHMENT: ENGINE MODELS

Family: RFTGL02.2R3N EO Number: U-R-068-0021 Date Applicable: 11/01/2023

Model					Peak Power	Peak Torque							
	Code	Trim	Config	Displacement	Power	Speed	Fueling	Torque Speed	Fueling	ECS Num	GHG	Notes	
-	-	-	-	L	kW	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
50D/1	50D/1		13	2.2	50	2500	69.5	250	1800	85.2	1	N/A	
50D/3	50D/3		13	2.2	43	2600	62.3	200	1800	65.2	1	N/A	
50D/10	50D/10		13	2.2	54	2600	76	246	1800	83	1	N/A	
50D/5	50D/5		13	2.2	40	2600	57	180	1800	61.8	1	N/A	
50D/2	50D/2		13	2.2	49	2600	66.7	220	1800	70.2	1	N/A	
50D/7	50D/7		13	2.2	45	2600	65.8	208	1800	70.2	1	N/A	
50D/6	50D/6		13	2.2	34	2600	52.4	160	1800	56	1	N/A	
50D/4	50D/4		13	2.2	41	2600	60.2	185	1800	62.6	1	N/A	
50D/8	50D/8		13	2.2	52	2600	73.5	246	1800	83	1	N/A	
50D/9	50D/9		13	2.2	50	2600	72.5	232	1800	78.8	1	N/A	