

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
2025	SDZXL03.6123	Diesel	Dedicated	Diesel	Variable-speed and Constant-speed

Emission Control Systems	Special Features
[1]: Direct Diesel Injection (DDI), Turbocharger (TC), Charge Air Cooler (CAC), Electronic Control Module (ECM), Exhaust Gas Recirculation (EGR), Diesel Oxidation Catalyst (DOC), Continuous Trap Oxidizer (CTOX), 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/kW-hr) and percent opacity (%opacity), respectively, except as noted, or designated as not applicable (*).

Applicable Standard		Criteria				Smoke Opacity		
		NMHC	NOx	CO	PM	ACL	LUG	PEAK
Tier 4 Final 75 ≤ kW < 130	STD	0.19	0.40	5.0	0.02	*	*	*
	FEL	*	*	*	*	*	*	*
	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 ≤ kW < 130 power categories into a single engine family. The listed engine models comply with the more stringent set of standards of the 75 ≤ 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 27th day of September 2024.



Robin U. Lang, Chief
 Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: SDZXL03.6123 EO Number: U-R-013-0755 Date Applicable: 9/9/2024

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	L	hp	rpm	mm3/stroke	N-m	rpm	mm3/stroke	-	-	-
TCD 3.6 L4	C5VI105DU		L4	3.621	140.8	2300	110	550	1600	127	1	N/A	
TCD 3.6 L4	C5VI90DU		L4	3.621	120.6	2300	94	480	1600	110	1	N/A	
TCD 3.6 L4	C5VI85EV		L4	3.621	113.9	2200	86	430	1600	96	1	N/A	
TCD 3.6 L4	C5VI85EU		L4	3.621	113.9	2200	92	460	1600	104.5	1	N/A	
TCD 3.6 L4	C5VI85DV		L4	3.621	113.9	2300	83.5	430	1600	96	1	N/A	
TCD 3.6 L4	C5VI80DU		L4	3.621	107.2	2000	84	430	1600	96	1	N/A	
TCD 3.6 L4	C5VI74DU		L4	3.621	99.7	2300	78	410	1600	91.5	1	N/A	
TCD 3.6 L4	C5VI80GU		L4	3.621	107.2	2000	92	430	1600	96	1	N/A	
TCD 3.6 L4	C5VI74EU		L4	3.621	99.7	2200	80	410	1600	91.5	1	N/A	
TCD 3.6 L4	C5VI70EU		L4	3.621	93.8	2200	75	390	1600	87	1	N/A	
TCD 3.6 L4	C5VT74EU		L4	3.621	99.9	2200	78.5	420	1600	93.5	1	N/A	
TCD 3.6 L4	C5VT69EU		L4	3.621	93.1	2200	74	397	1600	89	1	N/A	
TCD 3.6 L4	C5VI85GV		L4	3.621	113.9	2000	92	430	1600	96	1	N/A	
TCD 3.6 L4	C5VI74GU		L4	3.621	99.7	2000	85.5	410	1600	91.5	1	N/A	
TCD 3.6 L4	C5VT85EU		L4	3.621	114.5	2200	90	480	1600	106.5	1	N/A	
TCD 3.6 L4	C5VI80EU		L4	3.621	107.2	2200	86	430	1600	96	1	N/A	
TCD 3.6 L4	C5VT83EU		L4	3.621	111.33	2200	87.5	476	1600	105.5	1	N/A	
TCD 3.6 L4	C5VT88EU		L4	3.621	118	2200	92.5	500	1600	111.5	1	N/A	
TCD 3.6 L4	C5VT77EU		L4	3.621	103.2	2200	81.5	440	1600	97.5	1	N/A	
TCD 3.6 L4	C5VI100DU		L4	3.621	134.1	2300	104.5	500	1600	113.8	1	N/A	
TCD 3.6 L4	C5VI105EU		L4	3.621	140.8	2200	113.5	550	1600	127	1	N/A	
TCD 3.6 L4	C5VI100GU		L4	3.621	134.1	2000	115	500	1600	113.8	1	N/A	
TCD 3.6 L4	C5VI90GU		L4	3.621	120.6	2000	103	480	1600	110	1	N/A	
TCD 3.6 L4	C5VI85DU		L4	3.621	113.9	2300	89	460	1600	104.5	1	N/A	
TCD 3.6 L4	C5VI100EU		L4	3.621	134.1	2200	107	500	1600	113.8	1	N/A	
TCD 3.6 L4	C5VI95GU		L4	3.621	127.3	2000	109.5	500	1600	113.8	1	N/A	
TCD 3.6 L4	C5VI90EU		L4	3.621	120.6	2200	97	480	1600	110	1	N/A	
TCD 3.6 L4	C5VI105GU		L4	3.621	140.8	2000	121	550	1600	127	1	N/A	
TCD 3.6 L4	C5VI95EU		L4	3.621	127.3	2200	102.5	500	1600	113.8	1	N/A	
TCD 3.6 L4	C5VI95DU		L4	3.621	127.3	2300	99.5	500	1600	113.8	1	N/A	
TCD 3.6 L4	C5VI85GU		L4	3.621	113.9	2000	98	460	1600	104.5	1	N/A	
TCD 3.6 L4	C5VT105EU		L4	3.621	140.8	2200	112	550	1600	126	1	N/A	
TCD 3.6 L4	C5VT95EU		L4	3.621	127.3	2200	100	500	1600	111.5	1	N/A	
TCD 3.6 L4	C5VT100EU		L4	3.621	134.1	2200	105	500	1600	111.5	1	N/A	
TCD 3.6 L4	C5VI105DH		L4	3.621	140.8	2300	110	550	1600	127	1	N/A	