

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	SDZXL04.1056	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: 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 18th day of October 2024.



Robin U. Lang, Chief
Emissions Certification and Compliance Division

ATTACHMENT: ENGINE MODELS

Family: SDZXL04.1056 EO Number: U-R-013-0763 Date Applicable: 9/30/2024

Model	Code	Trim	Config	Displacement	Peak Power			Peak Torque			ECS Num	GHG	Notes
					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	L	hp	rpm	lb/hr	N-m	rpm	lb/hr	-	-	-
TCD 4.1 L4	CFVI115A		L4	4.038	154.2	2300	59.4	609	1600	48.7	1	N/A	
TCD 4.1 L4	CFVT121U		L4	4.038	160.9	2100	61.4	699	1500	53.9	1	N/A	
TCD 4.1 L4	CFVI90A		L4	4.038	120.6	2200	45.4	500	1600	39.5	1	N/A	
TCD 4.1 L4	CFVT111U		L4	4.038	146.8	2100	55.9	663	1500	50.5	1	N/A	
TCD 4.1 L4	CFVT109U		L4	4.038	147.2	2100	55.9	639	1500	47.9	1	N/A	
TCD 4.1 L4	CFVI85L		L4	4.038	113.9	2200	43.9	500	1600	39.5	1	N/A	
TCD 4.1 L4	CFVI90		L4	4.038	120.6	2300	46.5	500	1600	39.5	1	N/A	
TCD 4.1 L4	CFVI105D		L4	4.038	140.8	2100	52.7	550	1600	43.2	1	N/A	
TCD 4.1 L4	CFVI95C		L4	4.038	127.3	2000	46.2	530	1600	42.1	1	N/A	
TCD 4.1 L4	CFVI80A		L4	4.038	107.2	2300	42.4	440	1600	35.5	1	N/A	
TCD 4.1 L4	CFVI80S		L4	4.038	107.2	2400	43.7	440	1600	35.5	1	N/A	
TCD 4.1 L4	CFVT120U		L4	4.038	160.9	2100	61.4	699	1500	54.3	1	N/A	
TCD 4.1 L4	CFVT98UB		L4	4.038	131.4	2100	50.1	604	1500	45.3	1	N/A	
TCD 4.1 L4	CFVT110U		L4	4.038	146.8	2100	55.9	663	1500	50.5	1	N/A	
TCD 4.1 L4	CFVI95B		L4	4.038	127.3	2100	47.1	530	1600	42.1	1	N/A	
TCD 4.1 L4	CFVI80D		L4	4.038	107.2	2000	39.1	440	1600	35.5	1	N/A	
TCD 4.1 L4	CFVI95A		L4	4.038	127.3	2200	48.1	530	1600	42.1	1	N/A	
TCD 4.1 L4	CFVI80B		L4	4.038	107.2	2200	41.3	440	1600	35.5	1	N/A	
TCD 4.1 L4	CFVT89U		L4	4.038	120	2100	46.1	522	1500	34.6	1	N/A	
TCD 4.1 L4	CFVT119U		L4	4.038	160.9	2100	61.4	699	1500	53.9	1	N/A	
TCD 4.1 L4	CFVI80C		L4	4.038	107.2	2100	40.1	440	1600	35.5	1	N/A	
TCD 4.1 L4	CFVT91U		L4	4.038	122	2100	46.4	564	1500	41.9	1	N/A	
TCD 4.1 L4	CFVI115B		L4	4.038	154.2	2200	58.1	609	1600	48.7	1	N/A	
TCD 4.1 L4	CFVT98U		L4	4.038	131.4	2100	50.1	604	1500	45.3	1	N/A	
TCD 4.1 L4	CFVI115C		L4	4.038	154.2	2100	57.3	609	1600	48.7	1	N/A	
TCD 4.1 L4	CFVI115D		L4	4.038	154.2	2000	55.5	609	1600	48.7	1	N/A	
TCD 4.1 L4	CFVT108U		L4	4.038	146.8	2100	55.9	663	1500	50.5	1	N/A	
TCD 4.1 L4	CFVI105A		L4	4.038	140.8	2300	54.6	550	1600	43.2	1	N/A	
TCD 4.1 L4	CFVT96U		L4	4.038	129.8	2100	48.7	564	1500	41.9	1	N/A	
TCD 4.1 L4	CFVI105B		L4	4.038	140.8	2200	53.2	550	1600	43.2	1	N/A	
TCD 4.1 L4	CFVI105C		L4	4.038	140.8	2000	51.1	550	1600	43.2	1	N/A	
TCD 4.1 L4	CSVI105D		L4	4.038	140.8	2100	52.7	550	1600	43.2	1	N/A	
TCD 4.1 L4	CSVI115D		L4	4.038	154.2	2000	55.5	609	1600	48.7	1	N/A	
TCD 4.1 L4	CSVI85L		L4	4.038	113.9	2200	43.9	500	1600	39.5	1	N/A	
TCD 4.1 L4	CSVI105A		L4	4.038	140.8	2300	54.6	550	1600	43.2	1	N/A	
TCD 4.1 L4	CSVI80B		L4	4.038	107.2	2200	41.3	440	1600	35.5	1	N/A	
TCD 4.1 L4	CSVI95C		L4	4.038	127.3	2000	46.2	530	1600	42.1	1	N/A	
TCD 4.1 L4	CSVI105B		L4	4.038	140.8	2200	53.2	550	1600	43.2	1	N/A	
TCD 4.1 L4	CSVI95A		L4	4.038	127.3	2200	48.1	530	1600	42.1	1	N/A	
TCD 4.1 L4	CSVI95B		L4	4.038	127.3	2100	47.1	530	1600	42.1	1	N/A	
TCD 4.1 L4	CSVI80C		L4	4.038	107.2	2100	40.1	440	1600	35.5	1	N/A	
TCD 4.1 L4	CSVI90		L4	4.038	120.6	2300	46.5	500	1600	39.5	1	N/A	

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					Power	Speed	Fueling	Torque	Speed	Fueling			
-	-	-	-	L	hp	rpm	lb/hr	N-m	rpm	lb/hr	-	-	-
TCD 4.1 L4	CSV190A		L4	4.038	120.6	2200	45.4	500	1600	39.5	1	N/A	
TCD 4.1 L4	CSV180S		L4	4.038	107.2	2400	43.7	440	1600	35.5	1	N/A	
TCD 4.1 L4	CSV1115A		L4	4.038	154.2	2300	59.4	609	1600	48.7	1	N/A	
TCD 4.1 L4	CSV180A		L4	4.038	107.2	2300	42.4	440	1600	35.5	1	N/A	
TCD 4.1 L4	CFVT91UB		L4	4.038	122	2100	46.4	564	1500	41.9	1	N/A	
TCD 4.1 L4	CSV180D		L4	4.038	107.2	2000	39.1	440	1600	35.5	1	N/A	
TCD 4.1 L4	CSV1115C		L4	4.038	154.2	2100	57.3	609	1600	48.7	1	N/A	
TCD 4.1 L4	CSV1115B		L4	4.038	154.2	2200	58.1	609	1600	48.7	1	N/A	
TCD 4.1 L4	CSV1105C		L4	4.038	140.8	2000	51.1	550	1600	43.2	1	N/A	