EXECUTIVE ORDER U-R-013-0228

New Off-Road Compression-Ignition Engines

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below 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	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)						
2007	7DZXL04.1070	4.038	Diesel	8000						
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION							
Direct Dies Exhau	el Injection, Turbocharg st -Gas Recirculation, Si	er, Charge Air Cooler, moke Puff Limiter	Loaders, Tractor, Dozer, Pun Other OEM Prod	np, Compressor, ucts						

The engine models and codes are attached.

The following are the exhaust certification standards (STD), or family emission limit(s) (FEL) as applicable, and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kW-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED	EMISSION			E	XHAUST (g/kW-l	OF	OPACITY (%)					
POWER CLASS	STANDARD CATEGORY		HC NOx		NMHC+NOx	со	PM	ACCEL	LUG	PEAK		
75 ≤ kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50		
		FEL	-	-	4.0	-	0.30	-	-	-		
[CERT	-	-	3.9	1.0	0.15	14	2	25		

BE IT FURTHER RESOLVED: That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2423 and 2427.

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

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

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this

Annette Hebert, Chief

Mobile Source Operations Division

day of May 2007.

Engine Model Summary Form

Attachmunt Eathuranis-orrs

Manufacturer: DEUTZ AG

Engine category: Nonroad CI

EPA Engine Family: 7DZXL04.1070

Mfr Family Name: TCD2012L04 2V MECH 75-130KW TIER3

Process Code: New Submission

	CEK																		
8.Fuel Rate: 9.Emission Control (bs/hr)@peak torque Device Per SAE J1930	DDI, TC, SPL CAR COR	DDI, TC, SPL							•										
8.Fuel Rate: (lbs/hr)@peak torque	32.7	32.7	32.7	32.7	32.7	33.0	33.0			 									
7.Fuel Rate: mm/stroke@peak torque	95	95	95	95	95	93	93							-		-			
6.Torque @ RPM (SEA Gross)	309,7@1550	309,7@1550	309,7@1550	309,7@1550	309,7@1550	295@1600	295@1600		community of the second	 	-	1							1
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	49	44.7	4.4.4	43.0	43.4	45.5	44.4		manner and the manner manner by by the manner manner and the party of the same			A TO THE PARTY OF							
4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	92	84	87	88	85	89	87		The second section of the second section is a second section of the second section of the second section secti	and the second s	A TABLE TO THE PARTY OF THE PAR	ikide promonomonimum na kaladia vapeno menorana kaladia ayan menorana	THE CONTRACTOR OF THE PROPERTY		•			100	
3.BHP@RPM (SAE Gross)	118@2400	112,6@2400	113,9@2300	112,6@2200	111,3@2300	114@2300	110@2300			 		THE REPORT OF THE PERSON AND PERS	THE RESIDENCE AND THE THE RESIDENCE AND THE PROPERTY OF THE PR					:	
2.Engine Model	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	TCD2012L04 2V	ORDER CONTRACT OF THE											
1.Engine Code	C3MI88	C3MI84	C3M185	C3MI84A	C3MI83	C3MT85	C3MT82	er et i i i i i i i i i i i i i i i i i i											