

EXECUTIVE ORDER U-R-013-0350 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)			
2010	ADZXL06.1077	6.057	Diesel	8000			
SPECIAL	FEATURES & EMISSION C	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION				
Direct Dies Electronic	sel Injection, Turbocharge Control Module, Smoke l Gas Recirculatio		Tractor, Other Industrial Equipment				

The engine models and codes are attached.

The following are the exhaust certification standards (STD) 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 STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
POWER CLASS			нс	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
		CERT			3.8	0.9	0.12	14	7	30

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 January 2010.

Deutz AG Nonroad CI

Engine Family 1. Engine Code

ADZXL06.1077

ADZXL06.1077

ADZXL06.1077

ADZXL06.1077

ADZXL06.1077

ADZXL06.1077

ADZXL06.1077

C3CT123

C3CT108

C3CT93

C3CT124

C3CT129

C3CT121

C3CT97

2.Engine Model

TCD2012L06

TCD2012L06

TCD2012L06

TCD2012L06

TCD2012L06

TCD2012L06

TCD2012L06

130@2100

Engine Model Summary Template

Attachment

68.5

429.9@1600

12/30/2009

EC# U-R-013-0350

DDI, TC, CAC, ECM, SPL, EGR

5.Fuel Rate:

47.9

4.Fuel Rate: (lbs/hr) @ peak HP

7.Fuel Rate: 8.Fuel Rate: mm/stroke @ peak 6.Torque @ RPM mm/stroke@pe (lbs/hr)@peak 3.BHP@RPM HP 9.Emission Control (for diesels ak torque (SAE Gross) (for diesel only) (SEA Gross) torque Device Per SAE J1930 only) 85 164,9@2100 59.4 543,5@1450 107 51,7 DDI, TC, CAC, ECM, SPL, EGR 144,8@2100 76 53.1 481,6@1450 95 45,9 DDI, TC, CAC, ECM, SPL, EGR 124,7@2100 DDI, TC, CAC, ECM, SPL, EGR 67 46.8 402,7@1450 84,5 40,8 87 105 55,9 166,6@2100 60.8 511,2@1600 DDI, TC, CAC, ECM, SPL, EGR 173.3@2100 528.8@1600 DDI, TC, CAC, ECM, SPL, EGR 88.5 61.9 102.5 54.6 83.5 162.5@2100 446.9@1600 DDI, TC, CAC, ECM, SPL, EGR 58.4 87 46.3

88.5

42.7