EXECUTIVE ORDER U-R-013-0400 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)
2011	BDZXL06.5074	6.472	Diesel	8000
SPECIAL	FEATURES & EMISSION	CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLIC	CATION
Med Chan	chanical Direct Injection, ge Air Cooler, Electronic Exhaust Gas Recirc	Control Module.	Loaders, Tractor, Dozer, Pump, C Other Industrial Equipme	Compressor, ent

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			E	EXHAUST (g/kw-l	1 r)		OF	ACITY (%	5)
POWER CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	co	PM	ACCEL	LUG	PEAK
75 ≤ kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50
		CERT			4.0	1.8	0.25	20	6	28

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

_ uay or April 2011

Annette Hebert, Chief

Mobile Source Operations Division

## CT ## Fuel Rate: The Indian Code Cacima	Deute AG	Þ		Enc	jine Model	Engine Model Summary Template	<u>Template</u>		£0# 57	FO# 11.0-012-0420
V 1.Engine Code 2. Engine Model (3.8HP@RPM (street)) 4. Fuel Rate: (10.5/hr) @ peak HP (1.0rque @ RPM mm/stroke@pe (10.5/hr) @ peak HP (1.0rque @ RPM mm/stroke@peak HP (1.0rque @ RPM mm/stroke@ RPM mm/stroke@peak HP (1.0rque @ RPM mm/stroke@peak	Nonroad	- L		Atta	hment	- Zod	7		4/19/	100
C3CI129A TCD914L06 174.2@2300 91 69.8 625@1600 103 54.9 C3CI124A TCD914L06 167@2150 89 63.8 625@1600 103 54.9 C3CI119A TCD914L06 146.2@1800 89 59.3 600@1600 94 50.1 C3CI125A TCD914L06 146.2@1800 87 66.7 600@1600 94 50.1 C3CI120A TCD914L06 160.9@2150 85 60.9 600@1600 94 50.1 C3CI12A TCD914L06 151.5@2000 85 56.6 580@1600 90 48.0 C3CI11AA TCD914L06 139.5@1800 85 56.6 580@1600 90 48.0	Engine Family	1.Engine Code	2.Engine Model		4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM ^r (SEA Gross)	7.Fuel Rate: nm/stroke@pe ak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
C3C1124A TCD914L06 167@2150 89 63.8 625@1600 103 54.9 C3C1119A TCD914L06 159.6@2000 89 59.3 600@1600 94 50.1 C3C1125A TCD914L06 146.2@1800 87 66.7 600@1600 94 50.1 C3C1125A TCD914L06 160.9@2150 85 60.9 600@1600 94 50.1 C3C1113A TCD914L06 151.5@2000 85 56.6 580@1600 90 48.0 C3C1104A TCD914L06 139.5@1800 85 50.9 580@1600 90 48.0	DZXL06.5074	C3C1129A	TCD914L06	174.2@2300	91	69.8	625@1600	103	54.9	DDI, TC, CAC, EGR, ECM
C3C1119A TCD914L06 159.6@2000 89 59.3 600@1600 94 50.1 C3C1109A TCD914L06 146.2@1800 87 66.7 600@1600 94 50.1 C3C1125A TCD914L06 168.3@2300 87 66.7 600@1600 94 50.1 C3C1120A TCD914L06 160.9@2150 85 60.9 600@1600 94 50.1 C3C1113A TCD914L06 151.5@2000 85 56.6 580@1600 90 48.0 C3C1104A TCD914L06 139.5@1800 85 50.9 580@1600 90 48.0	DZXL06.5074	C3C1124A	TCD914L06	167@2150	88	63.8	625@1600	103	54.9	DDI, TC, CAC, EGR
TCD914L06 146.2@1800 89 53.3 600@1600 94 50.1 TCD914L06 168.3@2300 87 66.7 600@1600 94 50.1 TCD914L06 151.5@2000 85 60.9 600@1600 94 50.1 TCD914L06 151.5@2000 85 56.6 580@1600 90 48.0 TCD914L06 139.5@1800 85 50.9 580@1600 90 48.0	BDZXL06.5074	C3C1119A	TCD914L06	159.6@2000	88	59.3	600@1600	94	50.1	DDI, TC, CAC, EGR
C3C1125A TCD914L06 168.3@2300 87 66.7 600@1600 94 50.1 C3C1120A TCD914L06 160.9@2150 85 60.9 600@1600 94 50.1 C3C1113A TCD914L06 151.5@2000 85 56.6 580@1600 90 48.0 C3C1104A TCD914L06 139.5@1800 85 50.9 580@1600 90 48.0	DZXL06.5074	C3C1109A	TCD914L06	146.2@1800	89	53.3	600@1600	94	50.1	DDI, TC, CAC, EGR
C3CI120A TCD914L06 160.9@2150 85 60.9 60.0 60.0 94 50.1 C3CI113A TCD914L06 151.5@2000 .85 56.6 580@1600 90 48.0 C3CI104A TCD914L06 139.5@1800 85 50.9 580@1600 90 48.0	DZXL06.5074	C3C1125A	TCD914L06	168.3@2300	87	66.7	600@1600	94	50.1	DDI, TC, CAC, EGR
C3C1113A TCD914L06 151.5@2000 85 56.6 580@1600 90 48.0 C3C1104A TCD914L06 139.5@1800 85 50.9 580@1600 90 48.0	DZXL06.5074	C3CI120A	TCD914L06	160.9@2150	85	60.9	600@1600	94	50.1	DDI, TC, CAC, EGR
C3C1104A TCD914L06 139.5@1800 85 50.9 580@1600 90 48.0	DZXL06.5074	C3CI113A	TCD914L06	151.5@2000	. 85	56.6	580@1600	06	48.0	DDI, TC, CAC, EGR
	DZXL06.5074	C3CI104A	TCD914L06	139.5@1800	85	50.9	580@1600	06	48.0	DDI, TC, CAC, EGR 🌵