



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)
2009	9DZXL03.6098	3.619	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection, Turbocharger, Exhaust Gas Recirculation			Loaders, 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 POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
56 ≤ kW < 75	Tier 3	STD	N/A	N/A	4.7	5.0	0.40	20	15	50
		CERT	--	--	4.2	1.1	0.23	6	2	15

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.

This Executive Order hereby cancels and replaces Executive Order U-R-013-0311 dated February 27, 2009.

Executed at El Monte, California on this 30 day of April 2009.

Annette Hebert, Chief
Mobile Source Operations Division

Engine Model Summary Template

Attachment

P. 1 of 3

U-R-013-031(-1)

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: @ peak HP (lbs/hr) (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@pea k torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
9DZXL03.6098	C3UJ68	TD2011L04W	68.0 kW 91.1	69	39.8	270@1600	68	24.1	DDI, TC, EGR
9DZXL03.6098	C3UJ63	TD2011L04W	84.4	65	36.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ61	TD2011L04W	81.8	64	34.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ58	TD2011L04W	58.0 kW 77.7	63	32.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ64.6	TD2011L04W	86.6	65	37.5	266@1600	64	22.7	DDI, TC, EGR
9DZXL03.6098	C3UJ59.9	TD2011L04W	80.3	60	33.3	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UJ58A	TD2011L04W	77.7	59	31.4	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UJ68H	TD2011L04W	91.1	69	39.8	270@1600	68	24.1	DDI, TC, EGR
9DZXL03.6098	C3UJ68J	TD2011L04W	91.1	69	39.8	270@1600	68	24.1	DDI, TC, EGR
9DZXL03.6098	C3UJ68L	TD2011L04W	91.1	69	39.8	270@1600	68	24.1	DDI, TC, EGR
9DZXL03.6098	C3UJ68P	TD2011L04W	91.1	69	39.8	270@1600	68	24.1	DDI, TC, EGR
9DZXL03.6098	C3UJ68R	TD2011L04W	91.1	69	39.8	270@1600	68	24.1	DDI, TC, EGR
9DZXL03.6098	C3UJ68S	TD2011L04W	91.1	69	39.8	270@1600	68	24.1	DDI, TC, EGR
9DZXL03.6098	C3UJ68T	TD2011L04W	91.1	69	39.8	270@1600	68	24.1	DDI, TC, EGR
9DZXL03.6098	C3UJ68Q	TD2011L04W	91.1	69	39.8	270@1600	68	24.1	DDI, TC, EGR
9DZXL03.6098	C3UJ63H	TD2011L04W	84.4	65	36.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ63J	TD2011L04W	84.4	65	36.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ63L	TD2011L04W	84.4	65	36.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ63P	TD2011L04W	84.4	65	36.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ63R	TD2011L04W	84.4	65	36.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ63S	TD2011L04W	84.4	65	36.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ63T	TD2011L04W	84.4	65	36.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ63Q	TD2011L04W	84.4	65	36.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ61H	TD2011L04W	81.8	64	34.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ61J	TD2011L04W	81.8	64	34.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ61L	TD2011L04W	81.8	64	34.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ61P	TD2011L04W	81.8	64	34.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UJ61R	TD2011L04W	81.8	64	34.1	270@1600	65	23.1	DDI, TC, EGR

Engine Model Summary Template

Attachment P. 2 of 3 U-R-013-0311-1

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: @ peak HP (lbs/hr) (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@pea k torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
9DZXL03.6098	C3U161S	TD2011L04W	81.8	64	34.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3U161T	TD2011L04W	81.8	64	34.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3U161Q	TD2011L04W	81.8	64	34.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3U158H	TD2011L04W	77.7	63	32.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3U158J	TD2011L04W	77.7	63	32.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3U158L	TD2011L04W	77.7	63	32.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3U158P	TD2011L04W	77.7	63	32.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3U158R	TD2011L04W	77.7	63	32.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3U158S	TD2011L04W	77.7	63	32.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3U158T	TD2011L04W	77.7	63	32.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3U158Q	TD2011L04W	77.7	63	32.1	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3U164H	TD2011L04W	86.6	65	37.5	266@1600	64	22.7	DDI, TC, EGR
9DZXL03.6098	C3U164J	TD2011L04W	86.6	65	37.5	266@1600	64	22.7	DDI, TC, EGR
9DZXL03.6098	C3U164L	TD2011L04W	86.6	65	37.5	266@1600	64	22.7	DDI, TC, EGR
9DZXL03.6098	C3U164P	TD2011L04W	86.6	65	37.5	266@1600	64	22.7	DDI, TC, EGR
9DZXL03.6098	C3U164R	TD2011L04W	86.6	65	37.5	266@1600	64	22.7	DDI, TC, EGR
9DZXL03.6098	C3U164S	TD2011L04W	86.6	65	37.5	266@1600	64	22.7	DDI, TC, EGR
9DZXL03.6098	C3U164T	TD2011L04W	86.6	65	37.5	266@1600	64	22.7	DDI, TC, EGR
9DZXL03.6098	C3U164Q	TD2011L04W	86.6	65	37.5	266@1600	64	22.7	DDI, TC, EGR
9DZXL03.6098	C3U159H	TD2011L04W	80.3	60	33.3	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3U159J	TD2011L04W	80.3	60	33.3	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3U159L	TD2011L04W	80.3	60	33.3	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3U159P	TD2011L04W	80.3	60	33.3	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3U159R	TD2011L04W	80.3	60	33.3	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3U159S	TD2011L04W	80.3	60	33.3	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3U159T	TD2011L04W	80.3	60	33.3	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3U159Q	TD2011L04W	80.3	60	33.3	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3U158HA	TD2011L04W	77.7	59	31.4	257@1600	61	21.6	DDI, TC, EGR

Engine Model Summary Template

Attachment

P. 3 of 3

0-R-013-0311-1

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: mm/stroke @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@pea k torque	8.Fuel Rate: (lbs/hr)/@peak torque	9.Emission Control Device Per SAE J1930
9DZXL03.6098	C3UI58JA	TD2011L04W	77.7	59	31.4	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI58LA	TD2011L04W	77.7	59	31.4	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI58PA	TD2011L04W	77.7	59	31.4	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI58RA	TD2011L04W	77.7	59	31.4	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI58SA	TD2011L04W	77.7	59	31.4	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI58TA	TD2011L04W	77.7	59	31.4	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI58QA	TD2011L04W	77.7	59	31.4	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI65H	TD2011L04W	87.1	65	37.6	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UI65J	TD2011L04W	87.1	65	37.6	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UI65L	TD2011L04W	87.1	65	37.6	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UI65P	TD2011L04W	87.1	65	37.6	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UI65R	TD2011L04W	87.1	65	37.6	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UI65S	TD2011L04W	87.1	65	37.6	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UI65T	TD2011L04W	87.1	65	37.6	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UI65Q	TD2011L04W	87.1	65	37.6	270@1600	65	23.1	DDI, TC, EGR
9DZXL03.6098	C3UI62H	TD2011L04W	82.8	61.5	35.5	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI62J	TD2011L04W	82.8	61.5	35.5	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI62L	TD2011L04W	82.8	61.5	35.5	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI62P	TD2011L04W	82.8	61.5	35.5	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI62R	TD2011L04W	82.8	61.5	35.5	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI62S	TD2011L04W	82.8	61.5	35.5	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI62T	TD2011L04W	82.8	61.5	35.5	257@1600	61	21.6	DDI, TC, EGR
9DZXL03.6098	C3UI62Q	TD2011L04W	82.8	61.5	35.5	257@1600	61	21.6	DDI, TC, EGR