



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-45-9;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engine and emission control system 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)
2002	2PKXL03.0UA1	2.955	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Direct Diesel Injection			Agricultural Tractor and 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
37≤KW<75	Tier 1	STD	N/A	9.2	N/A	N/A	N/A	20	15	50
		CERT	--	8.1	--	2.9	0.36	2	10	10

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 18th day of December 2001.

R. B. Summerfield
R. B. Summerfield, Chief
Mobile Source Operations Division

Engine Model Summary Form

U-R-022-0017

ATTACHMENT 1 OF 1

Manufacturer: Perkins Engines Company Ltd
Engine category: Nonroad CI
EPA Engine Family: 2PKXL03.0UA1
Mfr Family Name: AS EPA
Process Code: New Submission

1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930
	1881/2200	59.7 @ 2200	44.0	21.3	149.6 @ 1600	48.0	16.9	DDI
	1881/2300	61.0 @ 2300	43.4	21.7	149.6 @ 1600	48.0	16.9	DDI
	1881/2400	61.7 @ 2400	42.4	22.4	149.6 @ 1600	48.0	16.9	DDI
	1881/2500	62.4 @ 2500	41.8	23.0	149.6 @ 1600	48.0	16.9	DDI
	1881/2600	62.4 @ 2600	40.8	23.2	149.6 @ 1600	48.0	16.9	DDI
	1927/2400	57.0 @ 2400	39.0	20.5	140.1 @ 1800	42.0	16.7	DDI
	1927/2500	57.5 @ 2500	38.4	21.1	140.1 @ 1800	42.0	16.7	DDI
	1927/2600	57.7 @ 2600	37.4	21.3	140.1 @ 1800	42.0	16.7	DDI
	2071/2500	62.0 @ 2500	41.8	23.0	149.6 @ 1600	48.0	16.9	DDI
	2071/2600	62.4 @ 2600	40.8	23.2	149.6 @ 1600	48.0	16.9	DDI
	2072/2600	57.7 @ 2600	37.5	21.3	140.1 @ 1600	42.0	14.8	DDI
	2073/2600	52.3 @ 2600	33.5	19.0	131.1 @ 1600	39.8	13.9	DDI
	Caterpillar 3034	62.4 @ 2600	40.8	23.2	149.6 @ 1600	48.0	16.9	DDI
	Caterpillar 3034	57.7 @ 2600	37.5	21.3	140.1 @ 1600	42.0	16.7	DDI
	Caterpillar 3034	52.3 @ 2600	33.5	19.0	131.1 @ 1600	39.8	13.9	DDI