

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 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)
2003	3KBXL02.2FCD	1.647, 2.197	Diesel	5000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Indirect Diesel Injection			Loader, Compressor, 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
19 ≤ KW < 37	Tier 1	STD	N/A	N/A	9.5	5.5	0.80	20	15	50
		CERT	--	--	6.0	1.1	0.42	6	6	11

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 4th day of December 2002.



Allen Lyons, Chief
 Mobile Source Operations Division

Engine Model Summary Form

U-R-025-0116

Attachment 1082

Manufacturer: **KUBOTA Corporation**
 Engine category: **Nonroad CI**
 EPA Engine Family: **3KBXL02.2FCD**
 Mfr Family Name: **N/A**
 Process Code: **Running Change**

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
D1703-E01	D1703-E	36.5@2800	33.3	15.6	81.8@1700	38.0	10.8	N/A
D1703-E02	D1703-E	34.5@2700	31.9	14.4	81.8@1500	37.9	9.5	N/A
D1703-E03	D1703-E	31.9@2400	32.2	13.0	78.2@1550	35.6	9.3	N/A
D1703-E04	D1703-E	29.4@2200	32.0	11.8	79.1@1600	36.0	9.7	N/A
D1703-M-E01	D1703-M-E	36.7@2800	33.0	15.5	82.4@1700	37.9	10.8	N/A
D1703-M-E02	D1703-M-E	34.7@2700	32.3	14.6	81.9@1500	37.7	9.5	N/A
V2203-E01	V2203-E	48.4@2800	32.1	20.1	108.1@1700	37.0	14.1	N/A
V2203-E02	V2203-E	43.9@2600	30.7	17.8	108.1@1500	37.1	12.4	N/A
V2203-E03	V2203-E	42.5@2400	31.9	17.1	105.0@1500	35.6	11.9	N/A
V2203-E04	V2203-E	42.5@2400	31.9	17.1	101.9@1700	33.9	12.9	N/A
V2203-E05	V2203-E	42.5@2400	31.9	17.1	101.0@1700	33.4	12.7	N/A
V2203-E06	V2203-E	41.7@2300	32.6	16.8	105.9@1600	36.1	12.9	N/A
V2203-E07	V2203-E	38.9@2200	31.3	15.4	97.9@1600	31.9	11.4	N/A
V2203-E08	V2203-E	38.9@2200	31.3	15.4	102.3@1600	34.3	12.3	N/A
V2203-E09	V2203-E	37.3@2100	31.4	14.7	101.0@1500	33.4	11.2	N/A
V2203-E10	V2203-E	48.4@2800	32.3	20.2	106.4@1600	36.0	12.9	N/A
V2203-E11	V2203-E	45.6@2700	31.2	18.8	107.7@1500	37.0	12.4	N/A
V2203-E12	V2203-E	43.9@2600	30.7	17.8	103.6@1700	35.0	13.3	N/A
V2203-E13	V2203-E	46.9@2650	32.5	19.3	106.4@1700	36.0	13.7	N/A
V2203-E14	V2203-E	34.9@2000	30.4	13.6	96.9@1600	32.1	11.5	N/A
V2203-E15	V2203-E	44.0@2450	32.3	17.7	104.1@1600	35.2	12.6	N/A
V2203-E16	V2203-E	36.9@2200	29.8	14.7	105.5@1500	35.8	12.0	N/A
V2203-E17	V2203-E	32.5@1700	33.5	12.7	95.4@1300	32.7	9.5	N/A
V2203-E18	V2203-E	36.2@1950	33.7	14.7	93.4@1300	32.2	9.4	N/A
V2203-M-E01	V2203-M-E	48.8@2800	32.1	20.1	110.0@1700	37.9	14.2	N/A
V2203-M-E02	V2203-M-E	38.2@2250	30.0	15.1	106.9@1600	36.4	13.0	N/A

Part Number Summary Form

2 of 2

U-6-025-0116

Manufacturer: KUBOTA Corporation
 Engine category: Nonroad CI
 EPA Engine Family: 3KBXL02.2FCD
 Mfr Family Name: N/A
 Process Code: Running Change

Engine Code	Engine Model	Injection Pump	Injector	Turbo Charge	Electronic Control Module	After Treatment Device (Specify)	Smoke Puff Limiter	Description	Part Number
D1703-E01	D1703-E	1G702-51011	16082-53001	N/A	N/A	N/A	N/A	N/A	N/A
D1703-E02	D1703-E	1G702-51011	16082-53001	N/A	N/A	N/A	N/A	N/A	N/A
D1703-E03	D1703-E	1G702-51011	16082-53001	N/A	N/A	N/A	N/A	N/A	N/A
D1703-E04	D1703-E	1G702-51011	16082-53001	N/A	N/A	N/A	N/A	N/A	N/A
D1703-M-E01	D1703-M-E	1G702-51011	16082-53001	N/A	N/A	N/A	N/A	N/A	N/A
D1703-M-E02	D1703-M-E	1G702-51011	16082-53001	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E01	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E02	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E03	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E04	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E05	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E06	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E07	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E08	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E09	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E10	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E11	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E12	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E13	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E14	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E15	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E16	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E17	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-E18	V2203-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-M-E01	V2203-M-E	1G762-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A
V2203-M-E02	V2203-M-E	1G787-51011	16454-53003	N/A	N/A	N/A	N/A	N/A	N/A