



Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapters 1 and 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following new large spark-ignition engines and emission control systems produced by the manufacturer are certified for use in off-road equipment as described below. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY NAME	ENGINE DISPLACEMENT (liters)	FUEL TYPE
2010	AJDXB02.4001	2.4	LPG
DURABILITY HOURS	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT USAGE
5000	Three-Way Catalytic Converter, Heated Oxygen Sensor, Gaseous Fuel Mixer		Forklift
ENGINE MODELS (rated power in kilowatt, kW)		4024DFN70 (44.0 kW), 4024DFN70A (44.0 kW)	

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx) and carbon monoxide (CO) exhaust certification emission standards (Title 13, California Code of Regulations, (13 CCR) Section 2433(b)(1)) and certification emission levels for this engine family in grams per kilowatt-hour (g/kW-hr). Engines within this engine family shall have closed crankcases in conformance with 13 CCR Section 2433(b)(3).

(g/kW-hr)	HC+NOx	CO
Exhaust Standards	0.8	20.6
Certification Levels	0.4	2.8

The following is the evaporative hydrocarbon emission standard (13 CCR Section 2433(b)(3)) and certification emission level for this engine family in grams per gallon of fuel tank capacity (g/gallon).

Evaporative Certification Method	HC Certification Level (g/gallon)	HC Certification Standard (g/gallon)
Design Based	N/A	0.2

BE IT FURTHER RESOLVED: That for the listed engines for the aforementioned model-year, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2433(c) (certification and test procedures), 13 CCR Section 2434 (emission control labels), and 13 CCR Sections 2435 and 2436 (emission control system warranty).

BE IT FURTHER RESOLVED: That the listed engine models are conditionally certified based on certification levels estimated by extrapolating partial durability test data. The manufacturer is required to demonstrate compliance using full durability test results by April 30, 2010. Failure to adequately demonstrate compliance by the above specified date shall be cause for the Air Resources Board to revoke this Executive Order. Engines introduced into commerce under the revoked Executive Order shall be deemed uncertified, and the manufacturer may be subject to enforcement actions.

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 28 day of January 2010.

Annette Hebert, Chief
Mobile Source Operations Division