

## CROWN EQUIPMENT CORPORATION

EXECUTIVE ORDER U-L-061-0006 New Off-Road Large Spark-Ignition Engines Above 19 Kilowatts

Pursuant to the authority vested in California 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-14-012;

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		
2019	KCEQB02.41A1	2.4	LPG		
DURABILITY		IAL FEATURES & I CONTROL SYSTEMS	TYPICAL EQUIPMENT USAGE		
5000 Heate		ay Catalytic Converter, ed Oxygen Sensor, seous Fuel Mixer	Forklift		
	INE MODELS ver in kilowatt, kW)	4024/	AN20 (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	12.4		

The following is the evaporative hydrocarbon emission standard (13 CCR Section 2433(b)(4)) and certification emission level for this engine family in grams per gallon of fuel tank capacity (g/gallon).

<b>Evaporative Certification Method</b>	HC Certification Level (g/gallon)	HC Certification Standard (g/gallon)		
N/A	N/A	N/A		

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).

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 \_\_\_\_\_ day of June 2018.

Annette Hebert, Chief

Emissions Compliance, Automotive Regulations and Science Division

Model Year: 2019	Page: 5
Manufacturer Name: Crown Equipment Corporation	Issued: 03/13/2018
Engine Family: KCEQB02.41A1	Revised:
OFF-ROAD LSI ENGINE SUPPLEMENTAL INFORMATION	E.O.#: 11-L-061-0006

## **\$12. MODEL SUMMARY** (Use an asterisk (\*) to identify worst-case engine model used for certification testing.)

S13.	S14.	Sa	S15. ales Cod	es	S16.	S17.	S18.	S19.	S20.
Engine Model	Engine Code	(Check ALL appropriate)		Engine (Che	Eng. Displ. (Liters)	Rated Power (kW)	Rated Speed (RPM)	Peak Torque (N-m)	Peak Torque Speed (RPM)
		Calif. Only	49- State	50- State	(=,,0,0)	(***)			(RPM)
4024AN20	4024AN20			х	2.4	44.0	2800	169	1000