

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 engine and emission control systems produced by the manufacturer are certified for use in small 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 (cc)	ENGINE CLASS	FUEL TYPE (CNG/LNG=compressed/liquefied natural gas LPG=liquefied petroleum gas)
2012	CFJXS.7202GA	653, 720	4-stroke, ≥ 225 cc	Gasoline
DURABILITY HOURS	SPECIAL FEATURES & EMISSION CONTROL SYSTEMS		TYPICAL EQUIPMENT APPLICATION	
1000	EM		Riding Mower, Tractor, Compressor, Pump, Pressure Washer, Stump Beater, Generator, Non-Backpack Blower, Leaf Blower/Vacuum, Commercial Turf and Utility Vehicle	
ENGINE CODES/MODELS (rated power in kilowatt, kW)	See Attachment			
<small>ABBREVIATIONS: EM=engine modification TWC/OC=three-way/oxidizing catalyst WUTWC/WUOC=warm-up TWC/OC O2S=oxygen sensor HO2S=heated O2S                      EGR=exhaust gas recirculation AIR=secondary air injection PAIR=pulsed AIR MFI=multi port fuel injection SFI=sequential MFI TBI=throttle body fuel injection                      DFI=direct fuel injection TC/SC=turbo/super charger CAC=charge air cooler 2(prefix)=parallel (2)(suffix)=in series ECM=engine control module</small>				

The following are the hydrocarbon plus oxides of nitrogen (HC+NOx), carbon monoxide (CO), and particulate matter (PM) emission standards (Title 13, California Code of Regulations, (13 CCR) Section 2403(b)), 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 Section 90.109 of the "California Exhaust Emission Standards and Test Procedures for 2005 and Later Small Off-Road Engines," adopted July 26, 2004.

*=not applicable	HC+NOx (g/kW-hr)	CO (g/kW-hr)	PM (g/kW-hr)
STANDARD	8.0	549	*
FAMILY EMISSION LEVEL	8.0	*	*
CERTIFICATION LEVEL	7.0	468	*

**BE IT FURTHER RESOLVED:** That the family emission level(s) (FELs), as applicable, is an emission limit declared by the manufacturer for use in the averaging, banking and trading program and in lieu of an emission standard for certification. It serves as the applicable emission standard for determining compliance of any engine within this engine family under 13 CCR Sections 2403(e)(1) and 2407(a).

**BE IT FURTHER RESOLVED:** That for the listed engines, the manufacturer has submitted, and the Executive Officer hereby approves, the information and materials to demonstrate certification compliance with 13 CCR Section 2404 (emission control labels) and 13 CCR Sections 2405 and 2406 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

Quarterly reports of engines produced in this engine family for sale in California shall be submitted to the Executive Officer no later than 45 days after the end of each calendar quarter.

**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 18 day of July 2011.

  
 Annette Hebert, Chief  
 Mobile Source Operations Division

Model Year: 2012  
 Manufacturer: Fuji Heavy Industries Ltd.  
 Engine Family: CFJXS.7202GA

Issued: June 2, 2011  
 Revised:  
 E.O. Number: U-U-012-0394

**CARB**

**Small Off-Road Engine Model Summary Form**

Units for Table: kW

Worst Case?	47. Model Designation	48. Sales Code	49. Displ. (cc)	50. Bore/Stroke (mm)	51. Ignition Timing (BTDC)	52. Max Power (kW)	53. Rated Speed (RPM)	54. Rated Torque (N-m)	55. Torque Speed (RPM)	56. Emission Control Sys.
	EH650Y5	50-State	653	80/65	26 deg.	14.5	3600	44.3	2200	EM
	EH650Y6	50-State	653	80/65	26 deg.	15.1	3600	45.6	2500	EM
	EH650Y8	50-State	653	80/65	26 deg.	13.3	3600	41.4	2000	EM
	EH650Y9	50-State	653	80/65	26 deg.	13.8	3600	42.5	2000	EM
	EH650Y10	50-State	653	80/65	26 deg.	14.5	3600	44.3	2200	EM
	EH650Y12	50-State	653	80/65	26 deg.	14.5	3600	44.3	2200	EM
	EH650Y13	50-State	653	80/65	26 deg.	15.1	3600	45.6	2500	EM
	EH650Y14	50-State	653	80/65	26 deg.	15.1	3600	45.6	2500	EM
	EH650Y16	50-State	653	80/65	26 deg.	15.0	3600	40.0	2400	EM
	EH650Y17	50-State	653	80/65	26 deg.	13.6	3600	40.5	2400	EM
	EH650Y19	50-State	653	80/65	26 deg.	15.1	3600	40.5	2400	EM
x	EH720Y1	50-State	720	84/65	26.5deg.	15.3	3600	47.6	2400	EM
	EH720Y2	50-State	720	84/65	26.5deg.	14.1	3600	47.1	2400	EM
	EH722Y1	50-State	720	84/65	26.5deg.	17.0	3600	45.0	2400	EM
	EH722Y2	50-State	720	84/65	26.5deg.	17.5	3600	48.0	2400	EM
	EH722Y3	50-State	720	84/65	26.5deg.	16.5	3600	45.8	2400	EM