KAWASAKI HEAVY INDUSTRIES, LTD.

EXECUTIVE ORDER U-M-001-0113 New Emission-Compliant Off-Highway Recreational Vehicles

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: The engine and exhaust emission control systems produced by the manufacturer are certified as described below for off-highway recreational vehicles. Production vehicles shall be in all material respects the same as those for which certification is granted. The manufacturer shall ensure that character "C" or "3" is not used in the eighth (8th) position of the vehicle identification number (VIN) of all vehicles in the engine family listed below. Violation of this VIN provision may result in incorrect registration of the vehicles.

AXX.633AAA and MODEL / EN ENGINE (cc)	633 GINE CODE (EIM in "kg" for Certification Ch VEHICLE MODEL	ATV nassis Testing, or F MAKE	Gasoline Rated Power in "kW" (ENGINE (cc)	EM or "hp" for Certification Engine Testing) VEHICLE MODEL	
	VEHICLE MODEL				
ENGINE (cc)		MAKE	ENGINE (cc)	VEHICLE MODEL	
633	BRUTE FORCE 650 4X4 / VF650AE (30.9 kW)	*	•	•	
633	BRUTE FORCE 650 4X4I / VF650AE (34.7 kW)	•	•	*	
*	*	*	*	*	
*	· *	•	***	*	
*	*	*	•	•	
- -	633	633 BRUTE FORCE 650 4X41 / VF650AE (34.7 kW)	633 BRUTE FORCE 650 4X4 / VF650AE (34.7 kW)	(30.9 KW) BRUTE FORCE 650 4X4I / VF650AE	

ATV=all-terrain vehicle; OFMC=off-road motorcycle; UV=off-road utility vehicle; SV=off-road sport vehicle; SCAR=sand car; EM=engine modification; TWC=three-way catalyst; OC=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; DGI=direct gasoline injection; TC/SC=turbo/super charger; CAC=charge air cooler; EIM=equivalent inertia mass; 2 (prefix)=parallel; (2) (suffix)=in series;

Following are the exhaust emission standards, or designated standard as applicable, and certification levels for this engine family. The designated standard, as applicable, shall be shown on the permanent emission control label. Vehicles within this engine family shall not discharge any crankcase emissions into the ambient atmosphere in conformance with Title 13, California Code of Regulations, Section (13 CCR) 2412(i).

	НС				HC+NOx				co		
	CERT	STD	DSN_STD	CAV_STD	CERT	STD	DSN_STD	CAV_STD	CERT	STD	
CHASSIS TESTING (g/km)	*	*	*	*	*	*	*	*	*	*	
ENGINE TESTING (g/kW-hr)	*	*	*	*	11.4	*	12.7	13.4	354	400	
CAV_STD=corporate average standard; DSN_STD=manufacturer designated standard; STD=direct standard; CERT=certification level; HC=hydrocarbons; NOx=oxides of nitrogen; CO=carbon monoxide; g/km=grams per kilometer; g/kW-hr=grams per kilowatt-hour; g/bhp-hr=grams per brake horsepower-hour; *=not applicable;											

BE IT FURTHER RESOLVED: For the off-highway recreational vehicles listed above, the manufacturer has submitted materials to demonstrate certification compliance with the evaporative emission requirements in 13 CCR 2412, as applicable.

BE IT FURTHER RESOLVED: Certification to the designated standard listed above, as applicable, is subject to the following terms, limitations and conditions. The designated standard shall be the exhaust limit for this engine family for the model year and cannot be changed by the manufacturer. It serves as the exhaust standard applicable to this engine family for determining engine family compliance, and compliance with the corporate average standard in accordance with 13 CCR 2412(b), 13 CCR 2412(d), and 13 CCR 2414.

BE IT FURTHER RESOLVED: The listed vehicles shall comply with 13 CCR 1965 and 13 CCR 2413 (emission control labels). The vehicles shall also be subject to 13 CCR 2414 (enforcement and recall provisions).

Vehicles 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. Vehicles 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 27 day of March 2009.

Annette Hebert, Chief

Mobile Source Operations Division