California Environmental Protection Agency AIR RESOURCES BOARD

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 engines 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)			
2009	9VPXL12.8BCA	12.8	Diesel	8000			
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION				
Direct Dies Electr	sel Injection, Turbocharg onic Control Module, Sm Exhaust Gas Recirc	er, Charge Air Cooler, toke Puff Limiter, sulation	Generator				

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	EMISSION		EXHAUST (g/kW-hr)				OPACITY (%)			
CLASS	STANDARD CATEGORY		нс	NOx	NMHC+NOx	со	РМ	ACCEL	LUG	PEAK
225 <u>&lt;</u> kW < 450	Tier 3	STD	N/A	N/A	4.0	3.5	0.20	N/A	N/A	N/A
		CERT	-	-	3.9	0.8	0.15	-	-	-

**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 \_

day of November 2008.

Annette Hebert, Chief Mobile Source Operations Division

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Attachment, Page 1 of 1

8. Fuel Rate: 9. Emission Control (lbs/hr)@peak torqueDevice Per SAE J1930 DDI,TC,CAC,E DDI,TC,CAC,E CM,SPL,EGR DDI,TC,CAC,E. DDI,TC,CAC,E CM,SPL,EGR CM,SPL,EGR CM, SPL, EGR ₹ ¥ ¥ ₹ 7.Fuel Rate: mm/stroke@peak torque (I ₹ ₹ ₹ ₹ 4.Fuel Rate: 5.Fuel Rate: mm/stroke @ peak HP (lbs/hr) @ peak HP 6.Torque @ RPM (for diesel only) (for diesels only) (SEA Gross) 2096 2382 1491 1771 ٩ ¥ ¥ ¥ 305 334 223 260 •••• 280,4 FU 3.BHP@RPM (SAE Gross) 529@1800 449@1800 376@1800 601@1800 440.2 (m)= 2.Engine Model TAD 1352GE TAD 1351GE TAD 1350GE TAD 1353GE Engine Family 1.Engine Code 2 e 4 <del>.</del> \* 9VPXL12.8BCA 9VPXL12.8BCA 9VPXL12.8BCA 9VPXL12.8BCA

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