

## **AB VOLVO PENTA**

EXECUTIVE ORDER U-R-014-0098 New Off-Road Compression-Ignition Engines

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)		
2007	7VPXL16.1ACB	16.12	Diesel	8000		
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION			
Direct Diesel Injection, Turbocharger, Charge Air Cooler, Engine Control Module			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 STANDARD CATEGORY		EXHAUST (g/kW-hr)				OPACITY (%)			
CLASS			нс	NOx	NMHC+NOx	со	PM	ACCEL	LUG	PEAK
kW > 560	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	N/A	N/A	N/A
		CERT	-	-	5.4	0.7	0.10	-	-	-

**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 December 2006.

Annette Hebert, Chief

Mobile Source Operations Division

## **Engine Model Summary Form**

Manufacturer: AB Volvo Penta

Engine category: Nonroad CI

EPA Engine Family: 7VPXL16.1ACB

Mfr Family Name: TAD 164X GE

Process Code: Running Change

4+1achment 4 of 4

	~	ā	ā	ā	4
ion Control er SAE J1930	TC, CAÇ 🏚	.c. cac 🗘	EM. TC. CAC DA!	EM. TC. CAC 🗘	
9.Emiss Device Pe	EW.	EM. 1	EM.	EM. J	7.000
8.Fuel Rate: 9.Emission Control (lbs/hr)@peak torque Device Per SAE J1930	N	W	AN SERVED OF THE	¥	Designation of the pass Long
7.Fuel Rate: mm/stroke@peak torque	404	374	Marie NA	Α	
6. Torque @ RPM (SEA Gross)	2388	2230	3576	3903	
5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	NA	Ä	¥	¥	
4. Fuel Rate: 5 4. Fuel Rate: 6 6. mm/stroke @ peak HP (lbs/) (for diesel only) (for	404	374	200	535	
3.BHP@RPM (SAE Gross)	809@1800	757@1800	903@1800	821@1500	
2.Engine Model	TAD 1642 GE	TAD 1641 GE	TWD 1643GE	TWD 1643GE	
Engine Code		2	\$	4	