# EXHAUST EMISSION DATA SHEET

#### **MQ POWER INDUSTRIAL GENERATOR SET**

### Model: MQP550V



### The engine used in this generator set is certified to comply with United States EPA Tier 2 and CARB Mobile Off-Highway emission regulations.

ENGINE DATA							
	/OLVO			Bore:	5.67 in	144 mm	
Model:	AD1641GE				Stroke:	6.50 in	165 mm
Туре:	I-Cycle Diesel	, Direc	t Injection, I-6		Displacement	: 984 in <sup>3</sup>	16.12 liters
Aspiration:	Turbocharger,	Charg	e Air Cooled, E	CM	Compression	16.5:1	
PERFORMANCE DATA	<u>\</u>						
SAE Gross HP @ 1800 RPM (60 Hz) 809							
Rated Load Fuel Consumption (gal/Hr) 33.1							
	Rated Load Exhaust Gas Flow (cfm) 4153						
•	w (cfm)		4153	3			
•	. ,		4153 954	-			
Rated Load Exhaust Gas Flo Rated Load Exhaust Gas Ter	nperature (F)	- M			Tier 2 Limit	s - >751	BHP
Rated Load Exhaust Gas Flo Rated Load Exhaust Gas Ter	nperature (F) States EPA		954	ghway	-	s - >751 d Engine E	
Rated Load Exhaust Gas Flo Rated Load Exhaust Gas Ter United S	nperature (F) States EPA		954 obile Off-Hig	ghway	-		missions
Rated Load Exhaust Gas Flo Rated Load Exhaust Gas Ter United S Criteria Pollutant	NO2)	<b>Emis</b> : 4.77	954 obile Off-Hig sion Requirem	ghway nents	Certifie 4.03	d Engine E	missions
Rated Load Exhaust Gas Flo Rated Load Exhaust Gas Ter <b>United S</b> Criteria Pollutant NOx (Oxides of Nitrogen as N	ND2) rbons)	<b>Emis</b> : 4.77	954 obile Off-Hig sion Requirem gr/bhp-hr	ghway nents	Certifie 4.03	<b>d Engine E</b> gr/bhp-hr	missions mbined
Rated Load Exhaust Gas Flo Rated Load Exhaust Gas Ter <b>United S</b> Criteria Pollutant NOx (Oxides of Nitrogen as N HC (Total Unburned Hydroca	NO2) rbons)	Emis: 4.77 (NO)	954 obile Off-Hig sion Requirem gr/bhp-hr < + HC)* Comb	ghway nents	Certifie 4.03 (NOx	d Engine E gr/bhp-hr + HC)* Cor	missions mbined
Rated Load Exhaust Gas Flo Rated Load Exhaust Gas Ter United S Criteria Pollutant NOx (Oxides of Nitrogen as N HC (Total Unburned Hydroca CO (Carbon Monoxide)	ND2) rbons)	Emis: 4.77 (NO» 2.61 0.15	954 obile Off-Hig sion Requirem gr/bhp-hr < + HC)* Comb gr/bhp-hr	ghway nents	Certifie 4.03 (NOx 0.52	d Engine E gr/bhp-hr + HC)* Cor gr/bhp-hr	missions mbined
Rated Load Exhaust Gas Flo Rated Load Exhaust Gas Ter <b>United S</b> Criteria Pollutant NOx (Oxides of Nitrogen as N HC (Total Unburned Hydroca CO (Carbon Monoxide) PM (Particulate Matter)	NO2) rbons)	Emis: 4.77 (NO) 2.61 0.15 PXL16	954 obile Off-Hig sion Requirem gr/bhp-hr gr/bhp-hr gr/bhp-hr	ghway nents	Certifie 4.03 (NOx 0.52	d Engine E gr/bhp-hr + HC)* Cor gr/bhp-hr	missions mbined
Rated Load Exhaust Gas Flo Rated Load Exhaust Gas Ter <b>United S</b> Criteria Pollutant NOx (Oxides of Nitrogen as N HC (Total Unburned Hydroca CO (Carbon Monoxide) PM (Particulate Matter) EPA Engine Family:	NO2) rbons) NO2: rbons) 8VF nce: VP2	Emis: 4.77 (NO) 2.61 0.15 PXL16	954 obile Off-Hig sion Requirem gr/bhp-hr gr/bhp-hr gr/bhp-hr .1ACB Cl-08-04	ghway nents	Certifie 4.03 (NOx 0.52	d Engine E gr/bhp-hr + HC)* Cor gr/bhp-hr	missions mbined

Note: Engine operation with excessive air intake or exhaust restriction beyond factory published maximum limits, or with improper service maintenance, may result in higher emission levels.

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)		
2008	8VPXL16.1ACB	16.12	Diesel	8000		
	FEATURES & EMISSION		TYPICAL EQUIPMENT APPLICATION			
Direct Dies	el Injection, Turbocharg Engine Control Mo	er, Charge Air Cooler, odule	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
kW > 560	Tier 2	STD	N/A	N/A	6.4	3.5	0.20	N/A	N/A	N/A
		FEL	-	-	6.0	-	0.17	-	-	-
		CERT	-	-	5.4	0.7	0.10	-	-	-

**BE IT FURTHER RESOLVED:** That the family emission limit(s) (FEL) is an emission level declared by the manufacturer for use in any 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 2423 and 2427.

**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 2007.

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Annette Hebert, Chief Mobile Source Operations Division

## Engine Model Summary Form

Manufacturer:AB Volvo PentaEngine category:Nonroad ClEPA Engine Family:8VPXL16.1ACBMfr Family Name:TAD 164XGEProcess Code:New Submission

Attachment 1 of 1 U-R-014-0102

1         TAD1642GE         809@1800         404         2388         NA         NA         ECM, CAC, TC         Dp1           2         TAD1641GE         757@1800         374         2230         NA         NA         J         J         J	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lbs/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbs/hr)@peak torque	9.Emission Control Device Per SAE J1930	
2 TAD1641GE 757@1800 374 2230 NA NA J J J		> TAD1642GE	809@1800	404		2388	NA	– NA	ECM, CAC, TC,	DDI
	2	TAD1641GE	757@1800	374		2230	NA	NA	V V V	Į