State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-326-4

Relating to Certification of New Heavy-Duty Engines and Vehicles

POWER SYSTEMS ASSOCIATES

Pursuant to the authority vested in the Air Resources Board by Sections 43100, 43102 and 43103 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-45-9;

IT IS ORDERED AND RESOLVED: That the following 1997 model-year Power Systems Associates diesel-cycle engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Diesel [dedicated] or Diesel + Compressed Natural Gas (CNG) [bi-fueled] or Diesel + Liquefied Natural Gas (LNG) [bi-fueled]

Engine Family	Engine Displacement Liters	(Cubic Inches)	Exhaust Emission Control Systems and Special Features
VPS442DZJARK	7.1	(442)	Turbocharger Charge Air Cooler Engine Control Module (Diesel) Engine Control Module (CNG/LNG)

Engine model codes are listed on attachments.

The following are the certification exhaust emission standards for this engine family in grams per brake horsepower-hour: (The standards for diesel + CNG/LNG bi-fuel are in the parentheses.)

Total (Non-Methane) Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates
1.3 (1.2)	15.5 (15.5)	5.0 (5.0)	0.10 (0.10)

The following are the certification exhaust emission values for this engine family in grams per brake horsepower-hour: (The values in parentheses are the certification exhaust emission values for diesel + CNG/LNG bi-fuel.)

Engine Family	Total (Non-Methane) Hydrocarbons	Carbon Monoxide	Nitrogen Oxides	Particulates
VPS442DZJARK	0.9 (0.9)	1.5 (7.8)	4.7 (2.8)	0.09 (0.08)

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

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

The Bureau of Automotive Repair will be notified by copy of this order and attachments.

Executed at El Monte, California this 5th day of January 1998.

R. B. Summerfield, Chief
Mobile Source Operations Division

ENGINE FAMILY: VPS 442D2J.2K EO: A-326-4

C. California Codes

Engine Code	Engine Model	BHP@RPM	Fuel Rate Rated mm/stroke	Fuel Rate Rated lb/hr	Torque @ RPM	Fuel Rate mm/stroke	Fuel Rate lb/hr	Emiss. Device ECM(Diesel) ECM(CNG/LNG)
1	3126G	250 @ 2200	19.0d/140.0NG	10.2d/100.0NG	660 @ 1440	19.0d/110.6NG	8.8d/61.2NG	EC,DI,TC,CAC
2	3126G	190 @ 2200	16.0d/107.0NG	10.2d/76.0NG	520 @ 1440	16.0d/84.9NG	7.4d/46.9NG	EC,DI,TC,CAC