

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-107-5

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

PERKINS ENGINES (PETERBOROUGH), LTD.

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-45-3;

IT IS ORDERED AND RESOLVED: That the following Perkins Engines (Peterborough), Ltd. 1993 model diesel engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 8,500 pounds:

Fuel Type: Diesel

<u>Engine Family</u>	<u>Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
PPE0243FAK4	4.0 243	Charge Air Cooler Turbocharger

Engine models and codes are listed on attachments.

The following are the certification emission standards for this engine family in grams per brake-horsepower-hour:

<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
1.3	15.5	5.0	0.25

The following are the certification emission values for this engine family in grams per brake-horsepower-hour:

<u>Engine Family</u>	<u>Hydrocarbons</u>	<u>Carbon Monoxide</u>	<u>Nitrogen Oxides</u>	<u>Particulates</u>
PPE0243FAK4	0.4	1.3	4.8	0.23

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 2<sup>nd</sup> day of March, 1992.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

**1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL ENGINES**

Manufacturer Perkins Engines (Peterborough)Ltd Engine Family PPE0243FAK4

Liters (CID) 3.99 (243.5) Fuel Type 2D Low Sulphur Engine Config. I-4

Exhaust ECS & Special Features (ECM/PCM, PTOX, IFI, etc.) TC CAC.  
(Use abbreviations per SAE J1930 MAY91)

Engine Model (Eng. Code)	Rated HP @ RPM	Fuel Rate @ Rated HP mm <sup>3</sup> / stroke (lbs/hr)	Fuel Pump & Injector P/N	ECM/PCM P/N	Part. Trap/ Catalyst P/N
PHASER 110Ti (AE)	110 BHP at 2600 RPM	78/84 CU MM/STROKE	PUMP 2645C451 OR 2642C452 WITH REMOTE LIFT PUMP	-	-

Revisions: