

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-13-67  
Relating to Certification of New Heavy-Duty Motor Vehicle Engines

CATERPILLAR, INC.

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 Caterpillar, Inc. 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>Displacement Liters (Cubic Inches)</u>	<u>Exhaust Emission Control Systems and Special Features</u>
PCT0893FZD2	14.6 (893)	Turbocharger Charge Air Cooler

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>
PCT0893FZD2	0.4	1.6	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 28<sup>th</sup> day of October, 1992.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

## 1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

## HEAVY-DUTY DIESEL ENGINES

Manufacturer Caterpillar Inc. Engine Family PCT0893FZD2 *.415*  
 Liters (CID) 14.6 (893) Fuel Type #2 Diesel Engine Config. 16  
 Exhaust Emission Control Sys. and (Special Features) ., (TC,CAC)

(Use abbreviations per SAE J1930 JUN 88)

Engine Model (Eng. Code)	Fuel Pump* MFR. P/N	Injector MFR. P/N	Rated HP @ RPM	Fuel Rate @ gated HP mm <sup>3</sup> /stroke	Part. Trap/ Catalyst MFR. P/N
3406 PEEC					
A	4P7565 (1)	7W7040	310 @ 1900	165	---
A	4P7565 (1)	7W7040	310 @ 1800	169	---
A	4P7565 (1)	7W7040	320 @ 1800	175	---
B	4P7565 (1)	7W7040	310 @ 1800	169	---
B	4P7565 (1)	7W7040	310 @ 1800	169	---
C	RESERVED				
D	4P7565 (1)	7W7043	350 @ 1800	185	---
D	4P7565 (1)	7W7043	350 @ 1800	185	---
D	4P7565 (1)	7W7043	350 @ 1800	185	---
E	4P7565 (1)	7W7042	400 @ 2000	196	---
E	4P7565 (1)	7W7042	400 @ 1800	212	---
E	4P7565 (1)	7W7042	400 @ 1800	212	---
E	4P7565 (1)	7W7042	375 @ 1800	197	---
E	4P7565 (1)	7W7042	365 @ 1800	191	---
E	4P7565 (1)	7W7042	365 @ 1800	191	---
F	4P7565 (1)	7W7043	350 @ 2000	174	---
G	4P7565 (1)	7W7041	425 @ 2000	204	---
G	4P7565 (1)	7W7041	425 @ 1900	211	---
G	4P7565 (1)	7W7041	425 @ 2000	204	---
G	4P7565 (1)	7W7041	425 @ 1900	211	---
H	4P7565 (1)	7W7041	425 @ 1800	222	---
H	4P7565 (1)	7W7041	425 @ 1800	222	---
I	RESERVED				
J	4P7565 (1)	7W7042	460 @ 1900	248	---
K	4P7565 (1)	7W7042	400 @ 1800	211	---
K	4P7565 (1)	7W7042	365 @ 1800	191	---

\*Basic Fuel Pump 612665

(Reference Page No. 16.04-0893FZD-1 through 11).

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## 1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

## HEAVY-DUTY DIESEL ENGINES

Manufacturer Caterpillar Inc. Engine Family PCT0893F2D2Liters (CID) 14.6 (893) Fuel Type #2 Diesel (.25% Sulfur) Engine Config. 16Exhaust Emission Control Sys. and (Special Features) EM, (TC,CAC,DI)

(Use abbreviations per SAE J1930 JUN 88)

Engine Model (Eng. Code)	Fuel Pump* MFR. P/N	Injector MFR. P/N	Rated HP @ RPM	Fuel Rate @ Rated HP mm <sup>3</sup> /stroke	Part. Trap/ Catalyst MFR. P/N
3406 PEEC					
A	4P7565 (1)	7W7040	310 @ 1900	168	---
A	4P7565 (1)	7W7040	310 @ 1800	172	---
A	4P7565 (1)	7W7040	320 @ 1800	178	---
B	4P7565 (1)	7W7040	310 @ 1800	172	---
B	4P7565 (1)	7W7040	310 @ 1800	172	---
C	RESERVED				
D	4P7565 (1)	7W7043	350 @ 1800	189	---
D	4P7565 (1)	7W7043	350 @ 1800	189	---
D	4P7565 (1)	7W7043	350 @ 1800	189	---
D	4P7565 (1)	7W7043	330 @ 1800	183	---
E	4P7565 (1)	7W7042	400 @ 2000	200	---
E	4P7565 (1)	7W7042	400 @ 1800	217	---
E	4P7565 (1)	7W7042	400 @ 1800	217	---
E	4P7565 (1)	7W7042	375 @ 1800	201	---
E	4P7565 (1)	7W7042	365 @ 1800	195	---
E	4P7565 (1)	7W7042	365 @ 1800	195	---
F	4P7565 (1)	7W7043	350 @ 2000	177	---
G	4P7565 (1)	7W7041	425 @ 2000	208	---
G	4P7565 (1)	7W7041	425 @ 2000	208	---
H	4P7565 (1)	7W7041	425 @ 1800	226	---
H	4P7565 (1)	7W7041	425 @ 1800	226	---
I	RESERVED				
J	4P7565 (1)	7W7042	460 @ 1900	248	---
K	4P7565 (1)	7W7042	400 @ 1800	216	---
K	4P7565 (1)	7W7042	365 @ 1800	195	---

\*Basic Fuel Pump 612665

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## 1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

## HEAVY-DUTY DIESEL ENGINES

Manufacturer Caterpillar Inc. Engine Family PCT0893FZD2Liters (CID) 14.6 (893) Fuel Type #2 Diesel (.25% Sulfur) Engine Config. 16Exhaust Emission Control Sys. and (Special Features) EM, (TC,CAC,DI)

(Use abbreviations per SAE J1930 JUN 88)

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3406 PEEC					
A	4P7565 (1)	7W7040	310 @ 1900	165	---
A	4P7565 (1)	7W7040	310 @ 1800	169	---
A	4P7565 (1)	7W7040	320 @ 1800	175	---
B	4P7565 (1)	7W7040	310 @ 1800	169	---
B	4P7565 (1)	7W7040	310 @ 1800	169	---
C	RESERVED				
D	4P7565 (1)	7W7043	350 @ 1800	185	---
D	4P7565 (1)	7W7043	350 @ 1800	185	---
D	4P7565 (1)	7W7043	350 @ 1800	185	---
D	4P7565 (1)	7W7043	330 @ 1800	179	---
E	4P7565 (1)	7W7042	400 @ 2000	196	---
E	4P7565 (1)	7W7042	400 @ 1800	212	---
E	4P7565 (1)	7W7042	400 @ 1800	212	---
E	4P7565 (1)	7W7042	375 @ 1800	197	---
E	4P7565 (1)	7W7042	365 @ 1800	191	---
E	4P7565 (1)	7W7042	365 @ 1800	191	---
F	4P7565 (1)	7W7043	350 @ 2000	174	---
G	4P7565 (1)	7W7041	425 @ 2000	204	---
G	4P7565 (1)	7W7041	425 @ 1900	211	---
G	4P7565 (1)	7W7041	425 @ 2000	204	---
G	4P7565 (1)	7W7041	425 @ 1900	211	---
H	4P7565 (1)	7W7041	425 @ 1800	222	---
H	4P7565 (1)	7W7041	425 @ 1800	222	---
I	RESERVED				
J	4P7565 (1)	7W7042	460 @ 1900	248	---
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