

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-13-70  
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<br/>Liters (Cubic Inches)</u> | <u>Exhaust Emission Control<br/>Systems and Special Features</u> |
|----------------------|---|--|
| PCT0629FZE2          | 10.3 (629)                                    | Turbocharger<br>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<br/>Monoxide</u> | <u>Nitrogen<br/>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<br/>Family</u> | <u>Hydrocarbons</u> | <u>Carbon<br/>Monoxide</u> | <u>Nitrogen<br/>Oxides</u> | <u>Particulates</u> |
|--------------------------|---------------------|----------------------------|----------------------------|---------------------|
| PCT0629FZE2              | 0.2                 | 1.4                        | 4.7                        | 0.13                |

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 17<sup>th</sup> day of February, 1993.

  
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 PCT0629FZE2  
 Liter (CID) 10.3 (629) Fuel Type #2 Diesel (.25% Sulfur) Engine Config. 16  
 Exhaust Emission Control Sys. and (Special Features) CAC, TC

(Use abbreviations per SAE J1930 JUN 88)

| Engine Model<br>(Eng. Code) | Fuel Pump<br>MFR. P/N | Injector<br>MFR. P/N | Rated HP<br>@ RPM | Fuel Rate<br>@ Rated HP<br>mm /stroke | Part. Trap/<br>Catalyst<br>MFR. P/N |
|-----------------------------|-----------------------|----------------------|-------------------|---------------------------------------|-------------------------------------|
| 3176<br>(A)<br>RESERVED     |                       |                      |                   |                                       |                                     |
| (B)<br>RESERVED             |                       |                      |                   |                                       |                                     |
| (C)                         | 612750 (1)            | 1062276              | 325 @ 1800        | 170                                   | ---                                 |
| (D)                         | 4P9524 (2)            | 1062287              | 350 @ 1800        | 184                                   | ---                                 |
|                             | 4P9524 (2)            | 1062287              | 350 @ 1800        | 184                                   | ---                                 |

(1) Basic Fuel Pump 1062277  
 (2) Basic Fuel Pump 1062288

(Reference Page No. 16.04-0629FZE-1)  
 Revision No:

## 1993 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET

8-16-93

## HEAVY-DUTY DIESEL ENGINES

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 Exhaust Emission Control Sys. and (Special Features) TC,CAC

(Use abbreviations per SAE J1930 JUN 88)

| Engine Model<br>(Eng. Code) | Fuel Pump<br>MFR. P/N | Injector<br>MFR. P/N | Rated HP<br>@ RPM | Fuel Rate<br>@ Rated HP<br>mm /stroke | Part. Trap/<br>Catalyst<br>MFR. P/N |
|-----------------------------|-----------------------|----------------------|-------------------|---------------------------------------|-------------------------------------|
| 3176<br>(A)                 | 1062267 (3)           | 1062265              | 275 @ 1800        | 148                                   | ---                                 |
|                             |                       |                      | 275 @ 1800        | 148                                   | ---                                 |
| (B)                         | 612750 (1)            | 1062276              | 300 @ 1800        | 162                                   | ---                                 |
|                             |                       |                      | 300 @ 1800        | 162                                   | ---                                 |
| (C)                         | 612750 (1)            | 1062276              | 325 @ 1800        | 174                                   | ---                                 |
| (D)                         | 4P9524 (2)            | 1062287              | 350 @ 1800        | 188                                   | ---                                 |
|                             | 4P9524 (2)            | 1062287              | 350 @ 1800        | 188                                   | ---                                 |

(1) Basic Fuel Pump 1062277  
 (2) Basic Fuel Pump 1062288  
 (3) Basic Fuel Pump 1062266

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