

State of California  
AIR RESOURCES BOARD

EXECUTIVE ORDER A-86-189

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

MITSUBISHI MOTORS CORPORATION

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 1996 model-year Mitsubishi Motors Corporation 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

| <u>Engine Family</u> | <u>Engine Displacement<br/>Liters (Cubic Inches)</u> |       | <u>Exhaust Emission Control<br/>Systems and Special Features</u>                            |
|----------------------|--|-------|---|
| TMT460D7DBAA         | 7.5  | (460) | Turbocharger<br>Oxidation Catalytic Converter<br>Charge Air Cooler<br>Engine Control Module |

Engine models and codes are listed on attachments.

The following are the certification exhaust 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                        | 0.10                |

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

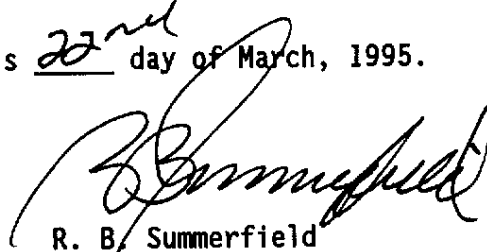
| <u>Engine<br/>Family</u> | <u>Hydrocarbons</u> | <u>Carbon<br/>Monoxide</u> | <u>Nitrogen<br/>Oxides</u> | <u>Particulates</u> |
|--------------------------|---------------------|----------------------------|----------------------------|---------------------|
| TMT460D7DBAA             | 0.4                 | 2.1                        | 4.2                        | 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 27<sup>th</sup> day of March, 1995.



R. B. Summerfield  
Assistant Division Chief  
Mobile Source Division

1996 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET  
HEAVY-DUTY DIESEL-STANDARD ENGINES

E.O. # A-86189

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Manufacturer Mitsubishi Motors Corporation Engine Family TMT460D7DBAA  
 Displacement: 7.5 Liters 460 Cubic Inches  
 Maximum Rated Power: 230 HP @ 2,600 RPM Engine Configuration: In-line, OHV, 6 cylinders  
 Ignition: Compression    Compression with Glow Plug x Spark     
 Fuel Type(s): Dedicated    Flex-Fuel    Dual-Fuel    Diesel x M100    M85     
                   CNG    LNG    LPG    Other (specify)     
 Diesel Cert Fuel: 13 CCR 2282    40 CFR 86.1313-90    40 CFR 86.1313-94 x  
 Primary Intended Service Class: LHD    MHD x HHD    Urban Bus     
 Exhaust ECS (incl. MFI, TC, CAC): OC, TC and CAC, ECM

(Use abbreviations per SAE J1930 Sept.91)

| Engine Model<br>(Eng Code) | Rated HP<br>@ RPM   | Fuel Rate<br>@ Rated HP<br>mm <sup>3</sup> / stroke<br>(lbs/hr) | Fuel Pump<br>& Injector<br>Part No.     | ECM/PCM<br>Part No. | EGR<br>Valve<br>Part No. | PTOX /<br>Catalytic<br>Converter<br>Part No. |
|----------------------------|---------------------|---|---|---------------------|--------------------------|--|
| 6D16T4-US96                | 190 HP<br>2,600 rpm | 88 mm <sup>3</sup> /st.<br>(77.2 lbs/hr)                        | I/P<br>ME075770(A/T)<br>I/N<br>ME075518 | MC883128            | N/A                      | ME290190                                     |
| 6D16T2B-US96               | 230 HP<br>2,600 rpm | 100 mm <sup>3</sup> /st.<br>(87.7 lbs/hr)                       | I/P<br>ME075768(M/T)<br>I/N<br>ME075517 | MC898136            | N/A                      | ME290190                                     |

Date Issued:

Revisions:

I/P : Fuel Injection Pump  
I/N : Fuel Injection Nozzle