

State of California
AIR RESOURCES BOARD

EXECUTIVE ORDER A-300-7

Relating to Certification of New Heavy-Duty Motor Vehicle Engines

THERMO POWER 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-45-9;

IT IS ORDERED AND RESOLVED: That the following 1995 model-year Thermo Power Corporation Otto-cycle engines are certified for use in motor vehicles with a manufacturer's gross vehicle weight rating (GVWR) over 14,000 pounds:

Fuel Type: Compressed Natural Gas

| <u>Engine Family</u> | <u>Engine Displacement Liters (Cubic Inches)</u> | <u>Exhaust Emission Control Systems and Special Features</u> |
|----------------------|--|---|
| STC4.3D5CREA | 4.3 (262) | Three Way Catalytic Converter Heated Oxygen Sensor Exhaust Gas Recirculation Throttle Body Injection |

Engine models and codes are listed on attachments.

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

| <u>Non-Methane Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> |
|-------------------------------------|----------------------------|----------------------------|
| 1.7 | 37.1 | 5.0 |

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

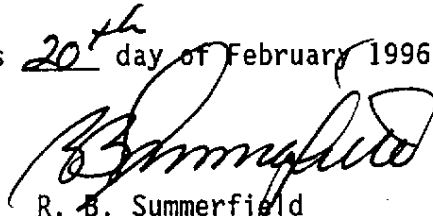
| <u>Engine Family</u> | <u>Non-Methane Hydrocarbons</u> | <u>Carbon Monoxide</u> | <u>Nitrogen Oxides</u> |
|----------------------|-------------------------------------|----------------------------|----------------------------|
| STC4.3D5CREA | 0.1 | 6.0 | 2.2 |

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 20th day of February 1996.



R. B. Summerfield
Assistant Division Chief
Mobile Source Division

E.O.# A-300-7

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INCOMPLETE MEDIUM-DUTY VEHICLE ENGINES
(CERTIFIED USING HEAVY-DUTY OTTO-CYCLE ENGINE TEST PROCEDURES)

Manufacturer: THERMO POWER CORP. Engine Family: STC4 3 DSCREA
Engine Config: V6 Valves/Cyl: 2 Displ: / 4.3 Liters / 262 CID
Cert Std: Tier-1 /LEV ULEV X Engine Intended Service Class: M4 M5
In-Use Stds: Full In Use X Alt In Use Max Rated Power: 139 HP @ 4000 RPM
All Eng Codes in Eng Family: CA 49S 50S X
Fuel Type(s): Dedicated X Flex-Fuel Dual-Fuel Bi-Fuel Gasoline CNG X
LNG LPG M85 M100 Other (specify)
Emiss Test Fuel(s): Indo CNG X LPG M85 M100 Other (specify)
Exhaust ECS (e.g., OC, TWC, MFI, IFI, TC, CAC): TWC, HO2S, EGR, TBI
(Use abbreviations per SAE J1930 SEP91)

| Engine Model (Eng Code) | Rated HP @ RPM | Ignition System or ECM/PCM Part No. | Fuel System Injector & Pump Part No. | EGR Valve Part No. | Catalytic Converter Part No. |
|----------------------------|-------------------|--|---|-----------------------|------------------------------------|
| 1 | 139 @ 4000 | 16222360 | 7171040 | 17087026 | 25130001 |

Date Issued:

Revisions: