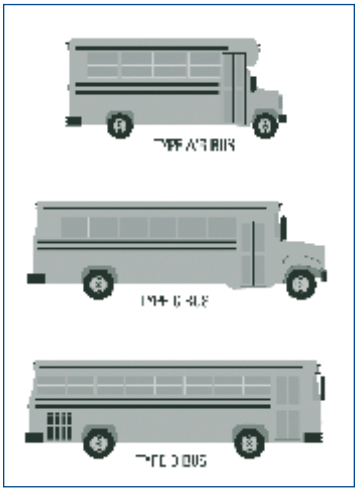
Available Alternative Fuel School Bus Products-2004

This document provides a listing of the currently-available (and soon to be available) model year (MY) 2004 alternative fuel school bus and school bus engine products.

Alternative Fuel School Bus Manufacturers

A variety of alternative fuel school bus products are available for MY 2004. A listing of these products is provided below, along with contact information for manufacturers of alternative fuel school buses and bus chassis in the U.S.



Standard School Bus Types

In this document, reference will be made to school bus types. The illustration above shows generally what is meant by these type designations. Type A and B are school buses on van-type cutaway chassis, while Type C is a conventional school bus with an engine hood (front engine) on a medium-duty truck chassis. Type D buses are transit style (flat front) buses, with engines either in the front or rear, on medium-duty truck chassis.

NOTE: This document illustrates the school bus prodcuts that were available in model year 2004. In the case of the Ford cutaway chassis and the bus products based on that vehicle, these may not continue to be available past 2004 as a result of Ford's planned discontinuance of gaseous fuel alternative fuel vehicles.

BLUE BIRD CORPORATION: Blue Bird Corporation is one of the world's leading bus manufacturers. Founded in 1927, Blue Bird has nearly 3,000 employees and four plants in two countries. Blue Bird manufactures Type A, B, C and D school buses. Blue Bird has over 60 distributors located nationwide. Their alternative fuel products include the type A MicroBird using the Ford E-450 CNG chassis and the type D All-American Rear Engine (RE) transit-style bus using John Deere CNG powerplants.

The MicroBird Type A CNG school bus offers seating for up to 30 passengers. It uses the Ford E-450 Super-Duty chassis with 5.4 liter dedicated natural gas engine, which meets Federal Ultra-Low Emission Vehicle emission standards and California Heavy-Duty Engine emission standards. The bus is equipped with a total of three steel CNG tanks providing 16.7 gasoline-gallon equivalents of natural gas storage.

The All American RE CNG school bus offers seating for 66 to 84 passengers. The All American has been the flagship of the Blue Bird school bus line since its introduction in 1948. The All American incorporates the latest features to ensure the strength and safety of the bus. The alternative fuel version utilizes the John Deere 8.1 liter dedicated natural gas engine mounted in the rear of the bus, paired with Allison automatic transmissions. For more information on Blue Bird alternative fuel products, please contact:

Rusty Mitchell
Blue Bird Corporation
402 Blue Bird Boulevard
P.O. Box 937
Fort Valley, GA 31030
(800) 486-7122 (phone)
school@blue-bird.com (for school bus information)
http://www.blue-bird.com

COLLINS BUS CORPORATION: Collins Bus Corporation is a wholly-owned subsidiary of Collins Industries, North America's largest producer of Type A small school buses, a leading manufacturer of ambu-

lances (including medical attack vehicles, rescue vehicles and fire emergency vehicles), the nation's second largest manufacturer of terminal trucks, and a leader in the road construction and industrial sweeper markets. Since 1971, Collins Industries has grown to over 1,000 employees in six plants comprising over one million combined square feet of manufacturing space. The Company sells its products throughout the United States and abroad.

The type A Collins Grand Bantam CNG school bus is available on an E-450 dual rear wheel with a GVWR of 14,050 pounds and a 5.4 liter dedicated CNG V-8 engine. This Collins Grand Bantam CNG offers a flat floor, track seating, 30 passenger capabilities and an optional lift model. Collins engineers worked closely with Ford Motor Company to manufacture their prototype chassis for school bus certification. And with three under body tanks providing a reported range of up to 150 miles, Ford has certainly made CNG a viable option for the Type A school bus market. For more information on Collins natural gas products, contact:

Collins Bus Corporation
P.O. Box 2946
Hutchinson, KS 67504-2946
(800) 533-1850 (phone)
http://www.collinsbus.com

CORBEIL BUS: Corbeil Bus and ProCon, a consortium of propane providers and equipment manufacturers, have developed a conventional Type C dedicated propane school bus for Model Year 2004. The bus was introduced at the National Association for Pupil Transit trade show in late 2003. The bus is being produced as a technology-enhanced aftermarket model.The bus, developed on the General Motors Family-2 Commercial Cutaway Chassis, uses an 8.1 liter dedicated propane engine with sequential port fuel injection. The vehicle can accommodate up to three propane tanks giving capacity of 50 gallons. Passenger capacities up to 72 children will be offered. For more information on this bus, contact:

Les Enterprises Michel Corbeil, Inc.
304 12th Avenue
St-Lin-Laurentides, Quebec, Canada J0R 1C0
(888) 439-3577 (phone)
http://www.corbeilbus.com
http://www.propaneschoolbus.com

Ford Motor Company

Ford CNG Cutaway Chassis with Shuttle Bus Body

FORD MOTOR COMPANY: Ford is a manufacturer of a variety of conventional fuel and alternative fuel vehicles, providing more alternative fuel choices than any other AFV manufacturer. The AFV choices for 2004 include the Ford E450 Cutaway Van chassis used by Blue Bird and Collins Bus for their dedicated CNG products. This vehicle is based on the best selling E-Series van platform, which has 21 years running with Best in Class quality.

The CNG version of the cutaway chassis is OEM engineered, manufactured, and supported. It is produced in a 158-inch wheelbase version, and offers advanced safety features including dual airbags and ABS brakes. The vehicle uses a 5.4 liter dedicated natural gas engine making 225 horsepower and 325 pound-feet of torque, while achieving ULEV emission standards. The basic chassis-cab vehicle is available with a variety of tank configurations (three tanks, four tanks, or five tanks) to meet most range and body layout needs. In the three-tank configuration, the vehicle has a total of 16.7 gge of fuel capacity, offering a range of 120-150 miles. Incremental price on this chassis is approximately $11,000. For more information on Ford alternative fuel products, contact:

Ford Motor Company
P.O. Box 6248
Dearborn, MI 48126
(800) 34-FLEET (phone)
http://www.fleet.ford.com

GENERAL MOTORS CORPORATION: General Motors produces a variety of conventional fuel and alternative fuel vehicles, including the Chevrolet Express/GMC Savana CNG cutaway van chassis. The vehicle uses a natural gas version of the GM Vortec 6-liter V-8, offering 285 horsepower and 300 ft-lb of torque. This engine meets ULEV standards for Federal and California. The vehicle is offered in bifuel or dedicated CNG, in two wheelbases: 159 inches or 177 inches. In

its bifuel configuration, a total of 20.6 gge of natural gas storage is provided, giving a range of 220-280 miles. In its dedicated configuration, a total of 29.7 gge of natural gas storage is provided, giving a range of 320-410 miles. In bifuel or dedicated versions, the CNG option has an incremental cost of $9,280. This chassis is not yet safety certified for school bus use, but GM (through its Upfitter Integration) is open to exploring this certification if enough interest is generated. For more information on potential certification of this chassis for school bus use, contact:

Tom Vaclavik
Lead Engineer, School Bus/Ambulance/Shuttle Bus
General Motors Corporation
Upfitter Integration
(800) 353-3867 (phone)
http://www.gmupfitter.com
http://www.gmaltfuel.com

Thomas Built Buses, Inc.

Thomas Saf-T-Liner HDX

THOMAS BUILT BUSES, INC.: Thomas has been a manufacturer of buses since 1936, and now, as a member of the Freightliner LLC group (a subsidiary of DaimlerChrysler Corporation) manufactures Type A/B, Type C, and Type D school buses. Thomas' new product for 2004 is the Saf-T-Liner HDX transit-style bus. For added lifespan on punishing routes the Saf-T-Liner HDX offers a heavier-duty version of their popular rear-engine Saf-T-Liner. Enhanced braking and cooling has been combined with a larger engine and heavier frame to deliver a safe, comfortable ride in tough driving environments like mountainous areas and stop-and-go inner city streets. This vehicle offers alternative fuel power with John Deere 8.1 liter CNG powerplants. For more information on Thomas alternative fuel products, contact:

Ron Dillard
Thomas Built Buses, Inc.
1408 Courtesy Road
High Point, NC 27260
(336) 889-5725 (phone)
(336) 881-6509 (fax)
Ron.Dillard@thomasbus.com
http://www.thomasbus.com

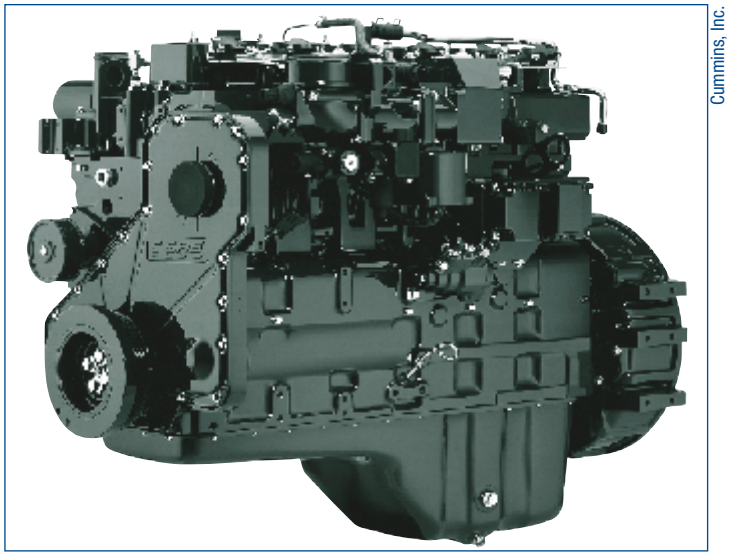
Alternative Fuel HD Engine Manufacturers

There are several options for alternative fuel heavy-duty engines suitable for school bus use. The most common are listed below.

CLEAN AIR PARTNERS: Clean Air Partners (CAP) works with Caterpillar, Inc. to fit standard Caterpillar engines with Dual-Fuel™ Electronic Controls that monitor and control natural gas fuel. Diesel fuel is used as the ignition source instead of a spark plug. Dual-Fuel™ engines can operate on diesel fuel in emergencies and the engine can be reconfigured to its original state for vehicle trade-in.

Dual-Fuel™ equipped Caterpillar engines are available in horsepower ratings from 190 to 410 horsepower for most on-highway truck applications as well as public works vehicles and buses. The Caterpillar 3126 natural gas engines from CAP have been demonstrated in school bus applications, but they have not been employed in school buses in quantity to date. All Dual-Fuel™ engines are certified to California's optional low NOx levels and meet federal Low Emission Vehicle emission standards. For more information on Clean Air Partners' natural gas products, contact:

Kevin Campbell
Sales Manager, LEV Products
Clean Air Partners
5066 Santa Fe Street
San Diego, CA 92109
(858) 332-4800 (phone)
(858) 332-4890 (fax)
kcampbell@cleanairpartners.com
http://www.cleanairpartners.com



Cummins, Inc.

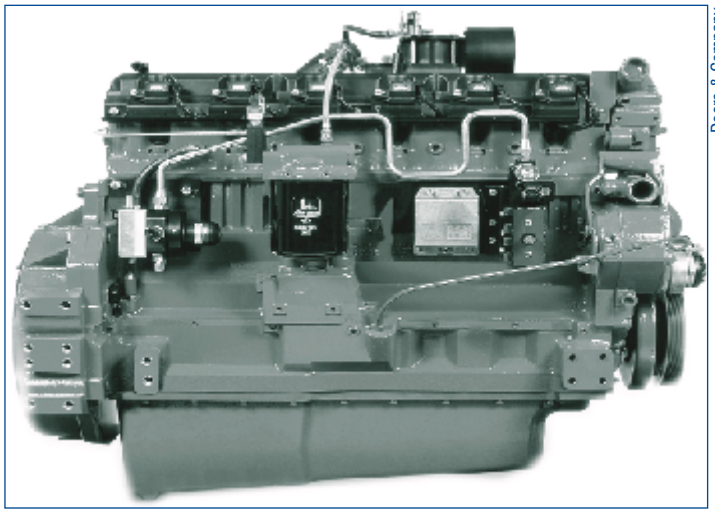
Cummins C Gas Plus Natural Gas Engine

CUMMINS WESTPORT: In 2001, Cummins Inc. and Westport Innovations, Inc. developed a joint venture to develop, manufacture, and market low-emissions, high-performance alternative fuel engines. Currently-available alternative fuel engines include the B Gas Plus engine in natural gas and B LPG Plus engine in propane (horsepower ratings of 195 hp to 230 hp) and the C Gas Plus engine using natural gas (horsepower ratings of 250 hp to 280 hp). For more information about Cummins Westport engine products, contact:

Cummins Westport, Inc.
1700 West 75th Avenue
Vancouver, BC V6P 6P2 Canada
(604) 718-2000 (phone)
(604) 718-2001 (fax)
info@cumminswestport.com
http://www.cumminswestport.com

DEERE & COMPANY: John Deere is a manufacturer of engines and off-road equipment, including the John Deere 8.1 liter natural gas medium-duty truck engine, in ratings of 250 hp, 275 hp, and 280 hp. In its 250 hp rating, this engine has become a very popular engine for school buses, being used currently by both Blue Bird and Thomas. John Deere low emission natural gas engines not only reduce air pollution concerns, they significantly reduce noise pollution as well. The high torque 8.1- liter CNG engines have plenty of power for pulling grades and carrying heavy loads. They offer drivers great acceleration and handling, even under load and at altitude. For more information on John Deere alternative fuel engine products, contact:

Johannes Inzenhofer
Program Manager – Natural Gas Engines
John Deere Power Systems
P.O. Box 5100
Waterloo, IA 50704-5100
(319) 292-7925 (phone)
(319) 292-5075 (fax)
inzenhoferjohannes@johndeere.com
http://www.deere.com



Deere & Company

Deere 8.1 Liter Natural Gas Engine

Sponsored by the U.S. Department of Energy
Energy Efficiency and Renewable Energy
Office of Weatherization and Intergovernmental Programs

A Strong Energy Portfolio for a Strong America

Energy efficiency and clean, renewable energy will mean a stronger economy, a cleaner environment, and greater energy independence for America. Working with a wide array of state, community, industry, and university partners, the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy invests in a diverse portfolio of energy technologies.

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