

# Fueling the Future Today With Ethanol

E85 as an alternative fuel has experienced tremendous growth in the last 10 years. The growth is due primarily to the fuel's many benefits as a renewable fuel that helps create a cleaner environment, boosts the U.S. economy and reduces oil imports.

E85 is an alcohol-based fuel, comprised of just 15% petroleum. Ethanol can be made from virtually any agriculture feedstock from which starch is derived, such as sugar cane, wheat or milo. Today, the vast majority of domestic ethanol is produced from corn, an abundant and renewable grain.

E85 is environmentally friendly. It has the highest oxygen content of any fuel available today, making it burn cleaner than gasoline. The use of E85 can reduce harmful tailpipe emissions including ozone-forming pollutants, carbon monoxide and lessen our exposure to air toxics, like benzene. More than 100 major U.S. cities suffer from unhealthy air quality. Federal government studies indicate that high-level ethanol fuel blends can significantly reduce harmful emissions including emissions of carbon dioxide, a major contributor to global climate change.

One bushel of corn produces 2.7 gallons of ethanol in addition to several valuable co-products. Using only the starch from the corn kernel, the fermentation process leaves behind vitamins and protein for use in other products such as gluten feed, gluten meal and corn oil. These co-products can be used in many foods for both humans and animal consumption.



*For All the Right Reasons...*

## Benefits of E85

- ✓ Using E85 reduces harmful emissions and helps protect the air we breathe.
- ✓ Ethanol is a bio-based fuel made from corn and other renewable sources right here in USA.
- ✓ Using E85 makes us less dependent on foreign oil because ethanol is made in America from crops "grown" by American farmers.
- ✓ No special training or knowledge is needed to fuel an E85 vehicle. E85 looks and fuels just like conventional gasoline.
- ✓ The range of a vehicle operating on E85 is excellent. You can drive more than 350 miles on an 18-gallon tank of fuel.
- ✓ There is little to no incremental cost to you on the purchase of an E85 vehicle.
- ✓ All E85 vehicles are proven reliable vehicles built as original equipment from the manufacturer and have the same warranties as gasoline vehicles.



National Ethanol Vehicle Coalition

3118 Emerald Lane, Suite 100

Jefferson City, MO 65109

573-635-8445 • 1-877-485-8595 toll free

Fax: 573-635-5466

Email: [nevc@e85fuel.com](mailto:nevc@e85fuel.com) • Web: [www.E85Fuel.com](http://www.E85Fuel.com)  
For more information about becoming a member, visit the website, call or email the NEVC.

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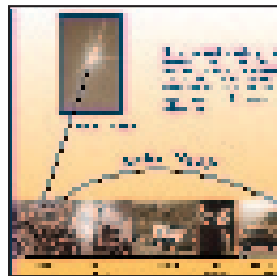
Provided by National Ethanol Vehicle Coalition  
[www.E85Fuel.com](http://www.E85Fuel.com)

Ever thought of running your car on clean energy? Well, 85 percent ethanol burns cleaner than gasoline and comes in a renewable supply. By harvesting crops produced every year, we are assured of an environmentally friendly fuel, which reduces the need for foreign oil and fossil fuel.

**Ethanol** is a high-octane, liquid, domestic, renewable fuel, produced by the fermentation of plant sugars. In the United States today, ethanol is typically produced from corn and other grain products. However, in the future it may be economical to produce ethanol from biomass resources such as agriculture and forestry wastes or specially grown "energy" crops.

**E85** is the term for motor fuel blends of up to 85 percent ethanol and 15 percent gasoline. E85 is considered an alternative fuel under federal and state laws designed to increase our domestic energy security and reduce vehicle emissions. It looks and "fuels" just like regular gasoline; however, ethanol does not contain many of the harmful carcinogens and other toxic chemicals found in gasoline.

Public fueling locations sell 85 percent ethanol in many cities across the country. For a current listing of stations that sell E85, please see our website at [www.E85Fuel.com](http://www.E85Fuel.com).



**E85 Can Reduce Pollution.**

Government tests have shown that E85 vehicles reduce harmful hydrocarbon and benzene emissions when compared to vehicles running on gasoline. Ethanol fuel can

also reduce carbon dioxide, a major contributor to global warming. Although carbon dioxide is released during ethanol production and combustion, it is recycled as a nutrient to the crops that are used to produce it. Ethanol is also non-toxic, water soluble and biodegradable.

Plants are able to absorb carbon dioxide (CO<sub>2</sub>) and give off oxygen through a process called photosynthesis. Carbon is the key element in the chemical structure of plants and animals.

Fossil fuels were formed from prehistoric plants and animals that were transformed into carbon over millions of years. The consumption of fossil fuels circumvents the carbon cycle because it releases carbon that has been locked away by nature without providing a way to reabsorb it.

Conversely, ethanol works WITH the earth's carbon cycle. Much of the CO<sub>2</sub> that is released when plants like corn are converted into ethanol and burned in automobiles is recaptured when new plants are grown to reproduce more ethanol.



**Made in America**, ethanol is a fuel that strengthens our national economy and security. The United States now imports more than half its oil, and overall consumption continues to increase. By using E85, U.S. drivers can help reverse that trend.

Today, U.S. ethanol producers have the capacity to produce more than 3.5 billion gallons each year. Ethanol is made primarily from corn but can be made from many other feed stocks and waste products. Therefore, the only limit on production is the efficiency of the technology. A number of federal and private studies conclude that corn to ethanol production today results in 35 percent to 67 percent more energy than it uses!

**Flexible Fuel Vehicles (FFVs)**

are specially designed to run on any ethanol fuel blend up to 85 percent. Special on-board diagnostics "read" the fuel blend, enabling drivers to fuel with E85 or gasoline if E85 is not available, without worrying about what is in the tank. E85 has superior performance characteristics because of its high octane rating (100 plus compared to gasoline's 87). Today, Ford Motor Company, General Motors, and DaimlerChrysler Corporation all offer E85 engines as standard equipment in their vehicles; therefore, little to no additional cost is incurred. The vehicles are proven reliable and come with factory warranties.

**What types of FFV's are being produced as of November 15, 2004?**

**DaimlerChrysler**

**MY '05** 3.3L Dodge Caravan & Grand Caravan SE



**MY '04-'05** 4.7L Dodge Ram Pickup 1500 Series

**MY '03-'05** 2.7L Stratus & Sebring Sedan

**MY '03** 3.3L Dodge Cargo Minivan

**MY '98-'03** 3.3L Dodge Minivan

**MY '98-'03** 3.3L Plymouth Minivan

**MY '98-'03** 3.3L Chrysler Minivan

*(all MY 2005 DaimlerChrysler models are available for fleet purchase only)*

**Ford Motor Company**

**MY '04-'05** 4.0L Explorer Sport Trac\*

**MY '02-'05** 4.0L Explorer\*

**MY '99-'05** 3.0L Taurus LX, SE, & SES Sedan\*



**MY '01-'03** 3.0L Ranger Supercab 2WD Pickup\*

**MY '99-'00** 3.0L Ranger 2WD & 4WD Pickup\*

**General Motors Corporation**

**MY '05** 5.3L Avalanche\*

**MY '02-'05** 5.3L Suburban\*, Tahoe\*, Police Tahoe (fleet purchase only), Yukon\* & Yukon XL\*



**MY '02-'05** 5.3L Sierra & Silverado Pickup\*

**MY '00-'02** 2.2L Chevrolet S-10 & GMC Sonoma 2WD Pickup

**Mazda**

**MY '99, '01-'02** 3.0L Mazda B3000 Pickup

**Mercedes-Benz**

**MY '05** 2.6L C240 luxury sedan and wagon

**MY '03-'05** 3.2L C320 sport sedan & wagon



**Mercury**

**MY '02 -'05** 4.0L Mountaineer\*

**MY '00 -'05** 3.0L Sable\*



**Isuzu**

**MY '00-'01** 2.2L Hombre pickups

*\*Selected vehicles*

Check the below Vehicle Identification Numbers to see if your vehicle above is E85 compatible:

**Ford Motor Company**

Vehicle	Characters 2 - 3	Character 8
Taurus	FA	2
Mercury Sable	ME	2
Ranger	FT	V
Explorer	FM	K
Mercury Mountaineer	M2	K

**General Motors**

Vehicle	Characters 2 - 3	Character 8
Chevy S-10 Pickup	GC	5
Sierra	GT	Z
Silverado	GC	Z
GMC Sonoma	GT	5
Suburban	GC	Z
Tahoe	GC	Z
Yukon & Yukon XL	GT	Z

**DaimlerChrysler**

Vehicle	Characters 2 - 3	Character 8
Chrysler Sebring	C3	T
Chrysler Town & Country	C4	G or 3
Dodge Caravan	B4	G or 3
Dodge Cargo Minivan	B4 or B8	3
Dodge Stratus	B3	T
Plymouth Voyageur	P4	G or 3

**Mazda**

Vehicle	Characters 2-3	Character 8
B3000 Pickup	F2	V

*The information stated in this pamphlet is the most accurate available to the National Ethanol Vehicle Coalition.*