



E85 FREQUENTLY ASKED QUESTIONS

What is a flexible fuel vehicle (FFV)?

Flexible fuel vehicles have been designed to operate on any ethanol blend up to 85% ethanol. Special onboard diagnostics “read” the fuel blend, enabling drivers to fuel with ethanol blends in any combination from a single tank. The computer adjusts the FFV’s fuel injection and ignition timing to compensate for the different fuel mixtures.

Flexible fuel vehicles (FFVs) have modifications to their design to enable them to operate on higher blends of ethanol. Changes include an oxygen fuel sensor that detects the level of oxygen (ethanol); the fuel tank, fuel lines, and fuel injectors are made of different materials; and a stainless steel fuel tank has been added along with Teflon-lined fuel hoses. For a list of FFVs, visit www.iowarfa.org. To determine if you own a flexible fuel vehicle, visit www.e85fuel.com/information/vin.php.

What happens when E85 is not available?

The FFV system allows the driver to use any combination of gasoline or ethanol – from 100% unleaded gasoline to 85% ethanol blends. Therefore, gasoline can be used if E85 is not available.

Does an FFV cost more than a gasoline-only model?

Flexible fuel engines are standard equipment on certain makes and models of automobiles, trucks and SUVs produced by General Motors, Ford Motor Company, DaimlerChrysler, and Nissan. FFVs are available at little or no additional cost. These vehicles carry the same warranties as gasoline-only vehicles.

Can a car be retrofitted or converted to use E85?

While conversion kits have been offered in the past to convert vehicles to use alternative fuels, today nearly all alternative vehicles are produced by auto manufacturers to ensure they meet exhaust emission standards set by the U.S. Environmental Protection Agency (EPA). At the present time there are no conversion kits or after-market parts that have been certified by EPA as meeting exhaust emission standards. In fact, converting a vehicle that was designed to only operate on unleaded gasoline to operate on another form of fuel is a violation of federal law and the offender may be subject to significant penalties.

Are repair and maintenance costs for FFVs any different than they are for gasoline vehicles?

No, the costs are roughly the same as regular auto repairs and maintenance. An FFV does run cleaner and, therefore, some maintenance costs may actually be reduced in the long run.

What is the price of E85?

Ethanol should be priced competitively with regular, unleaded gasoline. As is the case with all types of fuel, the larger the number of outlets offering E85, the more competitively priced the fuel should be.

Where can I buy E85?

For a list of Iowa E85 refueling locations, visit www.iowarfa.org or for E85 stations nationwide, go to www.e85fuel.com.

How can I get an E85 pump in my area?

Customer demand influences what products are sold. Talk to your local retailers about offering E85. Financial assistance is available to retailers through the Iowa Values Fund Financial Assistance Program, which is being managed by the IRFA. For more information on the grants available through the Iowa Values Fund, visit www.iowarfa.org.

What is the octane rating of E85 compared to gasoline?

E85 has an octane rating ranging from 100-105, making it a high performance fuel. In comparison, regular unleaded gasoline has an octane rating of 87.

What happens if I accidentally fuel my gasoline-powered vehicle with E85?

According to the National Ethanol Vehicle Coalition, no problems should occur if you mistakenly fuel *once* with E85. The “check engine light” may appear due to the higher oxygen content in E85. Long-term use of E85 in gasoline-only vehicles may cause damage because of the incompatibility of high-ethanol blends with parts in gasoline-only engines. Alcohol fuels can be more corrosive than gasoline. Therefore, fuel system parts have been upgraded to be ethanol-compatible. Also, improper use of E85 may compromise performance and emissions. For instructions on how to read a vehicle identification number to determine if your vehicle is E85 compatible, go to www.e85fuel.com/information/vin.php

What is the impact of having E85 available in Iowa?

Currently, over 93,000 FFVs are owned by Iowa motorists. Projections are that an additional 40,000 to 100,000 FFVs will be purchased by Iowans each year over the next decade, bringing the state’s total FFV fleet to 800,000 by 2015. If all these vehicles ran on E85, it would increase the demand for ethanol by 500 million gallons.

If E85 is spilled on the ground, can it contaminate groundwater?

Ethanol is water soluble, non-toxic and biodegradable. E85 contains roughly 80% less of the potential contaminants found in gasoline.

Is E85 more toxic or dangerous than gasoline?

No. 100% ethanol can be ingested by human beings. Fuel-grade ethanol must be “denatured” with gasoline to prevent consumption. Also, ethanol does not contain the harmful carcinogens and toxins found in gasoline.

Iowa Renewable Fuels Association www.iowarfa.org
American Lung Association – Iowa Chapter www.lungilia.org
Iowa Corn Promotion Board www.iowacorn.org
National Ethanol Vehicle Coalition www.e85fuel.org