

Gasoline vs. Diesel – Which is Right for You?

One of the most important decisions you will have to make when purchasing your new mobile clinic is “should I have a gasoline or a diesel chassis and generator?”. Our customers frequently ask us about the pros and cons of gasoline vs. diesel engines.

There are four critical factors to consider when comparing gasoline and diesel engines: (1) purchase price, (2) fuel economy & fuel cost, (3) maintenance and operational costs and (4) environmental impact.

Purchase Price: A Winnebago commercial shell with a diesel chassis costs roughly \$50,000.00 more to purchase than an identical shell with a gasoline chassis. A diesel generator also is generally more expensive than a gasoline generator. This chart compares Winnebago’s 2021 commercial shell retail prices for the diesel and gasoline chassis.

BASE PURCHASE PRICE							
MODEL	Ford Gasoline Chassis			MODEL	Freightliner Diesel Chassis		
	Engine	HP	Price		Engine	HP	Price
WFJ33S	7.3L V-8	350	\$ 147,500.00	WKJ33S	6.7L Cummins	340	\$ 197,500.00
WFJ38S	7.3L V-8	350	\$ 156,500.00	WKJ38S	6.7L Cummins	340	\$ 207,500.00

Fuel Economy (Mileage) & Fuel Cost: Diesel engines generally provide greater fuel efficiency than gasoline engines. The Ford V-8 gasoline engine averages between 6-10 mpg, while the Cummins diesel engine averages between 8-14 mpg. This greater efficiency helps offset the higher price of diesel fuel.

Historically, diesel fuel has been more expensive per gallon than gasoline due to higher fuel taxes and compliance with environmental restrictions. This chart compares the average prices for gasoline and diesel fuel throughout the United States as of December 2020.

AVERAGE PRICE PER GALLON			
Location	Gasoline (Regular)		Diesel
East Coast -NJ	\$	2.57	\$ 2.83
North East - Maine	\$	2.44	\$ 2.74
Gulf Coast - FL	\$	2.43	\$ 2.63
Midwest - MN	\$	2.30	\$ 2.60
Southwest - TX	\$	2.14	\$ 2.33
Rocky Mountains - CO	\$	2.34	\$ 2.43
West Coast - CA	\$	3.42	\$ 3.58

Maintenance Costs: Gasoline engines and generators are typically less expensive to service and maintain. Service centers for both Ford and Freightliner are located in many locations throughout the United States and Canada.

A comparison of standard maintenance costs for gasoline and diesel engines is listed below as a guideline. Prices may vary depending on your location. These figures are based on driving an average of 10,000 miles per year.

TYPICAL MAINTENANCE COSTS				
Maintenance Needed	Gasoline		Diesel	
	How Often	Price	How Often	Price
Oil Change & Filters	5,000 Miles	\$ 135.00	6,000 Miles	\$ 375.00
Transmission Fluid	60,000 Miles	\$ 170.00	Every 2 Years	\$ 315.00
Engine Air Filter	40,000 Miles	\$ 80.00	40,000 Miles	\$ 300.00
Spark Plugs	100,000 Miles	\$ 400.00	N/A	N/A
DEF Replacement	N/A	N/A	3,000 Miles	\$ 110.00
Annual Expense (10,000 Miles/Year)		\$ 403.00		\$ 1,312.00

Environmental Impact: According to EPA statistics a gasoline engine running on 10% ethanol gasoline (regular standard unleaded) emits 18.95 pounds of carbon dioxide emissions per gallon. A diesel engine averages 22.38 pounds per gallon. However, since diesel fuel has a higher energy content per gallon which results in greater fuel efficiency, diesel fuel emissions end up being only slightly higher on average than those of a gasoline engine.

Other Factors to Consider:

- Diesel engines are heavier than gasoline engines, and produce more noise and vibration.
- A diesel engine has greater torque at lower engine speeds, allowing the vehicle to climb hills more easily.
- A gasoline engine has more horsepower than a diesel engine, allowing you to speed up faster when merging into traffic.
- Gasoline engines are easier to start and heat up more quickly in colder climates and at higher altitudes than diesel engines.
- Diesel engines, when properly maintained, have greater longevity than gasoline engines.
- Local regulations (State, County or City) may prohibit or restrict diesel engine idling times (this would apply to the generator as well as the vehicle engine).

ADI recommends preparing an estimate of your mobile health programs projected annual mileage when evaluating the pros and cons of the respective chassis. The diesel chassis may be a better option if you plan on driving over 50,000 miles per year. The gasoline chassis may be better if you are in a cold climate, high elevation, or will be driving less than 50,000 miles per year. If you are still not sure which chassis is best for your program, our friendly and knowledgeable sales staff are here to help you with this decision.