

## Owner Operator Newsletter

### *“Put Your Fuel Bills on a Diet”*

If your doctor told you to lose a few pounds, you’d check the menu for all things that would help you reach your goal instead of automatically ordering the usual double cheeseburger and milk shake. Some of the diet choices may not be popular, but that’s the way it works if you’re going to reach your goal. It’s kind of like that with fuel economy – not all of the choices are popular, but putting your fuel bills on a diet means trying everything that will help you reach your goal. Doing the same thing over and over but somehow expecting better results doesn’t work. Even trying half of the choices will be disappointing if your goal is to get your lowest fuel cost. The trick is to make lots of little gains by using everything on the Fuel Economy Menu.

### **First, the Rules of Fuel Economy**

Getting your best fuel economy means overcoming four things:

1. Air resistance – aerodynamics is the most important factor over 50 mph according to Cummins Engine Company.
2. Rolling resistance – tires make the biggest difference in mpg at lower speeds according to Bridgestone Tire Company.
3. Gravity – gouging on the throttle and then gouging on the brakes is expensive. Overdrive Magazine says, “Better fuel economy goes hand in hand with lower power draw and less drive train component and tire wear.”
4. Habits – according to the American Trucking Association Maintenance Council, the most efficient drivers get about 30% better fuel economy than the least efficient drivers

### **The Fuel Economy Menu**

1. Air Resistance
  - Snug the van or reefer trailer close to the tractor cab to reduce drag.
  - “Build” the flatbed load to be the most aerodynamic shape you can get.
  - Avoid after-market add-ons that reduce aerodynamics such as horns and bug screens.
2. Rolling Resistance
  - Under-inflated tires work your engine harder while robbing fuel and driving up tire cost.
  - Ribbed tires get better fuel economy than lug tires.
  - Older tires get better fuel economy than new tires.
    - The break-in period for tires is around 35,000 to 45,000 miles.
  - Alignment – when fuel cost is highest may be the best time for a three-axle alignment.
  - Synthetic lubricants for axles and transmissions are more “slippery” than mineral lubricants and cost less over the long run because of extended life and extended drain intervals.
3. Gravity
  - Anticipate changes in traffic to keep momentum up and avoid abrupt starts and stops. “Blow no smoke” when accelerating and use the throttle to slow down instead of braking.
4. Habits
  - Idle time costs about a gallon of fuel per hour. Some drivers have gone from over 50% idle time to less than 10%. It’s all about MPG but there’s zero MPG for you when idling and there is zero fuel surcharge for you when idling. An auxiliary heater and/or air conditioner to reduce idling make increasing sense when fuel is high.

- Speed – above 55 MPH, each 1 MPH increase in vehicle speed decreases fuel economy by 0.1 mpg. That means a 10 MPH increase to 65 MPH costs one MPG.
- Maintenance – the best maintained trucks get the best fuel economy.
  - Check oil – it takes 15 minutes for oil to drain down into the crankcase. Wait to check your oil so that you don’t exceed recommended fill levels which uses more fuel.
  - Air filters – clean air filters use less fuel.
  - Fixing air leaks means your air compressor runs less using less energy.
- Out of route miles – there’s no fuel surcharge for running 6% out of route unnecessarily and increasing fuel cost but also increasing maintenance costs and tire costs by 6% too.
- Pre-trip and Post-trip inspections will catch fuel robbing problems earlier rather than later. A post-trip inspection might allow repairs during a normal down-time period.
- Shifting
  - Skip Shifting (when lightly loaded) – every time you “bang” a gear costs fuel.
  - Progressive Shifting – drive by RPM and not by engine sound or boost gauge.
  - Ask the manufacturer for the RPM “sweet spot” for your particular truck
  - Maximize time in top gear – minimize time spent in lower gears.
    - Stay in cruise control as much as possible.
- Traffic – avoid rush hour when practical. It’s all about MPG but your MPG is zero when you’re engine is running and you’re stopped in traffic not moving.
- It may not be necessary to manually turn the fan switch on with a modern engine.
- Fuel network and fuel optimizer – if a leased operator, use your carrier’s fuel network and fuel optimizer as much as possible.
- Fuel surcharge – understand this and how it works. You’ll know you understand this when you can calculate your net cost of fuel after applying the FSC to your fuel costs.
- Fuel Taxes – if responsible for paying fuel taxes, don’t be fooled by the price at the pump – make fuel buying decisions on the net cost of fuel after the fuel tax is removed.

**Will the Fuel Economy Menu put your fuel bills on a diet?  
Look at an Annual \$50,000 fuel expense!**

	<b>%</b>	<b>Savings</b>
Aerodynamics	2	\$1,000
Alignment	1	\$500
Acceleration & Braking	3	\$1,500
Idling	5	\$2,500
Out of route miles	3	\$1,500
Shifting	2	\$1,000
Speed	6	\$3,000
Technology	2	\$1,000
Tires	3	\$1,500
	27%	\$13,500

**W**hy look for satisfaction in your fuel bill diet by trying only a couple of things from the Fuel Economy Menu? Your lowest fuel cost comes from trying everything possible.

***Tiny gains in every area results in a huge reduction for your fuel diet!  
Twenty-seven percent improvement is like getting every fourth tank free!***