



**Fuel—
What kind of gas mileage should my Gold Wing get?** A question I get a lot...

- How do you ride it?
- How fast do you ride it?
- How heavy is it (accessories)?
- How much do you and your passenger weigh?
- Does it have an oversized windshield?
- How much air is in the tires?
- Are the tires worn out?
- Is the air cleaner dirty?
- How long has the spark plugs been in engine?
- What kind of fuel do you use?
- Winter or summer fuel.
- Was it windy?

These are questions I most likely won't fire back at you if you tell me your gas mileage has decreased, but they are all legitimate questions. Chances are most of the questions you can answer fairly well. But as you can tell there is not always a quick answer. I once had a guy complain that his 1800, with 118,000 miles had dropped a couple of miles per gallon. I was silently thinking "not bad".

In Oklahoma the fuel we buy is blended different in the winter. Winter fuel uses butanes and propane's to allow the fuel to atomize better in cold start conditions. These are called the light ends and they are blended with less of them in the summer months. The octane rating stays the same because the formula they use is an average of motor octane and research octane. Gasoline is an extremely complicated formula and there are plenty of differences from brand to brand and the seasons in which we buy it. The automobile industry has tried and continues to try to get the most mileage out of each gallon for us.

The ironic thing is a Gold Wing does not get gas mileage as good as some cars. Consider how much faster it is than the average car and it makes some sense but gas mileage can get complicated for us. Even comparing bike to bike can be deceiving. Everybody rides different; do you jerk the throttle when passing? Do you downshift? What R.P.M. do you shift at? I hope you can begin to see how the answer is not always clear.

Another thing is a new engine has quite a bit of friction. An automobile V8 takes about 80 horsepower to rev to 6,000 R.P.M. without spark plugs. It probably takes about half of that to spin a G.L.1800 motor through the transmission.

With that being said a new engine does not get gas mileage as good as one broken in because of friction (springs, bearings, gears etc.) but after a while the efficiency of the engine decreases, so to make the same horsepower more fuel has to be consumed. (You have to turn the throttle more to go 70 mph.) Staying on the subject of friction the ambient temperature can keep the oil and water cooler or hotter. That leads to more or less friction which can make or rob horsepower.

We have not even touched on how weather, temperature and humidity can affect the air fuel ratio. A 100 degree day with humidity is not optimum air quality for gas mileage. Oklahoma is typically 800 to 1200 feet above sea level and it can change the quality of air.

When your gas mileage goes down and we talk about it- if my head does a 360° don't freak out. It is just how I am wired. The variables are endless. What is really crazy is most of the time it stays close but it can and does vary. One way to check mileage is be consistent in your testing. Get a base line from point A to point B on a full tank, refill and record distance and quantity. Telling me it got worse mileage in

Canada would seem normal to me if you lived in Oklahoma but some customers are (let's say picky) about their Wing's gas mileage. In the old days we were happy if they ran.

Now if they don't run perfect we are disappointed. Motorcycles came with elaborate tool kits because you might need it. Today hand tools are probably not going to fix your Gold Wing along the side the rode. Oh! how technology makes our lives easier. Truth is we have become so spoiled in our equipment. If it doesn't start within 5 seconds something is wrong. Can you imagine a remote start 30 years ago? Who would pull the choke?

The truth is 25 or 30 years ago we had 20 or so variables that would affect our fuel mileage and today there are probably 50 or more (think fuel injection) lots of electronics. It is true that sometimes the gas mileage drops significantly because an electronic component fails. The engineers have tried to control the variables and have to a certain degree but gas mileage is a complicated issue for us. A 10%- 15% fluctuation is probably very normal. Anything above that can probably be diagnosed and cured.

But!!!! Maybe not!

