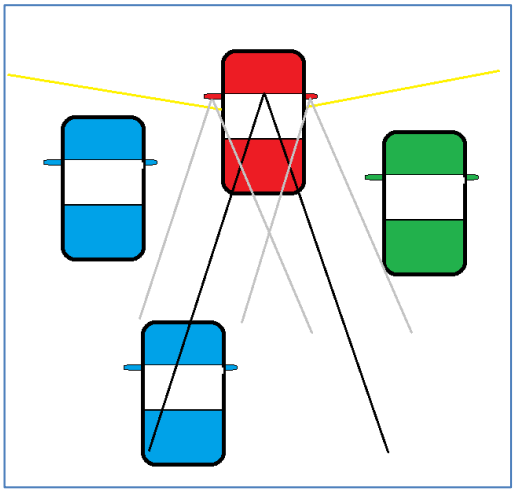
Just the Basics – 3 - Mirrors

When my kids turned 16, I sent them to a 2 day defensive driving / high performance driving school at Road Atlanta. I would only recommend it to parents who want their kids to live beyond their teen years. The first thing the instructors told the class that over 90% of the drivers do not set their mirrors correctly. A perfect example of this is a recent Allstate commercial. Mayhem, viewed in the mirror, is hanging on the side of a SUV telling the driver the coast is clear. Of course it is not and a wreck ensues.

The bottom line is: if you have a "blind spot", you are not setting the mirrors correctly. The purpose of the "side" mirrors is to see what is going on the side of your car, not in the back. The rear view mirror is supposed to let you know what is going on behind you.



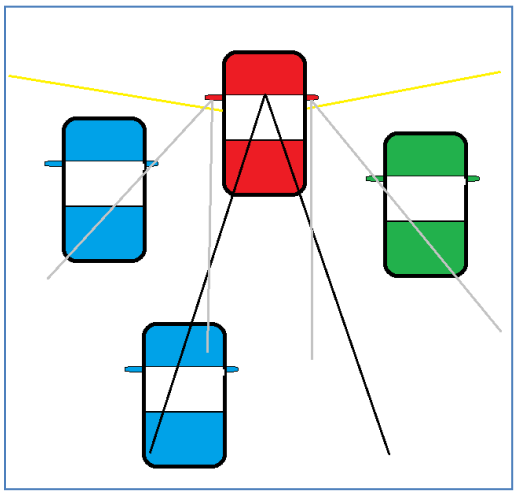
This drawing shows the red car with most common side mirror settings. The yellow lines indicate the peripheral field of vision most drivers have. The gray lines indicate the line of sight the way most people set their side mirrors. The black lines are the field of vision from the rear view mirror. The blue car is making a pass. As the blue car begins to change lanes (bottom car), it is in both of the mirrors. It is nearly out of the rear mirror view and will shortly go beyond the side mirror view. As it continues its pass, (on the left) there is an area where the car is totally out of view, the so-called 'Blind Spot'. The blue car on the left and the green car on the right are both totally out of the drivers view. The only way to check to see what is beside you is by turning your head around to look.

This can be dangerous for a couple of obvious reasons.

1) If a squirrel runs into the road and the car ahead of you slams on their brakes, you will rear end them and you would be found to be 'at fault' for failing to maintain assured clear distance ahead.

2) You have a tendency to steer where you look. If you are rubbernecking over your left shoulder, you will tend to swerve into the left lane. Right into the car you are looking for.

The second drawing shows the red car with the side mirrors adjusted correctly. The peripheral yellow and black rear view mirror sight lines remain the same. Note that you cannot see the side of your car by glancing at the side mirror by a few inches. If you think about it, why do you need to see the side of your car? It is not going anywhere. As the first blue car (on the bottom) is moving out of the field of view of the rear view mirror, it is coming into view on the side mirror. You will be able to see it in both for a period of time. As it progresses out of the side mirrors field of view, it comes into the driver's peripheral vision. The "blind spot" is eliminated. By adjusting the passenger's side mirror, the green car is also in view. As the green car goes by, it also comes into the driver's peripheral view. Note there is very little overlap in coverage between all the mirrors. Again, note that the side mirrors do not show



the side of the car. Anything wider than a few inches will be seen. I have yet to see a car, motor or bicycle less than a few inches wide.

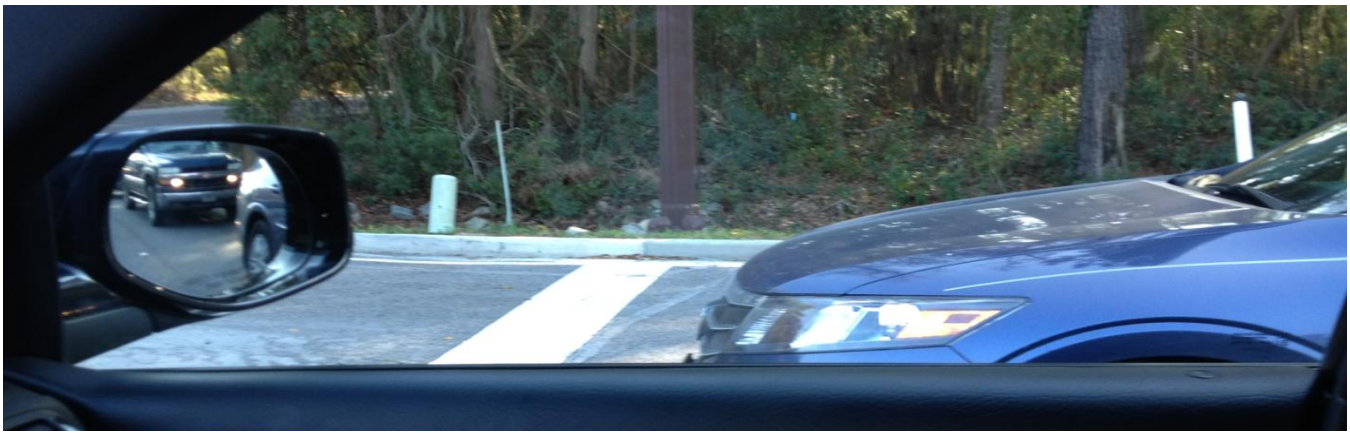
To see as much as possible in the field of view, you will likely need to adjust the side mirrors downward so you will be able to see the bumpers of the other cars. It will take some time to get used to looking in the side mirrors and seeing the painted lines on the road rather than what is behind you. Once you adapt to the new mirror positions, it is much easier to set them up again.

The first picture is Rt. 278, a 6 lane divided highway. I am in the middle lane, and a left turn lane is beginning. You will note the majority of the view is of the road. It is pointed down, so you can see the bumpers of a car and not the sky. The coast is clear to change lanes.

The right hand mirror shows an empty lane as well. Again, you cannot see the side of the car nor the sky. What would happen if a car came into the area and what would it look like?

This is part of a shot at a traffic light. You can see the rear wheel of a car that is only partially in the line of vision. You can also see the front of a Chevy SUV. In most people's mirrors, even the SUV would be out of the line of sight! Note, again, that the mirror is aimed low and you can see the bumper of both cars and not the driver. Since the bumpers are always the longest part of a vehicle, it is what you want to see.

Here is the full picture. The rear wheel you can see in the mirror belongs to the hood of the blue car you can see through the window. It just takes a quick glance know what is beside you.



The same applies to the left side of the car. Unfortunately, I cannot show you a similar picture, because my camera lens isn't wide enough to show both the mirror and window.

So, how do you set up the mirrors correctly? There are 3 ways.

First, in an empty parking lot, have someone in another car drive back and forth behind and beside you while you adjust your mirrors.

Second, when you are in a parking lot at the store, you can set them by yourself. You can fine tune it while at a traffic light.

This is the view out of my rear view mirror at a big box store. On the left, you can see part of a black pick-up. Only part of the tail light is visible. On the right, is an open parking space and white car in the spot in the next row (note bushes).

When the left mirror is set correctly, you can see the rest of the black pick-up and a lot more. Note there is no overlap between the rear and side mirror.

When the right mirror is set correctly, you will see only part of the white car in the next row back. You can also see the cart return I was parked next to.

The third way to set your mirrors is to sit in the drivers' seat and touch your head to the window. Adjust the left mirror so you can see the edge of the car. When you return to your normal seating position, the side of the car will be out of the line of sight and the mirror is set correctly.

For the right side, lean over to the center column. Adjust the mirror so you can just see the side of the car. When you return to normal position, you will lose sight of the side of the car.

Remember, it is important to make sure you set the angle low enough to see the bumper of surrounding cars. Setting the angle too high defeats the whole process.

By having the mirrors set properly, all you need is a quick glance to see if the coast is clear or not. This should take a fraction of a second. If nothing is there, it is safe. If something is there, it is not safe. You will not need to take your eyes off the road anymore.

Anopther good habit to develop is to quickly check your mirrors on a frequent basis, just to see what is there. Should a situation arise in front of you, such as a concrete block falling off the truck in front of you, knowing what is beside you ahead of time allows you to safely take evasive action.