

Editor's note: This article was adapted from one in the spring 2005 issue of *Crossroads*, newsletter of the Wisconsin LTAP, which was adapted from one in the Oct/Dec 2003 issue of *The Bridge*, newsletter of the Michigan LTAP. The Bridge story was produced by the Society of Automotive Engineers © 1995 SAE International and reprinted with permission. Some information for this article was found on the Car Talk website, www.cartalk.com/content/features/mirrors/index.html. Information about large trucks was found on NewsUSA's website, <http://about.newsusa.com/article-site.asp?ArticleId=3746>.

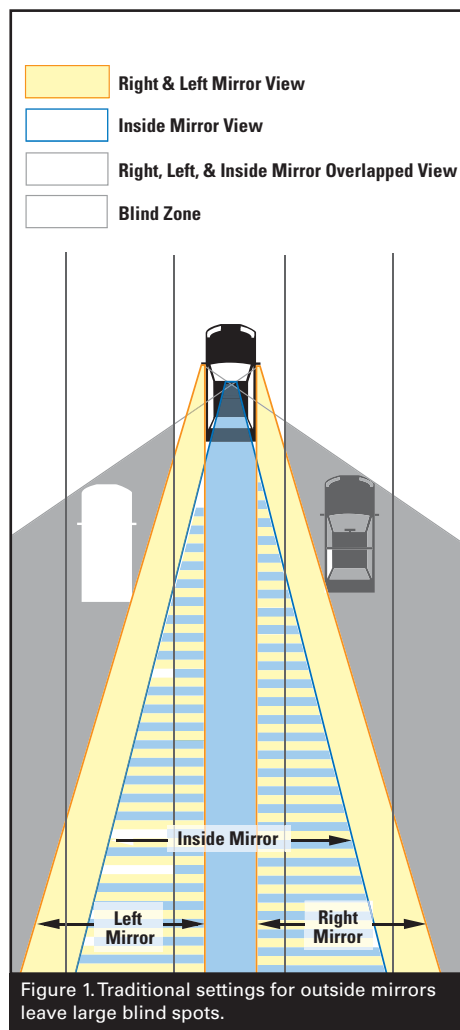
Eliminate (almost!) those blind spots

In a 2003 study (1999 data), the National Highway Traffic Safety Administration identified more than 200,000 crashes that involved “typical lane changes.” The majority of these crashes involved drivers who didn't see a vehicle in the other lane. The vehicle may have been in the driver's “blind spot.”

Did you know that when you're driving a car you can virtually eliminate blind spots by rotating the side mirrors out about 15 degrees?

Ineffective mirror settings

You may have been taught to set your outside mirrors so that you can just see the sides of your car. This setting mostly overlaps, and only slightly widens, the area you can already see from your rear-view mirror. This setting leaves a blind zone on each side of the car big enough to hide a vehicle approaching from the rear in the next lane. See Figure 1.

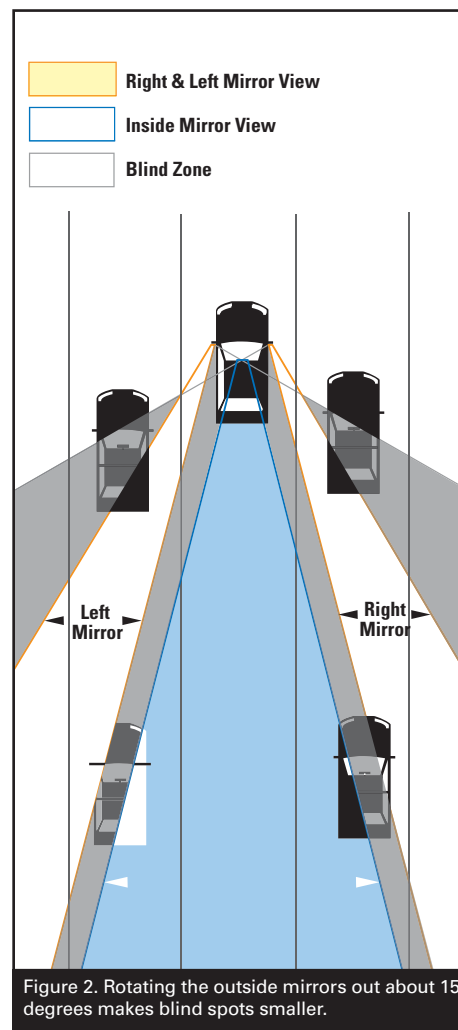


To change lanes safely with this setting, you have to check the rear-view mirror, then check the side mirror, and then physically turn and look back through the window to see if a vehicle is in the blind spot. At highway speeds, this requires drivers to take their eyes off the forward road for 100 feet or more.

Suggested mirror settings

To reduce or eliminate blind spots, rotate each outside mirror out about 15 degrees. Adjust the driver's side mirror by leaning your head left against the window, then setting the mirror so you can just see the side of the car. Adjust the passenger's side mirror by sitting in the middle of the front seat and setting the passenger's side mirror so you can just see that side of the car.

These settings leave four narrow blind zones that are too small to hide a vehicle. See Figure 2.



When you want to change lanes, look first in your rear-view mirror, then in the side mirror. If another vehicle is approaching in the next lane, you should always be able to see at least part of it in one of the mirrors until you can see it in your peripheral vision.

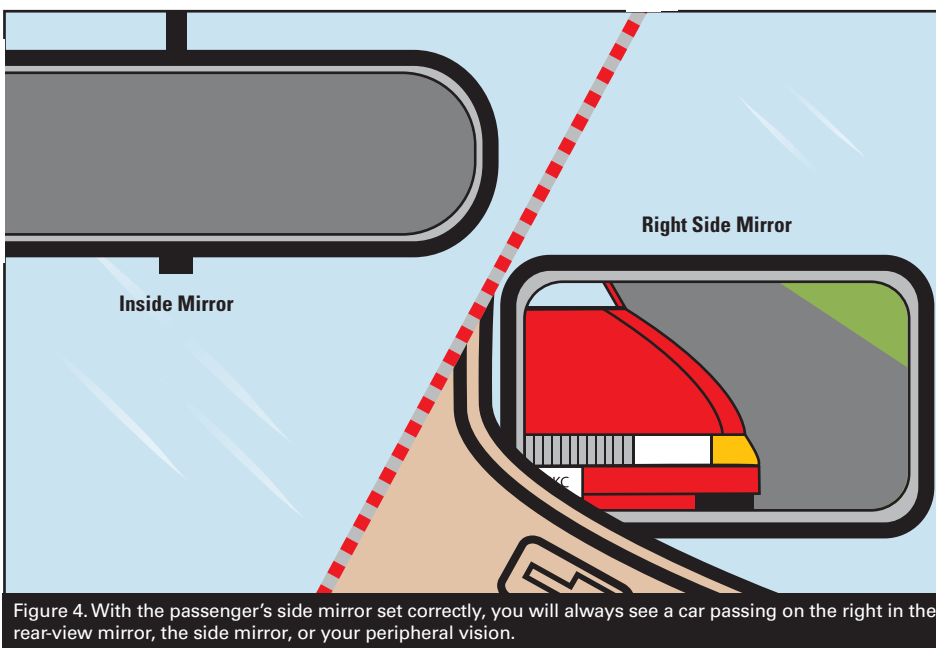
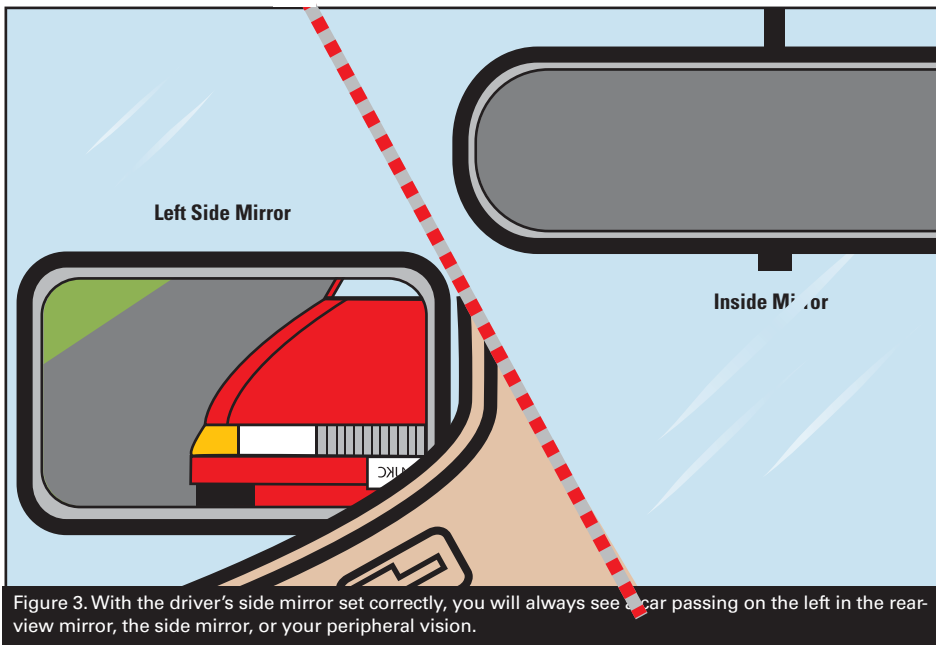
A side benefit of this side mirror setting is that it eliminates glare from passing vehicles' headlights.

You may need to make some slight adjustments. Your side mirror settings are correct if a passing car's front headlight appears in the side mirror just as it is disappearing

from your rear-view mirror. Before the passing car disappears from the side mirror, you should be able to see it approaching in your peripheral vision without turning your head.

These side mirror settings can take some getting used to. You may feel a little disoriented at first. But you'll soon learn to watch approaching vehicles slip from the rear-view mirror into the side-view mirror and then into your peripheral vision.

Figures 3 and 4 illustrate this from the left side mirror and right side mirror, respectively.



Exceptions

These mirror setting suggestions apply primarily to cars but may be useful for pickups and other small trucks. Always check your mirror settings in actual traffic to make sure they are providing maximum visibility.

Even with extra-large side mirrors, drivers of large trucks cannot eliminate their blind spots. A blind spot extends up to 30 feet directly behind large trucks. A blind spot on the right side of the truck is much larger than one on the left. See Figure 5.

When you are traveling behind or passing large trucks, remember that much of the time the driver can't see you. If you can't see the driver's face in the truck's side mirror, the driver can't see you either. Rules of thumb:

- Drive defensively.
- Maintain a significant distance between you and any large truck.
- When passing a large truck, pass on the left if possible and move quickly through the blind spot. ■

