

RUBBER CONTACT

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Fig. A

Ok so you positioned your bus a little close to the curb. So what, they can repaint the curb, heck it needs it anyway. The Wash Team will spray that tire dressing stuff on the tire when they wash it.

Nobody will know the difference, no big deal the tire is still round and it looks good from what I can see?

That is the hidden problem. We have become comfortable in this thought process and it will lead to a tire failure possibly - it may happen at the wrong time.

Do you know how to handle a tire failure at road speed? We need air in the tire to carry the payload. The more air the more weight. We have all seen tires at a tire shop; they are stacked high and even stand on end. With no air inflation a tire will hold its own weight and the wheel it is mounted on.

**If you look at (fig A)
Go ahead do it now.**

You saw a cutaway of a tire case. You can see the steel wire in the case it goes from side to side. This makes up the sidewall strength, which makes the tire case round. The other metal bands you see are the metal ply's that give the tire its load rating.

These strands are intertwined with the metal belts that you see layered. Ok you can look again. This makes up a steel hoop that will be put into a mold, which will have a special rubber compound poured in and then it is cured.

Ok now that you contacted the curb with your 23,000-pound bus. You have just bruised the tire case, which is un-repairable and undetectable.

This is the same as bruising your thigh but the bruise you can see, it will go away a few weeks later but the internal bruise on the tire will not go away.

Under the sidewall rubber the metal strands will break because of the sudden flexing that it was not intended to do. When this happens the metal strands in the sidewall can become frayed or snap, this can allow air to get between the sidewall and the metal strand this is known as blister. A common

phrase you may have heard is separation - this is when the section of metal strands or a metal belt will break which will cause a lump in the tire case sidewall.

If you see this or feel a vibration the tire should be inspected as soon as possible.

You can do serious damage to the tire case and all steering components when you come in contact with a fixed object.

Remember that you cannot see the damage just the scuff mark (*your signature*) on the sidewall. You may not know this but the tire on your bus costs the agency \$280.00 to \$325.00.

The same thing applies to your personal vehicle, except the tire cost.



Side Note:

What I Never want to hear is that you have to hit the curb or run over the curb to make a turn - if you feel this way we need to discuss further training in your vehicle and the turn you feel you must scuff. You should never be rubbing a curb at a school-loading zone. I have found that as you return to the bus yard, generally we all have a tendency to relax more. If you are rubbing the curb coming into the yard or the one going into the bus parking lot you need to realize that you are probably relaxing way to much and need to bring your attention back to driving a 40 foot bus.