

Old Dominion Chapter of the Solid Waste
Association of North America
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BACKING SAFELY



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Discussion Points

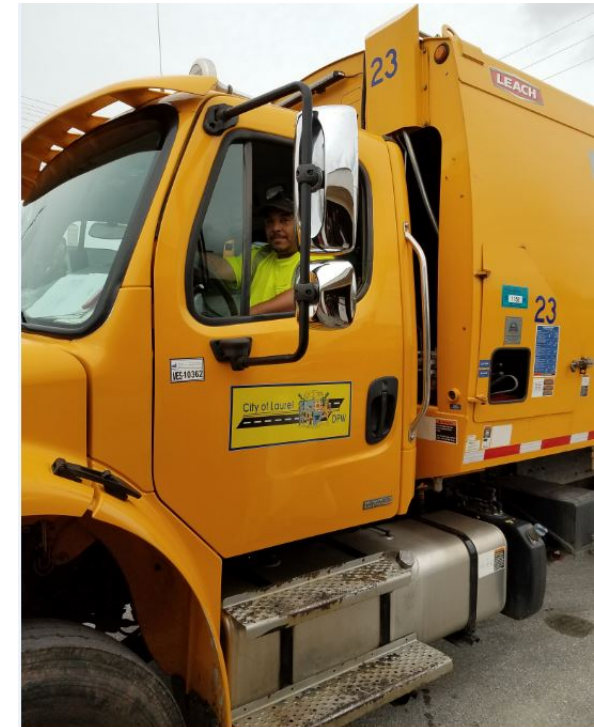
- Introduction
- Statistics
- Technology/Devices- help or hindrance?
- Fender mounted mirrors
- Contributing Factors
- Safe Practices & Tips

Introduction

- Backing up isn't easy:
 - the driver's seat faces forward making it tough to turn & to look and see behind the vehicle... but don't worry, everything gets easier with age.
 - Mirror, back-up cameras & detection systems have limitations and
 - vehicles come with their own built-in blind spots

Introduction – con't

- While we drive thousands of miles going forward, have you ever stopped to consider that most drivers cover less than a mile or two per year in reverse?



Statistics

- Yet approximately 30% of all accidents occur when vehicles are moving in reverse. Based on the high frequency of these accidents and the fact that most backing accidents are preventable, emphasis must be placed on safe backing procedures.



Statistics – con't

- The average cost of vehicle damage per crash is \$7,400
- Non-traffic backing up fatalities out number traffic backing up fatalities 2:1
- Non-traffic backing up fatalities account for 2/3's of all backing up injuries
- The “cost” in dollars of a crash involving a serious injury or a fatality is the tip of the iceberg

Mirrors-what the significance of x2 323

- How much safety is required under NHTSA/Federal Motor Vehicle Safety Standards (FMVSS)?

Answer: T_E B_R_ _INIM_M

- Lack of, or inadequately designed, mirrors (size, shape, configuration)
- Improperly positioned mirrors (mounting locations)

Dashboard Obstructions



Fender Mounted Mirrors

x2 Planar/323



Among the mirror-relevant crashes, note the overrepresentation of crash types in which the truck is moving to the right rather than the left, particularly in lane change/merge (LCM) crashes. LCM right crashes occur 4.4 times more frequently than LCM left crashes

Conversely, reversing & turning to the left poses a proportionally higher risk



?

Fender Mounted Mirrors (con't)

Pro's: The blind spot between the bumper and passenger side door is significantly reduced.

Con's: They're unpopular with most drivers. The views from the two mirrors, backup camera, forward view, spotters, etc. can be a visual overdose

<https://deepblue.lib.umich.edu/bitstream/handle/2027.42/58728/99830.pdf>



Technology

Technology/Device Aids

- Side Object Detection
- Backup cameras & alarms
- Blind Spot Sensors (visual/audio alert)
- Microwave Blind Spot Sensor Systems
- Radar Object Detection Systems

Backup Camera's, Sensors & Alarm's

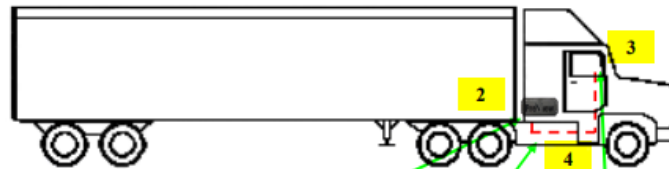


4.6 ★★★★★
Google
Customer Reviews



Blind Spot Side & Rear Sensors

Vehicle shown for reference



SOD5210



SOD510T



DISPLAY



Contact Technical Support with Questions:

Telephone: 844.787.2327
Web: www.PreViewRadar.com



4.6 ★★★★★

4.6 ★★★★★

Accidents & Contributing Factors

Conditions or situations that may contribute to backing accidents include:

- Moving backwards without first looking to be sure that the area behind the vehicle is clear – no one can assume that it's safe to back up.
- Lack of, or inadequately designed, mirrors (size, shape, configuration) Improperly positioned mirrors (mounting locations)

Accidents & Contributing Factors

- Improperly adjusted mirrors (line of sight, minimize blind spots).
- View blocks (signs, shrubs) Turning while backing (body of vehicle or trailer obscures target area).
- Changing conditions, changes in crew.

Accidents & Contributing Factors

- Other conditions or situations that may contribute to backing accidents include:
 - Distractions caused by bystanders, traffic, improper signaling of helper, etc.
 - Low visibility conditions (weather, night, enclosed docks, dimly lit garages)
 - Hard to see physical barriers behind the vehicle (posts, cargo, pallets, etc.)
 - Physical barriers which move behind the vehicle prior to, or during, the backing maneuver

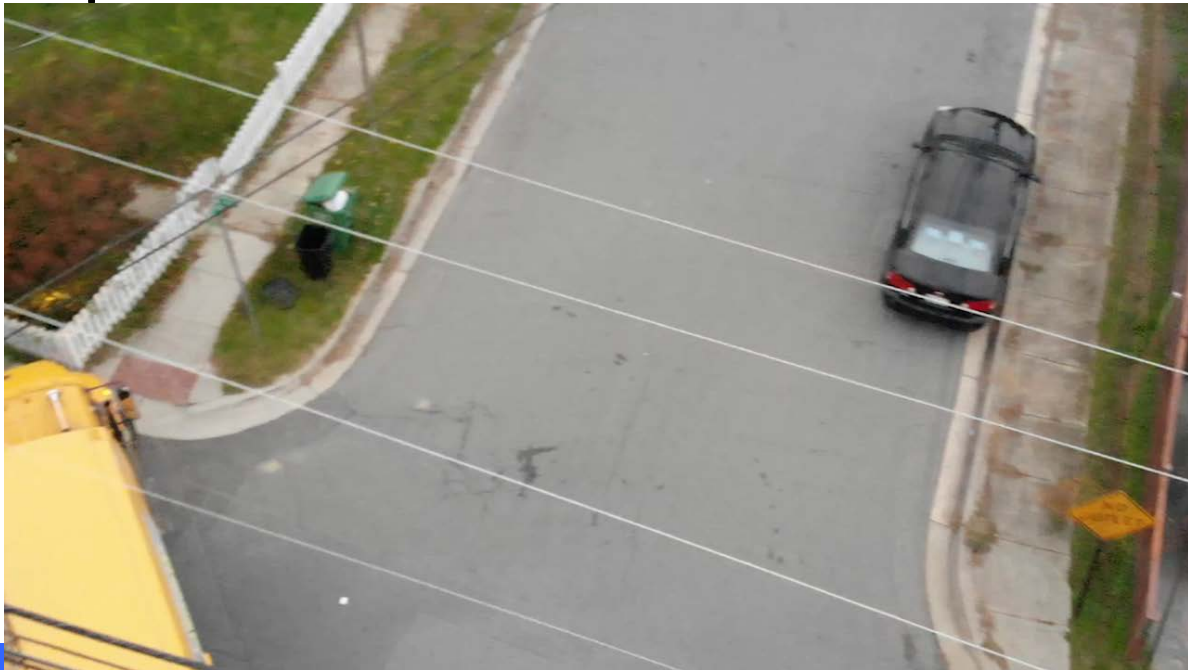
Accidents & Contributing Factors

My top 3:

- Complacency
- Change in process, routine and/or personnel
- Failure to spot

Backing Collisions – Best Practices

- The number one cause of backing accidents is backing up. So...
- Eliminate or minimized backing up each stop or terminal.



Safe Practices & Tips

- You've probably heard many of these tips, but they are worth repeating, since it is possible to "slip into a comfort zone".
- Here are my top 7:
 - Pre-trip Inspections

Safe Practices & Tips

Pre-Trip Inspection



Safe Practices & Tips

- Don't back up unless absolutely necessary.
- Proper planning of routes and proper positioning of the vehicle can reduce the amount of backing that is necessary
- Use spotters as often as possible, when available, feasible & safe use to assist you in backing.

Safe Practices & Tips

- Start up slowly at first to allow other vehicles and pedestrians, who may have unexpectedly approached, to safely move away. After coming to a stop count, count to 3, tap horn and reverse.
- When avoidable don't back into traffic stream.
- In traffic use spotter to prevent other drivers from squeezing through in back of the truck

Thank you!