

# **Safety Techniques for Special Needs Bus Drivers**

Reference Guide and Test Questions

Produced by:  
Video Communications

## **Introduction:**

There is one job that may be even more demanding than being a school bus driver. And that is being a “special needs” bus driver. Special needs bus drivers are required to:

- Familiarize themselves with different types of wheelchairs.
- Understand how to tie down wheelchairs, using a variety of tie downs.
- And how to safely load and unload special needs students.

The guide throughout the video is Amanda Hightman, an assistant supervisor and coordinator of special education transportation.

The goal of the video is to demonstrate and introduce safety techniques while loading and tying down wheelchair students.

## **Safety Equipment and Pre Tripping the Special Needs Bus**

1. All special needs buses should be equipped with fire extinguishers, a seat belt cutter, and proper first aid equipment.
2. Items on the bus that should be checked daily are: Making sure the lift is in good working condition, checking all lights and door latches to make sure they are working properly, and constantly learning and familiarizing yourself with the special needs student’s condition.
3. Special needs bus drivers must understand the importance of the safety equipment on the bus, as well as pre tripping the bus.

## **Part 1: Loading and Unloading Special Needs Students**

### **Placement of the bus**

1. When approaching loading zones, placement of the bus is critical. Stop the bus at a loading zone that is both approved and safe.
2. Be aware of your surroundings when approaching loading zones. Place the bus in a manner where you can safely load and unload the students.

3. The loading zone should be on flat, level ground, without rough surfaces or barriers, and with sufficient space for the lift to unfold and the wheelchair to safely be positioned on the lift.
4. If the lift does not completely reach the ground, do not attempt to load the student. Instead, reposition the bus until the lift lays flat on the ground. Then proceed with the loading procedures.
5. Turn on your blinker when approaching the loading zone to give warning to following vehicles.
6. Once the bus is safely positioned:
  - a) Place the bus in neutral or park
  - b) Set parking brake
  - c) Cancel turn signal
  - d) Engage four way hazards
  - e) Turn off engine and remove key
7. Remove the lift cover. Place it in an area where it will not be an obstruction, or cause a trip or fall during the loading or unloading process.

### Inspection of the Wheelchair

1. Before loading the student onto the lift, inspect the wheelchair and be sure to check the following:
  - a) Brakes are in good condition and are working properly.
  - b) Handlebars are not loose or shakable
  - c) Students shoulder belt is in good working condition
  - d) Students lap belt (should run across pelvic bone)
2. In the video, Amanda makes the point that it is not as safe when transferring a student with a rigid tray on the wheelchair. Amanda asks the parent for assistance in taking the tray off.
3. During inspection of the wheelchair, use this opportunity to talk with the parent to learn more about the student's disabilities.

4. Communication with the parent(s) is key! Give your input to the parent(s) on the safe transportation the student.

### Loading and Unloading

1. The first step before loading the student is to secure the lift door and lower the lift from outside of the bus.

2. Some districts require that the driver ride the lift with the student, while others require the driver to remain on the ground next to the lift.

Follow your district's policies on the operation of the lift, and if you have any questions, bring them up to your supervisor.

3. Always face the wheelchair student away from the bus when loading or unloading them from the lift. And always place the lift belt across the student's chair.

4. Either place or instruct the student to keep arms and legs within the lift area and clear of all moving parts.

### **Riding the Lift**

1. Stand balanced on the lift platform when riding the lift with the student. Have one hand solid on the wheelchair, and use the other hand to operate the lift controls.

### **Not Riding the Lift**

1. When not riding the lift, stand to the side of the lift with one hand solid on the wheelchair while the other hand operates the controls.

2. Keep a solid hand on the wheelchair and never stand under or in front of a lift that is being raised or lowered.

### **Additional Information**

1. Anytime a wheelchair student enters the lift platform on a manual chair, be sure to engage the brakes before raising or lowering the lift.

2. When a motorized wheelchair enters the lift, be sure to power it down before operating the lift.
3. If a student has a motorized chair and can load themselves onto the lift, stand in front of the student and direct them safely onto the lift platform.
4. Once the pupil is positioned on the bus, close the lift door and lock it.
5. Go back inside the bus and immediately replace the lift cover.
6. Follow the same formula for unloading the student as you would when loading them.
7. Never leave the lift unattended, and be sure to secure the lift door whenever the lift is not in use. A lift that is left unattended is a hazard and could potentially cause a trip or fall to passing students.
8. Every little step is important when loading or unloading special needs students. So always stay focused.

## **Part 2 - How to Safely Tie Down a Wheelchair**

1. Here are some important issues to keep in mind when tying down wheelchairs:
  - a) A wheelchair being transported on a school bus must be secured in a way that will guarantee the safety of the student during transport.
  - b) A properly secured wheelchair will not leave the floor of the bus during transportation.
  - c) There are many different types of disabilities to be aware of.
  - d) Familiarize yourself with the student's condition to learn how to approach the child and keep them at ease throughout the loading and tie down process.
  - e) There are many different types of tie downs.
2. Develop a seating plan for your route and the order in which students are loaded and unloaded from the bus.
3. Always face the student forward when tying down a wheelchair. Wheelchairs are believed to be stronger and more stable in a frontal loading position.

4. Only use approved tie downs, and only use one manufacturer's tie down system for each chair. Never mix and match tie downs.
5. Center the wheelchair along the floor track, leaving enough room for the rear strap to be properly secured.
6. Make sure to set the wheelchair's brakes or power off before tying down.
7. Every wheelchair must be secured at 4 points, with 2 tie downs in front and 2 tie downs at the rear.

### **Retractor Tie Down Systems**

1. In the video, Amanda gives a break down on these newer retractor securement systems.
2. Amanda then demonstrates how to secure them to the floor track by pushing down and sliding the anchors until they lock into place.
3. A very important issue concerning these tie downs is shown in the video with the tension adjustment knobs. Amanda explains and demonstrates that with these types of tie downs the adjustment knobs must face outside on the front of the wheelchair, and face inside on the rear of the wheelchair.
4. Many wheelchairs have securement rings intentionally designed for hooking tie downs to them. If available, these rings should be used for the best possible securement.
5. Pay attention to the part of the tie down strap that reads "locked". This part of the strap should be pulled out far enough to be visible. When the word "locked" is showing, it means the strap is locked from being pulled out any further from the floor anchor.
6. Tie down straps should be approximately at a 45 degree angle from the floor anchors to the securement points on the wheelchair.
7. Keep the tie down straps straight. There should not be any twists visible to the tie down straps.

8. Once all four tie downs are in place they can be secured by tightening them with the tension adjustment knobs.
9. Give a little tug on the straps to ensure they are snug from the floor to the chair.
10. To untie the wheelchair, unhook the seat belt straps from the floor anchors, click the red release button to disengage the lock and let the strap run free. Pull up on the anchor and slide it out from the floor track.
11. Although these newer securement systems are believed to be more efficient and safe, it is important to stay focused and pay attention to the little details when using them.

### **Ratchet Style Tie Downs**

1. Ratchet tie down systems are still abundant in school buses today. Many of the securement procedures are similar to that of retractor style tie downs, but with a few differences that are addressed in the video.
2. In the video, Amanda makes the statement; “For the best possible securement, you should secure the front, secure the rear, then go back to the front of the wheelchair and retighten.”
3. Amanda then demonstrates how to secure the wheelchair with these types of tie downs by:
  - a. Sliding the first floor anchor into a locked position.
  - b. Wrapping the other end through the securement ring, and hooking the two metal pieces together.
  - c. Tighten straps by pulling on them, and make sure there are no twists visible to them.
  - d. Repeat the process to the other side on the front of the wheelchair.
  - e. After the front is secured, move to the rear of the wheelchair.

- f. Ratchet style tie downs should always be used in the rear of the wheelchair for the best possible securement.
  - g. Like the front, slide the floor anchor into a locked position.
  - h. Wrap the other side through the securement ring, and attach the two metal pieces together.
  - i. Firmly pull on the excess strap and ratchet back and forth with the ratcheting mechanism until the tie down is snug from the floor to the wheelchair.
  - j. Repeat the same process to the other side on the rear of the wheelchair.
4. Remember, all 4 tie downs should be at approximately a 45 degree angle from the floor anchor to the wheelchair for the best securement.
  5. Once all tie down are in place and secured, give a tug to the wheelchair to make sure it is fully secured to the floor of the bus.
  6. If a wheelchair feels “wobbly” or “tipsy”, go back and readjust the tie downs.

### **Additional Safety Issues**

#### **Back Safety**

1. Back safety is an issue that bus drivers need to be aware of anytime they are loading, unloading, or tying down wheelchair students.
2. Whenever loading or unloading the student, keep your body close to the load, your back straight and your knees slightly bent.
3. When tying down the wheelchair, avoid bending as much as possible and position yourself so you're not overreaching or straining.
4. The video shows Amanda in a squatting position, showing how the pressure is being absorbed by her legs instead of her back. This position helps a bus driver maintain the natural curvature of their spine, reducing the chance of back injury.



## **Store Away Tie Downs**

1. The most common mistake for special needs bus drivers, is leaving the tie downs on the floor. This is a major safety hazard.
2. All special needs school buses should be equipped with tie down storage bags. Anytime a tie down is not secured or being secured, they should be stored away in the appropriate storage bag. This lessens the chance for a trip or fall when loading or unloading students.

## **No Securement Rings on Wheelchair?**

1. If there are no securement rings present on the wheelchair, locate the strongest points of the chair and attach them at that point.
2. It is suggested that the strongest part of the wheelchair's frame is the area where the bars meet and have been welded or bolted together.
3. Do not over tighten the wheelchair. This can cause strain to the frame weakening its overall structure. Wheelchairs can be expensive to replace and is the only means for these students to get around.

## **Manually Operating the Lift**

1. Because there is such a wide variety of bus types, be sure to read the instructions for manually operating the lift for the type of bus you will be operating.
2. The bus in the video has a jack rod located inside of the bus, next to the lift controls.
3. To lower the lift, Amanda inserts the jack rod into the control box and onto the valve stem inside.
4. Amanda demonstrates lowering the lift by slowly turning the jack rod to the left a quarter inch to release the lift and lower it to the ground.
5. Amanda then takes the rod and slides it into the jack lever located above the valve stem.

6. Operate the jack as you would a typical automobile to raise the lift.
7. Pay attention to your back during this process since there is so much repetitive motions associated with it. Keep your back straight, and sit or squat in a comfortable position.

### **Summary**

The video covers how to safely load and unload special needs students. It also covers safety techniques for tying down wheelchairs on the bus using different style tie downs. The video also went over issues dealing with: Back safety, storing tie downs, what to do if there are no securement rings on the wheelchair, and how to operate the lift manually.

But in the end, it is the special needs bus driver that has to apply these safety techniques whenever transporting special needs students. These students rely on your expertise, caring, and judgment. Don't let them down. Continue to do a great job!

## Test Questions

Answer true or false - or circle the correct answer

1. If the lift does not reach the ground when loading or unloading students, it is recommended that you reposition the bus.

True\_\_\_\_\_ False\_\_\_\_\_

2. There is no need to listen to the parents of special needs students about safely transporting their child, because the bus driver already knows everything about transporting them safely.

True\_\_\_\_\_ False\_\_\_\_\_

3. The Wheelchair tie down straps should be at approximately a \_\_\_\_\_ degree angle from the floor anchors to the wheelchair securement point.

- a) 30
- b) 70
- c) 45
- d) none of the above

4. You should run the lift belt across the students chair anytime they enter the lift.

True\_\_\_\_\_ False\_\_\_\_\_

5. It is believed that the \_\_\_\_\_ loading position is the preferred way to tie down a wheelchair.

- a) frontal
- b) side facing
- c) rear facing
- d) none of the above

6. It is okay to use different manufactured tie downs on a single chair.

True\_\_\_\_\_ False\_\_\_\_\_

7. All wheelchairs must be secured at 4 points.

True\_\_\_\_\_ False\_\_\_\_\_

8. With retractor tie downs, the securement adjustment knobs must face inside on the front and outside on the rear of the wheelchair.

True\_\_\_\_\_ False\_\_\_\_\_

9. It is okay to leave tie downs out if they are secured to the floor.

True\_\_\_\_\_ False\_\_\_\_\_

10. Special needs bus drivers should familiarize themselves with the student's condition.

True\_\_\_\_\_ False\_\_\_\_\_

## Answer Key

1. True
2. False
3. c
4. True
5. a
6. False
7. True
8. False
9. False
10. True