SE9: LOADING AND UNLOADING NON-AMBULATORY WHEELCHAIR PASSENGERS

OBJECTIVES

1. To provide instruction to each school bus driver trainee as to the best recommended practices for loading and unloading non-ambulatory wheelchair passengers.
2. To provide training and instruction as to the best recommended practices for working alone or with assistance from a bus aide when loading or unloading non-ambulatory wheelchair passengers.

TOPICS

1. Introduction
2. Proper securement of vehicle while loading or unloading wheelchair passengers.
3. Proper operation of lift.
4. Proper placement and positioning of three-point lap/shoulder restraint system.
5. Proper training for all other equipment used on bus.

1. INTRODUCTION

There are over 2,500 different makes and models of wheelchairs. In addition, students come in all shapes and sizes. Each student has needs unique only unto themselves. Disabilities may range from very mild to very severe and profound. Some students may be both mentally and physically challenged. There may be some physical body distortion that requires an extremely large wheelchair to accommodate that particular student's needs for transportation. To sum it up, wheelchairs and students come in all shapes and sizes – with each student having very individualized needs. However, best recommended practices indicate that there are several essential items that must be on each wheelchair. The required items for both manually and electrically operated wheelchairs are as follows:

1. Safety lap belt (automobile style with male/female interlocking device) in working condition (no Velcro)
2. Working hand brakes for manually operated wheelchairs
3. Electric wheelchairs must have working manual hand brakes or automatic brake activation when wheelchair power is disengaged
4. Properly inflated tires
5. Properly positioned headrests
6. Footrests
7. Anti-tilting devices

NOTE: If the student's medical condition and/or Individual Education Program (IEP) requires additional equipment that is to be used during transport of that student, then said additional equipment is to be used each and every time that student is to be transported on the school bus whether transport is to and from home/school/activities.

Several things need to happen before you actually begin your curbside pick up of any non-ambulatory wheelchair students. Best recommended practices suggest the following:

1. To make a home visit to determine the size of the wheelchair
2. To also determine the proper securement points, if unable to determine, contact your supervisor and/or Safety & Training staff immediately for assistance
3. At all times to have a copy of directions for both AM & PM routes – commonly referred to as a set of "Rights and Lefts" – each AM & PM route directions should indicate complete directions from the bus parking location to the first stop and each subsequent stop thereafter to include the directions to the school(s). Also, the time and location of each stop to be made; the name of the student; the school student attends; and any other pertinent information a sub-driver should know about each student (update as necessary).

4. At all times to have a copy of each student's information sheet and medical card on bus (update as necessary)
5. At all times have a current copy of the "Medical Alert Color Chart" placed in full view on the bulkhead of the bus

At all times to have emergency drop off information for each student indicating the name and phone number of the responsible party; and the address of the emergency drop off location (update as necessary)

Best recommended practices suggest the following criteria to be used when determining the proper securement points on wheelchair:

1. The strongest part of any wheelchair is the mainframe. This the L-shaped portion of the wheelchair.
2. The seat portion of the wheelchair supports the total body weight of the student. This base is usually the strongest part of the wheelchair.
3. Therefore, the bars located directly under the seat should be used (in most cases) as the points of securement.

Electric wheelchairs will sometimes vary. There may be heavy formed plastic covers that do not allow the normal access to the desired points of securement. If you cannot determine the proper points of securement, please be certain to check with your supervisor and/or Safety and Training to determine the proper points of securement before you attempt to transport a student in an electric wheelchair.

2. POSITIONING AND SECURING BUS FOR LOADING WHEELCHAIR PASSENGER

a. Stop bus at curbside at end of driveway with lift door opening at the center of driveway.
b. Put bus gear in neutral.
c. Set parking brake.
d. If you have a bus monitor, driver remains inside bus at the lift platform area waiting to receive student from lift platform.

3. PREPARING LIFT FOR LOADING WHEELCHAIR PASSENGER

a. Bus aide to exit bus and open and secure your lift door(s) to exterior wall of bus.
b. Before operating the lift, make certain the lift area is clear underneath (feet, children, pets, your feet, etc.)
c. Make sure seat belt on lift platform is fastened.
d. Press "up" on control box to raise lift to full upright position.
e. Press "unfold" on control box to open platform.

f. Unfold platform until you hear a **"Bur-r-r-r"** sound, or clicking sound. This sound indicates that the "unfold" cycle is complete. Newer model lifts make little or no noise.

g. Press "down" to lower the lift platform to floor level of the bus. Older model lifts require that you release "down button" to stop the platform. Newer model lifts automatically stop at the floor level when the unfold cycle is complete.

h. Press "down" until platform reaches ground level. Older lift models have manually operated wheel guards; newer models will open automatically.

i. If you have a bus monitor, they will greet student and parent/guardian and place student on lift with his/her body facing outward away from the side of bus.

j. Check to make certain student's lap belt is properly secured.

k. Apply hand brakes (USE GOOD BODY MECHANICS).

l. Inform student you are ready to go "up".

m. Place one hand on armrest of wheelchair and press "up" until platform reaches floor level. Older lift models must be stopped manually; newer lift models will stop automatically.

n. If you have a bus monitor, driver meets students at lift platform opening and will pull wheelchair into bus and place into position to begin the four-point securement process.

o. Bus monitor will raise, fold and secure lift platform.

p. Bus monitor will close and secure lift door.

Bus monitor will re-enter bus through main entry door, close entry door and assist with four-point securement process. This deactivates the 8-way warning system but leaves the 4-way hazards flashing indicating "caution". Students are safe inside the bus while the four-point securement process is being completed.

4. IF NO BUS MONITOR WHEN LOADING WHEELCHAIR PASSENGER:

a. Stop bus at curbside at end of driveway with lift door opening at the center of driveway.

b. Put bus gear in neutral.

c. Set parking brake: Driver to exit bus and open and secure your lift door(s) to exterior wall of bus.

d. Before operating the lift, make certain the lift area is clear underneath (feet, children, pets, your feet, etc.)

e. If applicable, make sure seat belt on lift platform is fastened.

f. Press "up" on control box to raise lift to full upright position.

g. Press “unfold” on control box to open platform. Unfold platform until you hear a **“Bur-r-r-r”** sound, or clicking sound. This sound indicates that the “unfold” cycle is complete. Newer model lifts make little or no noise.

h. Press “down” to lower the lift platform to floor level of the bus. Older model lifts require that you release “down button” to stop the platform. Newer model lifts automatically stop at floor level when the unfold cycle is complete. Press “down” until platform reaches ground level. Older lift models have manually operated wheel guards; newer models will open automatically.

i. Greet student and parent/guardian and place student on lift with his/her body facing outward away from side of bus.

j. Check to make certain student’s lap belt is properly secured.

k. Apply hand brakes (USE GOOD BODY MECHANICS).

l. Inform student you are ready to go “up”. Stand behind wheelchair and press “up” until platform reaches floor level. Older lift models must be stopped manually; newer lift models will stop automatically.

m. Using good body mechanics, unlock wheelchair hand brakes.

n. Pull wheelchair into bus and place in position to begin four-point securement system.

o. Lock wheelchair handbrakes.

p. Apply one rear securement strap.

q. Exit bus.

r. Raise lift platform, fold and secure.

Close lift door and re-enter bus through main entry door. This deactivates the 8-way warning system but leaves the 4-way hazards flashing indicating “caution”. Student is safe inside the bus while the four-point securement process is being completed.

5. POSITIONING OF WHEELCHAIR ON SCHOOL BUS

a. Place wheelchair in Forward Facing (unless otherwise noted in the student’s Individual Education Program (IEP)

b. Center wheelchair between parallel floor-tracking system. (Leave 1 to 2 inches between curve of rear wheel and rear securement buckle when in locked position. This allows room to operate the securement buckle freely).

c. Lock the hand brakes using good body mechanics.

d. Remove lap tray and properly secure.

e. Properly secure any other type of equipment that is to be transported in accordance with the student’s Individual Education Program (IEP)

f. Leave enough room between wheelchairs for you to maneuver (space may be limited due to number of wheelchairs assigned to your bus).

g. Place students name above their designated wheelchair position. Place students in seating order so as to accommodate an emergency evacuation situation should the need arise.

6. ATTACHING THE TWO REAR SECUREMENT STRAPS

a. Position both rear securement strap fittings into the floor tracking 3 to 8 inches from the rear tires of the wheelchair.

b. Loop hook end of each securement strap around mainframe of the wheelchair – Corner of Buttocks.

c. Clip hook into "O" ring of each securement strap.

d. With buckle open, pull each loose strap (tail-end) snug, keeping loose end of strap within the buckle guide.

e. Left and right straps should be hooked at same position on each side of the wheelchair at a minimum of 45 to maximum 90 degree angle with no twist in the belts and evenly distributed pressure.

Caution: Over-tightening may cause damage to wheelchairs. Also too much tension may cause the handle to snap forward. Hold buckle firmly and carefully rotate up to release tension. Re-lock buckle.

7. ATTACHING THE TWO FRONT SECUREMENT STRAPS

a. Position both front securement strap fittings in the floor tracking 3 to 8 inches from the front tires on the wheelchair.

b. Loop hook end of each securement strap around mainframe of the wheelchair— Bend or Fold of Knee.

c. Clip hook into "O" ring of each securement strap.

d. With buckle open, pull each loose strap (tail end) snug, keeping loose end of strap within the buckle guide.

e. Left and right straps should be hooked at the same position one each side of the wheelchair at a minimum of 45 to 90 maximum degree angle with no twist in the belts and evenly distributed pressure.

Caution: Over-tightening may cause damage to wheelchairs. Also too much tension may cause the handle to snap forward. Hold buckle firmly and carefully rotate up to release tension. Re-lock buckle.

8. ATTACHING THE LAP BELT

a. Lap belt track fitting should be secured to the floor track fitting at the rear of the wheelchair.

b. Female receiver should be placed to the inside aisle of the bus.

c. Male connector should be placed to the wall-side of the bus.

d. Advise student that you are bringing lap belt through armrest across student's bony pelvic area.

e. Fasten and pull strap to take up the slack. Do not over tighten lap belt.

NOTE: If not possible to actually bring lap belt across student's bony pelvic area, bring lap belt across top of armrest and fasten.

9. ATTACHING SHOULDER BELT

a. Shoulder belt track fitting should be placed in the appropriate level on wall mounted tracking with the release button facing the front of the bus. This keeps Velcro away from student's body.

b. Advise student you are bringing shoulder belt over the shoulder and all the way across the chest of the student.

c. Make certain the shoulder belt fastener is in the correct position (Smooth "L"). Attach fastener to the lap belt button and adjust for tightness.

d. To check for proper tightness of shoulder belt, three fingers placed together at an angle should fit between the shoulder belt and the student's body.

e. Shoulder belt position should not interfere with any medical equipment on student. Use shirt or jacket collar to aid in more comfortable use of shoulder belt.