L	

## **CDL REQUIREMENTS**

# **INITIAL ISSUANCE:**

- Xæláða Áj áð Ač ¦ ^ Ás lág ^ ¦ (q Áj áð A ) ^
- Supplemental Application Form (DPSMV 2211) . Enclosure A
- Ô´; \^ dÊ\$8[{]|^c^AÚ@• a8aqÁÒ¢aq(a) aeaq() ÁQÖÚÙT XÁGOFJDÁ(; Ásacq Á° ăçaq^) c
- Proof of liability insurance on personally owned vehicle/s
- Proof of Social Security number
- Application fee is \$15 (cash only) due at the time of application
- Upon passing required test/sÊæ;] |ãæ; oá, ã|Áà^Áã• ^ ^åÁæÂ €ÁåæÂ/Űæ; ^¦qÁ permit.
- Applicant is required to make an appointment with a CDL Third Party Examiner for administration of the skills test (pre-trip inspection, basic controls and road driving). A list of CDL Third Party Exama ^!q Áa Á available at any Office of Motor Vehicles location.
- Upon successful completion of the skills test, the Examiner will issue a Certificate of Successful Completion and place it in a sealed envelope to be presented to the CDL office for issuance. Tampering with this envelope may result in invalidation of your test.

# **CDL RENEWALS:**

- ÔÖŠÁå¦ãç^¦q•Áã&^}•^
- Ô´;;^} dÊÁ &[{]|^c^Á Ú@•ã&æþÁ Ò¢æ{ ¾ ææ¼}} Á ÇÖÚÙT XÁ GOFJ DÁ [; Á ãæþÁ equivalent
- Proof of liability insurance on personally owned vehicle/s
- Testing is required for renewal of Hazardous Materials endorsement. Hazmat testing is only conducted at a full-service CDL issuing office.
- Fingerprint background check must be within most recent 180 days.

# Fees (Cash only):

- Application fee (initial and renewal) \$15.00
- CDL å¦ãç^¦q Áãx^} ^Á^^ \$41.00 (\$51.00 for Orleans parish)
- Endorsements \$5.00 each
- Parish fee (if applicable) up to \$3.00

# **Questions:**

1-225-925-6146 or www.expresslane.org

# Section 1 INTRODUCTION

#### **This Section Covers**

- Commercial Driver License Tests
- Driver Disqualifications
- Other Safety Rules

There is a federal requirement that each state have minimum standards for the licensing of commercial drivers.

This manual provides driver license testing information for drivers who wish to have a commercial driver license (CDL). This manual does NOT provide information on all the federal and state requirements needed before you can drive a commercial motor vehicle (CMV). You may have to contact your state driver licensing authority for additional information.

#### You must have a CDL to operate:

Any single vehicle with a gross vehicle weight rating (GVWR) of 26,001 pounds or more.

A combination vehicle with a gross combination weight rating of 26,001 or more pounds, if the trailer(s) has a GVWR of 10,001 or more pounds.

A vehicle designed to transport 16 or more passengers (including the driver).

Any size vehicle which requires hazardous mater BT/F1 14(n)-212le designed to transport 12 d3ysr9&ndesigned to tue4(2 ec(ge)4(TJag0 1 82.8nt&MCIr TmID 3xr)-

1.1 - Commercial Driver License Tests

1.1.1

## 1.2 - CDL Disqualifications

#### 1.2.1 General

You may not drive a commercial motor vehicle if you are disqualified for any reason.

# 1.2.2 Alcohol, Leaving the Scene of an Accident, and Commission of a Felony

It is illegal to operate a CMV if your blood alcohol concentration (BAC) is .04% or more. If you operate a CMV, you shall be deemed to have given your consent to alcohol testing.

You will lose your CDL for at least one year for a first offense for:

Driving a CMV if your blood alcohol concentration is .04% or higher.

Driving a CMV under the influence of alcohol.

Refusing to undergo blood alcohol testing.

Driving a CMV while under the influence of a controlled substance.

Leaving the scene of an accident involving a CMV.

Committing a felony involving the use of a CMV.

For all drivers failing to have sufficient space to drive completely through the crossing without stopping.

For all drivers failing to obey a traffic control device or the directions of an enforcement official at the crossing.

For all drivers failing to negotiate a crossing because of insufficient undercarriage clearance.

# 1.2.6 Hazardous Materials Endorsement Background Check and Disqualifications

If you require a hazardous materials endorsement you will be required to submit your fingerprints and be subject to a background check.

You will be denied or you will lose your hazardous materials endorsement if you:

All states are connected to one computerized system to share information about CDL drivers. The states will check on drivers' accident records to be sure that drivers do not have more than one CDL.

# Section 2 DRIVING SAFELY

## **This Section Covers**

- Vehicle Inspection
- Basic Control of Your Vehicle
- Shifting Gears
- Seeing
- Communicating
- Space Management
- Controlling Your Speed
- Seeing Hazards
- Distracted Driving
- Aggressive Drivers/Road Rage
- Night Driving
- Driving in Fog



Figure 2.3



Figure 2.4

**Exhaust System Defects.** A broken exhaust system can let poison fumes into the cab or sleeper berth. Look for:

Loose, broken, or missing exhaust pipes, mufflers, tailpipes, or vertical stacks.

Loose, broken, or missing mounting brackets, clamps, bolts, or nuts.

Exhaust system parts rubbing against fuel system parts, tires, or other moving parts of vehicle.

Exhaust system parts that are leaking.

**Emergency Equipment.** Vehicles must be equipped with emergency equipment. Look for:

Fire extinguisher(s).

Spare electrical fuses (unless equipped with circuit breakers).

Warning devices for parked vehicles (for example, three reflective warning triangles or 6 fusees or 3 liquid burning flares).

**Cargo (Trucks).** You must make sure the truck is not overloaded and the cargo is balanced and secured before each trip. If the cargo contains hazardous materials, you must inspect for proper papers and placarding.

#### 2.1.4 CDL Pre-trip Vehicle Inspection Test

In order to obtain a CDL you will be required to pass a pre-trip vehicle inspection test. You will be tested to see if you know whether your vehicle is safe to drive. You will be asked to do a pre-trip inspection of your vehicle and explain to the examiner what you would inspect and why. The following seven-step inspection method should be useful.

#### 2.1.5 Seven-step Inspection Method

**Method of Inspection.** You should do a pre-trip inspection the same way each time so you will learn all the steps and be less likely to forget something.

Approaching the Vehicle. Notice general condition. Look for damage or vehicle leaning to one side. Look under the vehicle for fresh oil, coolant, grease, or fuel leaks. Check the area around the vehicle for hazards to vehicle movement (people, other vehicles, objects, low-hanging wires, limbs, etc.).

#### **Vehicle Inspection Guide**

#### **Step 1: Vehicle Overview**

Review Last Vehicle Inspection Report. Drivers may have to make a vehicle inspection report in writing each day. The motor carrier must repair any items in the report that affect safety and certify on the report that repairs were made or were unnecessary. You must sign the report only if defects were noted and certified to be repaired or not needed to be repaired.

#### **Step 2: Check Engine Compartment**

Check That the Parking Brakes Are On and/or Wheels Chocked.

You may have to raise the hood, tilt the cab

- · Box has secure cover.
- Battery(ies) secured against movement.
- Battery(ies) not broken or leaking.
- Fluid in battery(ies) at proper level (except maintenance-free type).
- Cell caps present and securely tightened (except maintenance-free type).
- Vents in cell caps free of foreign material (except maintenance-free type).

#### Step 6: Check Signal Lights

#### Get In and Turn Off Lights

Turn off all lights.

Turn on stop lights (apply trailer hand brake or have a helper put on the brake pedal).

Turn on left turn signal lights.

#### **Get Out and Check Lights**

Left front turn signal light clean, operating and proper color (amber or white on signals facing the front).

Left rear turn signal light and both stop lights clean, operating, and proper color (red, yellow, or amber).

#### **Get In Vehicle**

Turn off lights not needed for driving.

Check for all required papers, trip manifests, permits, etc.

Secure all loose articles in cab (they might interfere with operation of the controls or hit you in a crash).

Start the engine.

#### Step 7: Start the Engine and Check

Test for Hydraulic Leaks. If the vehicle has hydraulic brakes, pump the brake pedal three times. Then apply firm pressure to the pedal and hold for five seconds. The pedal should not move. If it does, there may be a leak or other problem. Get it fixed before driving. If the vehicle has air brakes, do the checks described in Sections 5 and 6 of this manual.

#### **Brake System**

#### Test Parking Brake(s)

Fasten safety belt

Set parking brake (power unit only).

Release trailer parking brake (if applicable).

Place vehicle into a low gear.

Gently pull forward against parking brake to make sure the parking brake holds.

Repeat the same steps for the trailer with trailer parking brake set and power unit parking brakes released (if applicable).

If it doesn't hold vehicle, it is faulty; get it fixed.

#### **Test Service Brake Stopping Action**

Go about five miles per hour.

Push brake pedal firmly

"Pulling" to one side or the other can mean brake trouble.

Any unusual brake pedal "feel" or delayed stopping action can mean trouble.

If you find anything unsafe during the pre-trip inspection, get it fixed. Federal and state laws forbid operating an unsafe vehicle.

#### 2.1.6 Inspection During a Trip

**Check Vehicle Operation Regularly** 

# Subsection 2.1 Test Your Knowledge

The vehicle inspection report tells the motor carrier about problems that may need fixing. Keep a copy of your report in the vehicle for one day. That way, the next driver can learn about any problems you have found.

- 1. What is the most important reason for doing a vehicle inspection?
- 2. What things should you check during a trip?
- 3. Name some key steering system parts.
- 4. Name some suspension system defects.
- 5. What three kinds of emergency equipment

position will depend on the type of backing to be done.

Look at Your Path. Look at your line of travel before you begin. Get out and walk around the vehicle. Check your clearance to the sides and overhead, in and near the path your vehicle will take.

**Use Mirrors on Both Sides.** Check the outside mirrors on both sides frequently. Get out of the vehicle and check your path if you are unsure.

**Back Slowly.** Always back as slowly as possible. Use the lowest reverse gear. That way you can more easily correct any steering errors. You also can stop quickly if necessary.

When putting out the triangles, hold them between yourself and the oncoming traffic for your own safety. (So other drivers can see you.)

**Use Your Horn When Needed.** Your horn can let others know you're there. It can help to avoid a crash. Use your horn when needed. However, it can startle others and could be dangerous when used unnecessarily.

#### 2.6 – Controlling Speed

Driving too fast is a major cause of fatal crashes. You must adjust your speed depending on driving conditions. These include traction, curves, visibility, traffic and hills.

#### 2.6.1 Stopping Distance

Perception Distance + Reaction Distance + Braking Distance = Total Stopping Distance

**Perception distance.** The distance your vehicle travels, in ideal conditions; from the time your eyes see a hazard until your brain recognizes it. Keep in mind certain mental and physical conditions can affect your perception distance. It can be affected greatly depending on visibility and the hazard itself. The average perception time for an alert driver is 1¾ seconds. At 55 mph this accounts for 142 feet traveled.

**Reaction distance**. The distance you will continue to travel, in ideal conditions; before you physically hit the brakes, in response to a hazard seen ahead. The average driver has a reaction time of <sup>3</sup>/<sub>4</sub> second to 1 second. At 55 mph this accounts for 61 feet traveled.

**Braking distance**. The distance your vehicle will travel, in ideal conditions; while you are braking. At 55 mph on dry pavement with good brakes, it can take about 216 feet.

**Total stopping distance**. The total minimum distance your vehicle has traveled, in ideal conditions; with everything considered, including perception distance, reaction distance and braking distance, until you can bring your vehicle to a complete stop. At 55 mph, your vehicle will travel a minimum of 419 feet. See Figure 2.11.

#### Figure 2.11

#### The Effect of Speed on Stopping Distance.

The faster you drive, the greater the impact or striking power of your vehicle. When you double your speed from 20 to 40 mph the impact is 4 times greater. The braking distance is also 4 times longer. Triple the speed from 20 to 60 mph and the impact and braking distance is 9 times greater. At 60 mph, your stopping distance is greater than the length of a football field. Increase the speed to 80 mph and the impact and braking distance are 16 times greater than at 20 mph. High speeds greatly increase the severity of crashes and stopping distances. By slowing down, you can reduce braking distance.

The Effect of Vehicle Weight on Stopping Distance. The heavier the vehicle, the more work the brakes must do to stop it, and the more heat they absorb. But the brakes, tires, springs, and shock absorbers on heavy vehicles are designed to work best when the vehicle is fully loaded. Empty trucks require greater stopping distances because an empty vehicle has less traction.

# 2.6.2 Matching Speed to the Road Surface

You can't steer or brake a vehicle unless you have traction. Traction is friction between the tires and the road. There are some road conditions that reduce traction and call for lower speeds.

**Slippery Surfaces.** It will take longer to stop, and it will be harder to turn without skidding, when the road is slippery. Wet roads can double stopping distance. You must drive slower to be able to stop in the same distance as on a dry road. Reduce

about 35 mph) on a wet road. On packed snow, reduce speed by a half, or more. If the surface is icy, reduce speed to a crawl and stop driving as soon as you can safely do so.

**Identifying Slippery Surfaces.** Sometimes it's hard to know if the road is slippery. Here are some signs of slippery roads:

**Shaded Areas**. Shady parts of the road will remain icy and slippery long after open areas have melted.

**Bridges.** When the temperature drops, bridges will freeze before the road will. Be especially careful when the temperature is close to 32 degrees Fahrenheit.

**Melting Ice**. Slight melting will make ice wet. Wet ice is much more slippery than ice that is not wet.

**Black Ice** 

#### 2.6.6 Speed on Downgrades

Your vehicle's speed will increase on downgrades because of gravity. Your most important objective is to select and maintain a speed that is not too fast for the:

Total weight of the vehicle and cargo.

Length of the grade.

Steepness of the grade.

Road conditions.

Weather.

If a speed limit is posted, or there is a sign indicating "Maximum Safe Speed," never exceed the speed shown. Also, look for and heed warning signs indicating the length and steepness of the grade. You must use the braking effect of the engine as the principal way of controlling your speed on downgrades. The braking effect of the engine is greatest when it is near the governed rpms and the transmission is in the lower gears. Save your brakes so you will be able to slow or stop as required by road and traffic conditions. Shift your transmission to a low gear before starting down the grade and use the proper braking techniques. Please read carefully the section on going down long, steep downgrades safely in "Mountain Driving."

#### 2.6.7 Roadway Work Zones

Speeding traffic is the number one cause of injury and death in roadway work zones. Observe the posted speed limits at all times when approaching and driving through a work zone. Watch your •] ^^å[ { ^¢\! Exp} åÅå[ } ¢\/allow your speed to creep up as you drive through long sections of road construction. Decrease your speed for adverse weather or road conditions. Decrease your speed even further when a worker is close to the roadway.

## Subsections 2.4, 2.5, and 2.6 Test Your Knowledge

- 1. How far ahead does the manual say you should look?
- What are two main things to look for ahead?

3.

To know how much space you have, wait until the vehicle ahead passes a shadow on the road, a pavement marking, or some other clear landmark. Then count off the seconds like this: "one thousand- and-one, one thousand-and-two" and so on, until you reach the same spot. Compare your count with the rule of one second for every ten feet of length.

If you are driving a 40-foot truck and only counted up to 2 seconds, you're too close. Drop back a little and count again until you have 4 seconds of following distance (or 5 seconds, if you're going over 40 mph). After a little practice, you will know how far back you should be. Remember to add 1 second for speeds above 40 mph. Also remember that when the road is slippery, you need much more space to stop.

**Stay to the Right.** Heavy vehicles are often tailgated when they can't keep up with the speed of traffic. This often happens when you're going uphill. If a heavy load is slowing you down, stay in the right lane if you can. Going uphill, you should not pass another slow vehicle unless you can get around quickly and safely.

**Dealing with Tailgaters Safely.** In a large vehicle, it's often hard to see whether a vehicle is close behind you. You may be tailgated:

When you are traveling slowly. Drivers trapped behind slow vehicles often follow closely.

In bad weather. Many car drivers follow large vehicles closely during bad weather, especially when it is hard to see the road ahead.on, sw how r(er.12Ma)

Figure 2.12

#### 2.7.2 Space Behind

You can't stop others from following you too closely. But there are things you can do to make it safer.

Find an open spot where you aren't near other traffic. When traffic is heavy, it may be hard to find an open spot. If you must travel near other vehicles, try to keep as much space as possible between you and them. Also, drop back or pull forward so that you are sure the other driver can see you.

**Strong Winds.** Strong winds make it difficult to stay in your lane. The problem is usually worse for lighter vehicles. This problem can be especially bad coming out of tunnels. Don't drive alongside others if you can avoid it.

Drivers on your left can be more readily seen. See Figure 2.14.

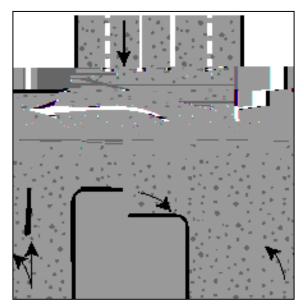


Figure 2.14

# 2.7.7 Space Needed to Cross or Enter Traffic

Be aware of the size and weight of your vehicle when you cross or enter traffic. Here are some important things to keep in mind.

Because of slow acceleration and the space large vehicles require, you may need a much larger gap to enter traffic than you would in a car.

Acceleration varies with the load. Allow more room if your vehicle is heavily loaded.

Before you start across a road, make sure you can get all the way across before traffic reaches you.

## 2.8 – Seeing Hazards

## 2.8.1 Importance of Seeing Hazards

What Is a Hazard? A hazard is any road condition or other road user (driver, bicyclist, pedestrian) that is a possible 8anr424 299.9w/meefoaceofrmc(oa)x(ce)1(of)rm

looking at street signs, maps, and house numbers. These drivers may not be paying attention to you.

**Slow Drivers.** Motorists who fail to maintain normal speed are hazards. Seeing slow moving vehicles early can prevent a crash. Some vehicles, by their nature, are slow and seeing them is a hazard clue (mopeds, farm machinery, construction machinery, tractors, etc.). Some of these will have the "slow moving vehicle" symbol to warn you. This is a red triangle with an orange center. Watch for it.

Drivers Signaling a Turn May Be a Hazard. Drivers signaling a turn may slow more than expected or stop. If they are making a tight turn into an alley or driveway, they may go very slowly. If pedestrians or other vehicles block them, they may have to stop on the roadway. Vehicles turning left may have to stop for oncoming vehicles.

**Drivers in a Hurry.** Drivers may feel your commercial vehicle is preventing them from getting where they want to go on time. Such drivers may pass you without a safe gap in the oncoming traffic, cutting too close in front of you. Drivers entering the road may pull in front of you in order to avoid being stuck behind you, causing you to brake. Be aware of this and watch for drivers who are in a hurry.

**Impaired Drivers.** Drivers who are sleepy, have had too much to drink, are on drugs, or who are ill are hazards. Some clues to these drivers are:

Weaving across the road or drifting from one side to another.

Leaving the road (dropping right wheels onto the shoulder, or bumping across a curb in a turn).

Stopping at the wrong time (stopping at a green m-57(t)

#### 2.9 - Distracted Driving

Whenever you are driving a vehicle and your asc? of factor of fact

Activities that can distract your attention include: talking to passengers; adjusting the radio, CD player or climate controls; eating, drinking or smoking; reading maps or other literature; picking up something that fell; reading billboards and other road advertisements; watching other people and vehicles including aggressive drivers; talking on a cell phone or CB radio; using telematic devices (such as navigation systems, pagers, etc.); daydreaming or being occupied with other mental distractions.

#### 2.9.1

ices

If drivers react a half-second slower because of distractions, crashes double. Some tips to follow so ^[ `Á, [ } op\a^8 [ { ^\hat{a} d \alpha c' \alpha K

Review and be totally familiar with all safety and usage features on any in-vehicle electronics, including your wireless or cell phone, before you drive.

Pre-program radio stations.

Pre-load you favorite CDs or cassette tapes.

Clear the vehicle of any unnecessary objects.

Review maps and plan your route before you begin driving.

Adjust all mirrors for best all-round visibility before you start your trip.

Avoid smoking, eating and drinking while you drive.

 $\ddot{O}[\ ] \phi^{A} \ * \not = ^{A} \dot{A} \dot{A} \ ( \ ] \ |^{c} \dot{A} \ | \dot{A} \ = \dot$ 

# 2.9.2 Use In-vehicle Communication Equipment Cautiously

When possible, pull off the road in a safe, legal place when making/receiving a call on communication equipment.

If possible, turn the cell phone off until your destination is reached.

Position the cell phone within easy reach.

Pre-

Be very careful when passing a driver who seems to be distracted. The other driver may not be aware of your presence, and they may drift in front of you.

# 2.10 - Aggressive Drivers/Road Rage

2.10.1

You are at greater risk when you drive at night. Drivers can't see hazards as quickly as in daylight, so they have less time to respond. Drivers caught by surprise are less able to avoid a crash. The problems of night driving involve the driver, the roadway, and the vehicle.

#### 2.11.2 Driver Factors

**Vision.** People can't see as sharply at night or in dim light. Also, their eyes need time to adjust to seeing in dim light. Most people have noticed this when walking into a dark movie theater.

Glare. Drivers can be blinded for a short time by bright light. It takes time to recover from this blindness. Older drivers are especially bothered by glare. Most people have been temporarily blinded by camera flash units or by the high beams of an oncoming vehicle. It can take several seconds to recover from glare. Even two seconds of glare blindness can be dangerous. A vehicle going 55 mph will travel more than half the distance of a football field during that time. Don't look directly at bright lights when driving. Look at the right side of the road. Watch the sidelines when someone coming toward you has very bright lights on.

Fatigue and Lack of Alertness. Fatigue (being

Windshield and Mirrors. It is more important at night than in the daytime to have a clean windshield and clean mirrors. Bright lights at night can cause dirt on your windshield or mirrors to create a glare of its own, blocking your view. Most people have experienced driving toward the sun just as it has risen or is about to set, and found that they can barely see through a windshield that seemed to look OK in the middle of the day. Clean your windshield on the inside and outside for safe driving at night.

## 2.11.5 Night Driving Procedures

**Pre-trip Procedures.** Make sure you are rested and alert. If you are drowsy, sleep before you drive! Even a nap can save your life or the lives of others. If you wear eyeglasses, make sure they are clean and unscratched. Don't wear sunglasses at night. Do a complete pre

Defrosting and Heating Equipment. Make sure the defrosters work. They are needed for safe driving. Make sure the heater is working, and that you know how to operate it. If you use other heaters and expect to need them (e.g., mirror heaters, battery box heaters, fuel tank heaters), check their operation.

Wipers and Washers. Make sure the windshield wiper blades are in good condition. Make sure the wiper blades press against the window hard enough to wipe the windshield clean, otherwise

Avoid driving through deep puddles or flowing water if possible. If not, you should:

Slow down and place transmission in a low gear.

Gently put on the brakes. This presses linings against brake drums or discs and keeps mud, silt, sand, and water from getting in.

Increase engine rpm and cross the water while keeping light pressure on the brakes.

When out of the water, maintain light pressure on the brakes for a short distance to heat them up and dry them out.

Make a test stop when safe to do so. Check behind to make sure no one is following, then apply the brakes to be sure they work well. If not, dry them out further as described above. (CAUTION: Do not apply too much brake pressure and accelerator at the same time, or you can overheat brake drums and linings.)

## 2.14 – Driving in Very Hot Weather

#### 2.14.1 Vehicle Checks

Do a normal pre-trip inspection, but pay special attention to the following items.

**Tires.** Check the tire mounting and air pressure. Inspect the tires every two hours or every 100 miles when driving in very hot weather. Air pressure increases with temperature. Do not let air out or the pressure will be too low when the tires

#### 2.14.3 Sharing the Road

Bicycling is a healthy form of recreation for many people, while for others it is an important form of transportation. Bicycles have the same rights to use public roads as automobiles and must follow the same traffic laws as other vehicles.

Many drivers find it hard to know how to react to bicyclists riding in the street. For the safety of both drivers and bicyclists the following precautions should be taken while driving and bicycling.

#### Approaching and passing bicyclists:

Increase following distances behind bicyclists because bicycle-stopping distances are shorter than automobiles.

Be aware that bicyclists not traveling in the extreme right of the lane may be trying to avoid gravel, debris, bad pavement, sewer grates and other obstacles.

Be cautious of bicyclists moving legally into the center of the lane because of road hazards or into the left lane because of a left turn.

Avoid passing between a bicyclist and an oncoming vehicle on a two-way roadway. Slow down and allow oncoming vehicles to pass. Then move to the left to allow plenty of room to pass the bicyclist safely.

A three foot distance must be present between the passing vehicle and slower traveling bicyclists.

Give bicyclists the entire lane when they are passing parked cars. They need the space to avoid opening doors.

Use caution when passing bicyclists because the air current created by a passing vehicles may cause bicyclists to have an accident.

If you are pulling a trailer, allow for extra passing room when passing bicyclists.

Extra caution should be used when motorist are near bicyclists in wet, windy, or icy weather.

#### **Turning near bicyclists:**

Drivers who are turning left must wait until oncoming bicyclists pass. Accidents occur when turning drivers do not notice the bicyclists in the flow of traffic or misjudge their speed.

Do not swing in front of a bicyclist to make a right turn. Making a right turn after overtaking a bicyclist is also a cause of accidents. Drivers should slow down and stay behind the bicyclist, or LOOK ONCE, THEN AGAIN. MAKE SURE YOU SEE THE BICYCLE AND KNOW ITS SPEED BEFORE YOU TURN.

Speeds of bicycles are hard to judge; they can vary from under 10 mph to over 35 mph. Good communication and eye contact between auto drivers and bicyclists are needed to prevent accidents.

#### Watch for bicyclists and use caution in hazardous conditions:

When opening your vehicle door into traffic, look first for bicyclists.

Railroad crossings can cause bicyclists to slow down and possible zigzag in order to cross the tracks.

Metal or grated surfaces may cause a bicycle to be less stable than any other type of vehicle. Bicyclists should slow down and move to the center of the lane to allow room for handling the uneven surface. Drivers should be prepared for the reaction of a bicyclist who is less experienced and may swerve to correct for the

new s(or111( s)] TJETBT1 c)-17(y)15207192.86 370.61 Tm

#### Subsections 2.11, 2.12, 2.13, and 2.14 Test Your Knowledge

- You should use low beams whenever you can. True or False?
- 2. What should you do before you drive if you are drowsy?
- 3. What effects can wet brakes cause? How can you avoid these problems?
- 4. You should let air out of hot tires so the pressure goes back to normal. True or False?
- 5. You can safely remove the radiator cap as long as the engine isn't overheated. True or False?

V@•^Áˇ^•al}•Á(æÁà^Á[}ÁœÁc•dŽQÁ[ˇÁ&æ) qÁ answer all of them, re-read subsections 2.11, 2.12, 2.13, and 2.14.

#### 2.15 - Railroad-highway Crossings

Railroad-highway grade crossings are a special kind of intersection where the roadway crosses train tracks. These crossings are always dangerous. Every such crossing must be approached with the expectation that a train is coming.

#### 2.15.1 Types of Crossings

Passive Crossings. This type of crossing does not have any type of traffic control device. The decision to stop or proceed rests entirely in your hands. Passive crossings require you to recognize the crossing, search for any train using the tracks and decide if there is sufficient clear space to cross safely. Passive crossings have yellow circular advance warning signs, pavement markings and crossbucks to assist you in recognizing a crossing.

**Active Crossings.** This type of crossing has a traffic control device installed at the crossing to regulate traffic at the crossing. These active

#### 2.15.4 Stopping Safely at Railroadhighway Crossings

A full stop is required at grade crossings whenever:

The nature of the cargo makes a stop mandatory under state or federal regulations.

Such a stop is otherwise required by law.

When stopping be sure to:

Check for traffic behind you while stopping gradually. Use a pullout lane, if available.

Turn on your four-way emergency flashers.

#### 2.15.5 Crossing the Tracks

Railroad crossings with steep approaches can cause your unit to hang up on the tracks.

Never permit traffic conditions to trap you in a position where you have to stop on the tracks. Be sure you can get all the way across the tracks before you start across. It takes a typical tractor-trailer unit at least 14 seconds to clear a single track and more than 15 seconds to clear a double track.

Do not shift gears while crossing railroad tracks.

#### 2.15.6

have low friction parts and streamlined shapes for fuel economy. They may also have more powerful engines. This means they can go up hills in higher gears and have less friction and air drag to hold them back going down hills. For that reason, drivers of modern trucks may have to use lower gears going down a hill than would be required to go up the hill. You should know what is right for your vehicle.

#### 2.16.3 Brake Fading or Failure

Brakes are designed so brake shoes or pads rub against the brake drum or disks to slow the vehicle. Braking creates heat, but brakes are designed to take a lot of heat. However, brakes can fade or fail from excessive heat caused by using them too much and not relying on the engine braking effect.

Brake fade is also affected by adjustment. To safely control a vehicle, every brake must do its share of the work. Brakes out of adjustment will stop doing their share before those that are in adjustment. The other brakes can then overheat

Keep Both Hands on the Steering Wheel. In order to turn quickly, you must have a firm grip on the steering wheel with both hands. The best way to have both hands on the wheel, if there is an emergency, is to keep them there all the time.

**How to Turn Quickly and Safely.** A quick turn can be made safely, if it's done the right way. Here are some points that safe drivers use:

Do not apply the brake while you are turning. It's very easy to lock your wheels while turning. If that happens, you may skid out of control.

Do not turn any more than needed to clear whatever is in your way. The more sharply you turn, the greater the chances of a skid or rollover.

Be prepared to "countersteer," that is, to turn the wheel back in the other direction, once you've passed whatever was in your path. Unless you are prepared to countersteer, you won't be able to do it quickly enough. You should think of emergency steering and countersteering as two parts of one driving action.

Where to Steer. If an oncoming driver has drifted into your lane, a move to your right is best. If that driver realizes what has happened, the natural response will be to return to his or her own lane.

If something is blocking your path, the best direction to steer will depend on the situation.

If you have been using your mirrors, you'll know which lane is empty and can be safely used.

If the shoulder is clear, going right may be best. No one is likely to be driving on the shoulder but someone may be passing you on the left. You

locked up and cause a skid. If the wheels are skidding, you cannot control the vehicle.

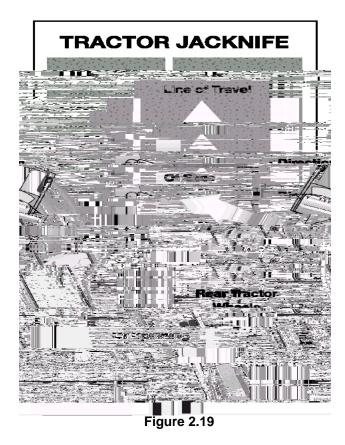
#### 2.17.3 Brake Failure

Brakes kept in good condition rarely fail. Most hydraulic brake failures occur for one of two reasons: (Air brakes are discussed in Section 5.)

Loss of hydraulic pressure.

Brake fade on long hills.

Loss of Hydraulic Pressure. When the system won't build up pressure, the brake pedal will feel spongy or go to the floor. Here are some things you can do.



### 2.19.2 Correcting a Drive-wheel Braking Skid

Do the following to correct a drive-wheel braking skid.

Stop Braking.

Set out reflective triangles to warn other traffic. Make sure other drivers can see them in time to avoid the accident. and cargo. Be sure to check that the fire

#### 2.20.2 Notify Authorities

If you have a cell phone or CB, call for assistance before you get out of your vehicle. If not, wait until after the accident scene has been properly protected, then phone or send someone to phone the police. Try to determine where you are so you can give the exact location.

#### 2.20.3 Care for the Injured

If a qualified person is at the accident and helping the injured, stay out of the way unless asked to assist. Otherwise, do the best you can to help any injured parties. Here are some simple steps to follow in giving assistance:

Don't move a severely injured person unless the danger of fire or passing traffic makes it necessary.

Stop heavy bleeding by applying direct pressure to the wound.

Keep the injured person warm.

#### 2.21 - Fires

Truck fires can cause damage and injury. Learn the causes of fires and how to prevent them. Know what to do to extinguish fires.

#### 2.21.1 Causes of Fire

The following are some causes of vehicle fires:

After Accidents. Spilled fuel, improper use of flares.

Tires. Under-inflated tires and duals that touch.

Electrical System. Short circuits due to damaged insulation, loose connections.

Fuel. Driver smoking, improper fueling, loose fuel connections.

Cargo. Flammable cargo, improperly sealed or loaded cargo, poor ventilation.

#### 2.21.2 Fire Prevention

Pay attention to the following:

Pre-trip Inspection. Make a complete inspection of the electrical, fuel, and exhaust systems, tires,

#### Use the Right Fire Extinguisher

Figures 2.20 and 2.21 detail the type of fire extinguisher to use by class of fire.

The B:C type fire extinguisher is designed to work on electrical fires and burning liquids.

The A:B:C type is designed to work on burning wood, paper, and cloth as well.

Water can be used on wood, paper, or cloth, but don't use water on an electrical fire (can cause shock) or a gasoline fire (it will spread the flames).

A burning tire must be cooled. Lots of water may be required.

If you're not sure what to use, especially on a hazardous materials fire, wait for firefighters.

Position yourself upwind. Let the wind carry the extinguisher to the fire.

Continue until whatever was burning has been cooled. Absence of smoke or flame does not mean the fire cannot restart.

Class/Type of Fires			
Class	Туре		
Α	Wood, Paper, Ordinary Combustibles Extinguish by Cooling and Quenching Using Water or Dry Chemicals		
В	Gasoline, Oil, Grease, Other Greasy Liquids Extinguish by Smothering, Cooling or Heat Shielding using carbon Dioxide or Dry Chemicals		
С	Electrical Equipment Fires Extinguish with Nonconducting Agents such as Carbon Dioxide or Dry Chemicals. DO NOT USE WATER.		
D	Fires in Combustible Metals		

doesn't have to drink as much to reach the same BAC).

Alcohol and the Brain. Alcohol affects more and more of the brain as BAC builds up. The first part of the brain affected controls judgment and self-control. One of the bad things about this is it can keep drinkers from knowing they are getting drunk. And, of course, good judgment and self-control are absolutely necessary for safe driving.

As BAC continues to build up, muscle control, vision, and coordination are affected more and

#### Figure 2.22

What Determines Blood Alcohol Concentration? BAC is determined by the amount of alcohol you drink (more alcohol means higher BAC), how fast you drink (faster drinking means higher BAC), and your weight (a small person

These effects mean increased chances of a crash and chances of losing your driver's license. Accident statistics show that the chance of a crash is much greater for drivers who have been drinking than for drivers who have not.

**How Alcohol Affects Driving.** All drivers are affected by drinking alcohol. Alcohol affects judgment, vision, coordination, and reaction time. It causes serious driving errors, such as:

Increased reaction time to hazards.

Driving too fast or too slow.

Driving in the wrong lane.

Running over the curb.

Weaving.

#### 2.22.2 Other Drugs

Pay attention to warning labels for legitimate drugs and medicines, and to doctor's orders regarding possible effects. Stay away from illegal drugs.

Don't use any drug that hides fatigue

disease, and skin and colon cancer can be detected easily and treated if found in time.

You should consult your physician or a local sleep disorder center if you suffer from frequent daytime sleepiness, have difficulty sleeping at night, take frequent naps, fall asleep at strange times, snore loudly, gasp and choke in your sleep, and/or wake up feeling as though you have not had enough sleep.

#### 2.23.2 While You Are Driving

**Keep Cool.** A hot, poorly ventilated vehicle can make you sleepy. Keep the window or vent cracked open or use the air conditioner, if you have one.

**Take Breaks.** Short breaks can keep you alert. But the time to take them is before you feel really drowsy or tired. Stop often. Walk around and inspect your vehicle. It may help to do some physical exercises.

Be sure to take a mid-afternoon break and plan to sleep between midnight and 6 a.m.

Recognize the Danger Signals of Drowsy Driving.  $\dot{U}|^{\hat{}}$   $\dot{A}$   $\dot$ 

#### Figure 2.24

#### 2.24.2 Why Are There Rules?

You must follow the many rules about transporting hazardous materials. The intent of the rules is to:

Contain the product.

Communicate the risk.

Ensure safe drivers and equipment.

**To Contain the Product.** Many hazardous products can injure or kill on contact. To protect drivers and others from contact, the rules tell shippers how to package safely. Similar rules tell drivers how to load, transport, and unload bulk tan

# Section 3 TRANSPORTING CARGO SAFELY

#### **This Section Covers**

• Inspecting Cargo

•

bridge formula. A bridge formula permits less maximum axle weight for axles that are closer together. This is to prevent overloading bridges and roadways.

Overloading can have bad effects on steering, braking, and speed control. Overloaded trucks have to go very slowly on upgrades. Worse, they may gain too much speed on downgrades. Stopping distance increases. Brakes can fail when forced to work too hard.

During bad weather or in mountains, it may not be safe to operate at legal maximum weights. Take this into account before driving.

#### 3.2.3 Don't Be Top-heavy

The height of the vehicle's center of gravity is very important for safe handling. A high center of gravity (cargo piled up high or heavy cargo on top) means you are more likely to tip over. It is most dangerous in curves, or if you have to swerve to avoid a hazard. It is very important to distribute the cargo so it is as low as possible. Put the heaviest parts of the cargo under the lightest parts.

#### 3.2.4 Balance the Weight

Poor weight balance can make vehicle handling unsafe. Too much weight on the steering axle can cause hard steering. It can damage the steering axle and tires. Under-loaded front axles (caused by shifting weight too far to the rear) can make the steering axle weight too light to steer safely. Too little weight on the driving axles can cause poor traction. The drive wheels may spin easily. During bad weather, the truck may not be able to keep going. Weight that is loaded so there is a high center of gravity causes greater chance of rollover. On flat bed vehicles, there is also a greater chance that the load will shift to the side or fall off. See Figure 3.1.

#### 3.3 – Securing Cargo

#### 3.3.1 Blocking and Bracing

Blocking is used in the front, back, and/or sides of a piece of cargo to keep it from slidi4()] T.] lueelocking is

Cargo should have at least one tiedown for each ten feet of cargo. Make sure you have enough tiedowns to meet this need. No matter how small the cargo, it should have at least two tiedowns.

There are special requirements for securing various heavy pieces of metal. Find out what they are if you are to carry such loads.

#### 3.3.3 Header Boards

Front-end header boards ("headache racks") protect you from your cargo in case of a crash or emergency stop. Make sure the front-end structure is in good condition. The front-end structure should block the forward movement of any cargo you carry.

#### 3.3.4 Covering Cargo

There are two basic reasons for covering cargo:

To protect people from spilled cargo.

To protect the cargo from weather.

Spill protection is a safety requirement in many states. Be familiar with the laws in the states you drive in.

You should look at your cargo covers in the mirrors from time to time while driving. A flapping cover can tear loose, uncovering the cargo, and possibly block your view or someone else's.

#### 3.3.5 Sealed and Containerized Loads

Containerized loads generally are used when freight is carried part way by rail or ship. Delivery by truck occurs at the beginning and/or end of the journey. Some containers have their own tiedown devices or locks that attach directly to a special frame. Others have to be loaded onto flat bed trailers. They must be properly secured just like any other cargo.

You cannot inspect sealed loads, but you should check that you don't exceed gross weight and axle weight limits.

#### 3.4 – Cargo Needing Special Attention

#### 3.4.1 Dry Bulk

Dry bulk tanks require special care because they have a high center of gravity, and the load can shift. Be extremely cautious (slow and careful) going around curves and making sharp turns.

#### 3.4.2 Hanging Meat

Hanging meat (suspended beef, pork, lamb) in a refrigerated truck can be a very unstable load with a high center of gravity. Particular caution is needed on sharp curves such as off ramps and on ramps. Go slowly.

#### 3.4.3 Livestock

Livestock can move around in a trailer, causing unsafe handling. With less than a full load, use false bulkheads to keep livestock bunched together. Even when bunched, special care is necessary because livestock can lean on curves. This shifts the center of gravity and makes rollover more likely.

#### 3.4.4 Oversized Loads

Over-length, over-width, and/or overweight loads require special transit permits. Driving is usually limited to certain times. Special equipment may be necessary such as "wide I

This page intentionally left blank.

# Section 4 TRANSPORTING PASSENGERS SAFELY

#### **This Section Covers**

- Vehicle Inspection
- Loading
- On the Road
- After-trip Vehicle Inspection
- Prohibited Practices
- Use of Brake-door Interlocks

Bus drivers must have a commercial driver license if they drive a vehicle designed to seat more than 16 or more persons, including the driver.

Figure 4.1

4.2

#### 4.3 - On the Road

#### 4.3.1 Passenger Supervision

Many charter and intercity carriers have passenger comfort and safety rules. Mention rules about

## Section 5 AIR BRAKES

#### **This Section Covers**

- Air Brake System Parts
- Dual Air Brake Systems
- Inspecting Air Brakes
- Using Air Brakes

This section tells you about air brakes. If you want to drive a truck or bus with air brakes, or pull a trailer with air brakes, you need to read this section. If you want to pull a trailer with air brakes, you also need to read Section 6, Combination Vehicles.

Air brakes use compressed air to make the brakes work. Air brakes are a good and safe way of stopping large and heavy vehicles, but the brakes must be well maintained and used properly.

Air brakes are really three different braking systems: service brake, parking brake, and emergency brake.

The service brake system applies and releases the brakes when you use the brake pedal during normal driving.

The parking brake system applies and releases the parking brakes when you use the parking brake control.

The emergency brake system uses parts of the service and parking brake systems to stop the vehicle in a brake system failure.

The parts of these systems are discussed in greater detail below.

#### 5.1 – The Parts of an Air Brake System

There are many parts to an air brake system. You should know about the parts discussed here.

#### 5.1.1 Air Compressor

The air compressor pumps air into the air storage tanks (reservoirs). The air compressor is connected to the engine through gears or a v-belt. The compressor may be air cooled or may bebelt.

5.1.5

#### Figure 5.4

#### Subsection 5.1 **Test Your Knowledge**

1.

Why must air tanks be drained? What is a supply pressure gauge used for? 2.

All vehicles with air brakes must have a 3. low air pressure warning signal. True or False?

4. What are spring brakes?

5.

The warning light and buzzer should come on before the air pressure drops below 60 psi in either system. If this happens while driving, you should stop right away and safely park the vehicle. If one air system is very low on pressure, either the front or the rear brakes will not be operating fully. This

If the warning BET19ing7

Subsections 5.2 and 5.3 Test Your Knowledge

- 1. What is a dual air brake system?
- 2. What are the slack adjusters?
- 3. How can you check slack adjusters?
- 4. How can you test the low pressure warning signal?
- 5. How can you check that the spring brakes come on automatically?
- 6. What are the maximum leakage rates?

Th^•^Á´`^• qā; }•Á( æê Áà^Á; }Á[`¦Ác^• dĚQÁ[`Á&æ) qóA answer them all, re-read subsections 5.2 and 5.3.

5.4 – Using Air Brakes

#### 5.4.1 Normal Stops

Push the brake pedal down. Control the pressure so the vehicle comes to a smooth, safe stop. If you have a manual transmission, don't push the clutch in until the engine rpm is down close to idle. When stopped, select a starting gear.

#### 5.4.2 Braking with Antilock Brakes

When you brake hard on slippery surfaces in a vehicle without ABS, your wheels may lock up. When your steering wheels lock up, you lose steering control. When your other wheels lock up, you may skid, jackknife, or even spin the vehicle.

ABS helps you avoid wheel lock up. The computer senses impending lockup, reduces the braking pressure to a safe level, and you maintain control. You may or may not be able to stop faster with ABS, but you should be able to steer around an obstacle while braking, and avoid skids caused by over braking.

Having ABS on only the tractor, only the trailer, or even on only one axle, still gives you more control over the vehicle during braking. Brake normally.

When only the tractor has ABS, you should be able to maintain steering control, and there is less chance of jackknifing. But, keep your eye on the trailer and let up on the brakes (if you can safely do so) if it begins to swing out.

When only the trailer has ABS, the trailer is less likely to swing out, but if you lose steering control

or start a tractor jackknife, let up on the brakes (if you can safely do so) until you gain control.

#### 5.4.4 Stopping Distance

Stopping distance was described in Section 2 under "Speed and Stopping Di

#### 5.4.8 Parking Brakes

Any time you park, use the parking brakes, except as noted below. Pull the parking brake control knob out to apply the parking brakes, push it in to release. The control will be a yellow, diamond-shaped knob labeled "parking brakes" on newer vehicles. On older vehicles, it may be a round blue knob or some other shape (including a lever that swings from side to side or up and down).

Don't use the parking brakes if the brakes are very hot (from just having come down a steep grade), or if the brakes are very wet in freezing temperatures. If they are used while they are very hot, they can be damaged by the heat. If they are used in freezing temperatures when the brakes are very wet, they can freeze so the vehicle cannot move. Use wheel chocks on a level surface to hold the vehicle. Let hot brakes cool before using the parking brakes. If the brakes are wet, use the brakes lightly while driving in a low gear to heat and dry them.

If your vehicle does not have automatic air tank drains, drain your air tanks at the end of each working day to remove moisture and oil. Otherwise, the brakes could fail.

Never leave your vehicle unattended without applying the parking brakes or chocking the wheels. Your vehicle might roll away and cause injury and damage.

### Subsection 5.4 Test Your Knowledge

- 1. Why should you be in the proper gear before starting down a hill?
- What factors can cause brakes to fade or fail?
- 3. The use of brakes on a long, steep downgrade is only a supplement to the braking effect of the engine. True or False?
- 4. If you are away from your vehicle only a short time, you do not need to use the parking brake. True or False?
- 5. How often should you drain air tanks?
- 6. How do you brake when you drive a tractortrailer combination with ABS?
- 7. You still have normal brake functions if your ABS is not working. True or False?

V@•^Áˇ^•qā}}•Á(æÂà^Á;}Á[ˇ¦Ác^•dĂQÁ[ˇÁ&æ) qóA answer them all, re-read subsection 5.4.

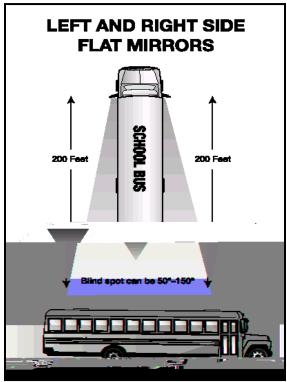


Figure 10.2

## 10.1.4 Outside Left and Right Side Convex Mirrors

The convex mirrors are located below the outside flat mirrors. They are used to monitor the left and right sides at a wide angle. They provide a view of traffic, clearances, and students at the side of the bus. These mirrors present a view of people and objects that does not accurately reflect their size and distance from the bus.

You should position these mirrors to see:

The entire side of the bus up to the mirror mounts.

Front of the rear tires touching the ground.

At least one traffic lane on either side of the bus.

Figure 10.3 shows how both the outside left and right side convex mirrors should be adjusted.

### 10.1.5 Outside Left and Right Side Crossover Mirrors

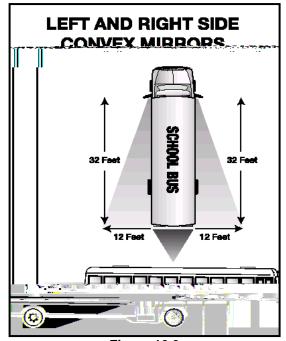


Figure 10.3

right side of the bus, including the service door and front wheel area. The mirror presents a view of people and objects that does not accurately reflect their size and distance from the bus. The driver must ensure that these mirrors are properly adjusted.

Ensure that the mirrors are properly adjusted so you can see:

The entire area in front of the bus from the front bumper at ground level to a point where direct vision is possible. Direct vision and mirror view vision should overlap.

The right and left front tires touching the ground.

The area from the front of the bus to the service door.

These mirrors, along with the convex and flat mirrors, should be viewed in a logical sequence to ensure that a child or object is not in any of the danger zones.

Figure 10.4 illustrates how the left and right side crossover mirrors should be adjusted.

Walk to a location at least 10 feet in front of the right corner of the bumper, but still remaining away from the front of the school bus.

When students reach the edge of the roadway, they should:

Stop and look in all directions, making sure the roadway is clear and is safe.

Check to see if the red flashing lights on the bus

they exited the bus. You should closely observe all students exiting the bus to confirm that they are in a safe location prior to moving the bus.

#### 10.2.6 Post-trip Inspection

When your route or school activity trip is finished,

Lead students upwind of the bus if fire is present.

Lead students as far away from railroad tracks as possible and in the direction of any oncoming train.

Lead students upwind of the bus at least 300 feet if there is a risk from spilled hazardous materials.

If the bus is in the direct path of a sighted tornado and evacuation is ordered, escort students to a nearby ditch or culvert if shelter in a building is not readily available, and direct them to lie face down, hands covering their head. They should be far enough away so the bus cannot topple on them. Avoid areas that are subject to flash floods.

**General Procedures.** Determine if evacuation is in the best interest of safety.

Determine the best type of evacuation:

- Front, rear or side door evacuation, or some combination of doors.
- Roof or window evacuation.

Secure the bus by:

- Placing transmission in Park, or if there is no shift point, in Neutral.
- Setting parking brakes.
- Shutting off the engine.
- Removing ignition key.
- Activating hazard-warning lights.

If time allows, notify dispatch office of evacuation location, conditions, and type of assistance needed.

Dangle radio microphone or telephone out of alaç^lop Á a a[ , Á[ l Áæc^l Á • ^ ÉæÁ] ] ^læa|^È

If no radio, or radio is inoperable, dispatch a passing motorist or area resident to call for help. As a last resort, dispatch two older, responsible students to go for help.

Order the evacuation.

Evacuate students from the bus.

-

Figure 10.8

to completely clear the railroad tracks on the other side if there is a need to stop. As a general rule, add 15 feet to the length of the school bus to determine an acceptable amount of containment or storage area.

#### 10.5 – Student Management

## 10.5.1 -bus Problems When Loading and Unloading

In order to get students to and from school safely and on time, you need to be able to concentrate on the driving task.

If there is a behavior problem on the bus, wait until the students unloading are safely off the bus and have moved away. If necessary, pull the bus over to handle the problem.

#### 10.5.2 Handling Serious Problems

Tips on handling serious problems:

Ø[ ||[ ¸ Á[ ˇ ¦Á&@ [ |q Á; | &^åˇ ¦^• Á[ ¦Ááã &ā |ã,^Á; ¦Á refusal of rights to ride the bus.

Stop the bus. Park in a safe location off the road, perhaps a parking lot or a driveway.

Secure the bus. Take the ignition key with you if you leave your seat.

Stand up and speak respectfully to the offender or offenders. Speak in a courteous manner with a firm voice. Remind the offender of the expected behavior. Do not show anger, but do show that you mean business.

If a change of seating is needed, request that the student move to a seat near you.

Never put a student off the bus except at school or at his or her designated school bus stop. If you feel that the offense is serious enough that you cannot safely drive the bus, call for a school administrator or the police to come and remove the student. Always follow your state or local procedures for requesting assistance.

#### 10.6 – Antilock Braking Systems

check and then goes out quickly. On older systems, the lamp could stay on until you are

# Section 11 Pre-trip Vehicle Inspection Test

#### **Drum Brake**

Check for cracks, dents, or holes. Also check for loose or missing bolts.

Check for contaminates such debris or oil/grease.

Brake linings (where visible) should not be worn dangerously thin.

#### **Brake Linings**

On some brake drums, there are openings where the brake linings can be seen from outside the drum. For this type of drum, check that a visible amount of brake lining is showing.

Note: Be prepared to perform the same brake components inspection on every axle (power unit and trailer, if equipped).

Note: Rotors and Disks would be checked the same way.

#### 11.2.4 Wheels

#### Rims

Check for damaged or bent rims. Rims cannot have welding repairs.

Check for rust trails that may indicate rim is loose on wheel.

#### **Tires**

The following items must be inspected on every tire:

- Tread depth: Check for minimum tread depth (4/32 on steering axle tires, 2/32 on all other tires).
- Tire condition: Check that tread is evenly worn and look for cuts or other damage to tread or sidewalls. Also, make sure that valve caps and stems are not

#### **Exhaust System**

Check system for damage (cracks, holes, or severe dents) and signs of leaks such as rust or carbon soot.

System should be connected tightly and mounted securely.

#### **Frame**

Look for cracks, broken welds, holes or other damage to the longitudinal frame members, cross members, box, and floor.

#### 11.2.6 Rear of Vehicle

#### **Splash Guards**

If equipped, check that splash guards or mud flaps are not damaged and are mounted securely.

#### Doors/Ties/Lifts

Check that doors and hinges are not damaged and that they open, close, and latch properly from the outside, if equipped.

c, hlm the outsi

#### **Pintle Hook**

Check the pintle hook for cracks or breaks and excessive wear.

#### **Tongue or Draw-bar**

Check that the tongue/draw-bar is not bent or twisted and checks for broken welds and stress cracks.

Check that the tongue/draw-bar is not worn excessively.

#### **Tongue Storage Area**

Check that the storage area is solid and secured to the tongue.

Check that cargo in the storage area i.e. chains, binders, etc. are secure.

#### 11.3 - School Bus Only

#### **Emergency Equipment**

In addition to checking for spare electrical fuses (if equipped), three red reflective triangles, and a properly charged, secured, and rated fire extinguisher, school bus drivers must also inspect the following emergency equipment:

- Emergency Kit
- Body Fluid Cleanup Kit

#### **Lighting Indicators**

In addition to checking the lighting indicators listed in Section 10.2 of this manual, school bus drivers must also check the following lighting indicators (internal panel lights):

- Alternately flashing amber lights indicator, if equipped.
- Alternately flashing red lights indicator.
- Strobe light indicator, if equipped.

#### Lights/Reflectors

In addition to checking the lights and reflective devices listed in Section 10.2 of this manual, school bus drivers must also check the following (external) lights and reflectors:

- Strobe light, if equipped.
- Stop arm light, if equipped.
- Alternately flashing amber lights, if equipped.
- Alternately flashing red lights.

#### **Student Mirrors**

In addition to checking the external mirrors, school bus drivers must also check the internal and external mirrors used for observing students:

Check for proper adjustment.

Checks that all internal and external mirrors and mirror brackets are not damaged and are mounted securely with no loose fittings.

Checks that visibility is not impaired due to dirty mirrors.

#### Stop Arm / Safety Arm

If equipped, check the stop arm to see that it is mounted securely to the frame of the vehicle. Also, check for loose fittings and damage.

#### 11.4 - Trailer

#### 11.4.1 Trailer Front

#### **Air/Electrical Connections**

Check that trailer air connectors are sealed and in good condition.

Make sure glad hands are locked in place, free of damage or air leaks.

Make sure the trailer electrical plug is firmly seated and locked in place.

#### Header Board or Bulkhead

If equipped, check the header board or bulkhead to see that it is secure, free of damage, and strong enough to contain cargo.

If equipped, the canvas or tarp carrier must be mounted and fastened securely.

On enclosed trailers, check the front area for signs of damage such as cracks, bulges, or holes.

#### 11.4.2 Side of Trailer

#### **Landing Gear**

Check that the landing gear is fully raised, has no missing parts, crank handle is secure, and the support frame and landing pads are not damaged.

If power operated, check for air or hydraulic leaks.

#### Doors/Ties/Lifts

If equipped, check that doors are not damaged. Check that doors open, close, and latch properly from the outside.

Check that ties, straps, chains, and binders are secure.

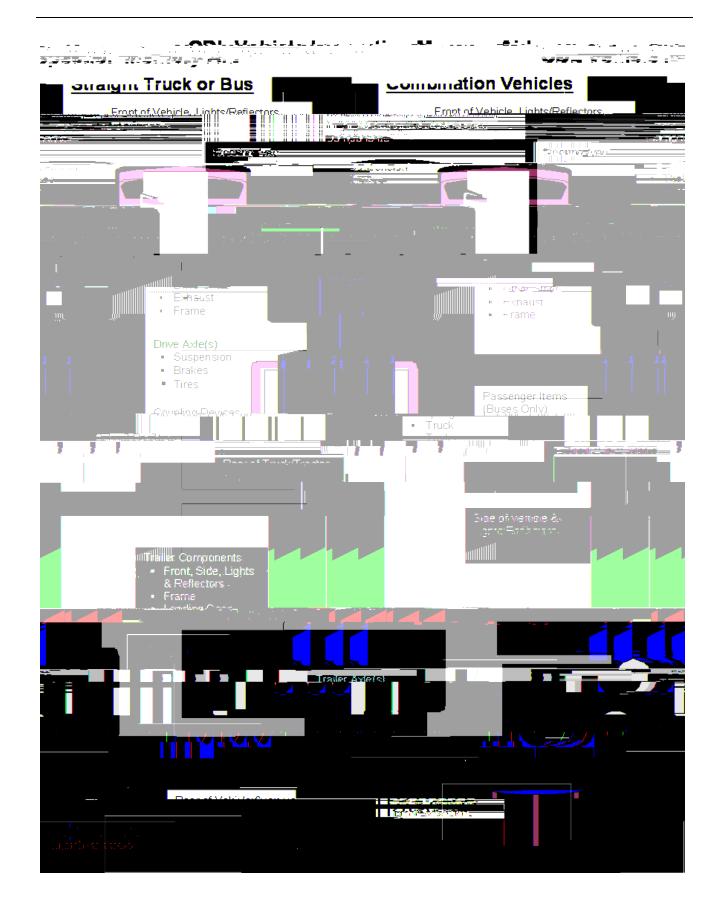
If equipped with a cargo lift, look for leaking, damaged or missing parts and explain how it should be checked for correct operation.

Lift should be fully retracted and latched securely.

#### Frame

Look for cracks, broken welds, holes or other damage to the frame, cross members, box, and floor.

#### **Tandem Release Arm/Locking Pins**



This page left intentionally blank.

## Section 12 Basic Vehicle Control Skills Test

#### **This Section Covers**

- Skills Test Exercises
- Skills Test Scoring

Your basic control skills could be tested using one or more of the following exercises off-road or somewhere on the street during the road test:

Straight line backing.

Offset back/right

Offset back/left

Parallel park (driver side).

Parallel park (conventional).

#### 12.2.5 Parallel Park (Conventional)

You may be asked to park in a parallel parking space that is on your right. You are to drive past the parking space and back into it bringing the rear of your vehicle as close as possible to the rear of the space without crossing side or rear boundaries marked by cones. You are required to get your vehicle completely into the space. (See Figure 12.5)

#### 12.2.6 Alley Dock

You may be asked to sight-side back your vehicle into an alley, bringing the rear of your vehicle as close as possible to the rear of the alley without going beyond the exercise boundary marked by a line or row of cones. You are required to get your vehicle completely into the space with your entire vehicle straight with the alley. (See Figure 12.6.)

This page intentionally left blank.

Section 13 – On-road Driving

Once through the intersection:

Continue checking mirrors and traffic.

Accelerate smoothly and change gears as necessary.

#### 13.1.3 Urban/Rural Straight

During this part of the test, you are expected to make regular traffic checks and maintain a safe following distance. Your vehicle should be centered in the proper lane (right-most lane) and you should keep up with the flow of traffic but not exceed the posted speed limit.

#### 13.1.4 Lane Changes

During multiple lane portions of the test, you will be asked to change lanes to the left, and then back to the right. You should make the necessary traffic checks first, then use proper signals and smoothly change lanes when it is safe to do so.

#### 13.1.5 Expressway

Before entering the expressway:

Check traffic.

Use proper signals.

Merge smoothly into the proper lane of traffic.

Once on the expressway:

Maintain proper lane positioning, vehicle spacing, and vehicle speed.

Continue to check traffic thoroughly in all directions.

When exiting the expressway:

Make necessary traffic checks.

Use proper signals.

Decelerate smoothly in the exit lane.

Once on the exit ramp, you must continue to decelerate within the lane markings and maintain adequate spacing between your vehicle and other vehicles.

#### 13.1.6 Stop/Start

#### 13.1.8 Railroad Crossing

**Before** reaching the crossing, all commercial drivers should:

Decelerate, brake smoothly, and shift gears as necessary.

Look and listen for the presence of trains.

Check traffic in all directions.

#### Do not