

# CDL Class "B" Theory

**Entry Level Driver Trainer**

Date / Location (optional)

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**Presenter(s) name and title**



# Vision, Mission & Strategic Plan Goals

## Vision

To create a world-class educational system that gives students the knowledge and skills to be successful in college and the workforce, and to flourish as parents and citizens

## Mission

To provide leadership through the development of policy and accountability systems so that all students are prepared to compete in the global community

## Strategic Plan Goals

1. **All** Students Proficient and Showing Growth in All Assessed Areas
2. **Every** Student Graduates from High School and is Ready for College and Career
3. **Every** Child Has Access to a High-Quality Early Childhood Program
4. **Every** School Has Effective Teachers and Leaders
5. **Every** Community Effectively Uses a World-Class Data System to Improve Student Outcomes
6. **Every** School and District is Rated "C" or Higher

# Mandate

**The Mississippi Department of Education, Office of Safe and Orderly Schools, Division of Pupil Transportation has developed this training to meet the requirements of the United State Congress mandated Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21).**

**This training is designed to be provided to trainee's prior to taking their Commercial Operator License skills test. Local district training is to be provided once the operator has received their CDL permit.**

*\*This training module was developed by the Mississippi Department of Education, Office of Safe and Orderly Schools, Division of Pupil Transportation in collaboration with Colorado Department of Education, State Transportation Unit and the National Association of State Directors of Pupil Transportation. We gratefully acknowledge their technical expertise and assistance in ensuring the accuracy of this content.\**

## Mandated by Law

- This training is mandated by the United States Congress in the Moving Ahead for Progress in the 21<sup>st</sup> Century Act (MAP-21)
- Effective February 7, 2022
- Applies to First-time CDL applicants, including
  - Class "A" CDLs
  - Class "B" CDLs
  - Current CDL holders seeking a license upgrade (e.g., a Class B CDL holder seeking a Class A CDL) or an additional endorsement necessary to transport hazardous materials (H-endorsement), or to operate a motor coach (P-Endorsement) or school bus (S-Endorsement).
- Does **Not** apply to driver who are excepted or exempted from federal CDL requirements (e.g., military drivers, farmers, and firefighters.) Also individuals holding a valid CDL or a P, S, or H endorsement issued before February 7, 2022.

# Classroom Etiquette

To make this learning experience as enjoyable and comfortable for all those in attendance please observe the following:

- Advise your friends and family that you are in training and to please refrain from calling and/or texting during class hours.
- Turn your cell phone to vibrate only. If you have an emergency and **MUST** answer your phone, please step out of the room so others are not disturbed.
- Do not text or answer texts during class hours.
- Your instructor will advise you if you are permitted to bring food to your classroom. If you bring food and/or beverages, be courteous. You are responsible to leave the area you are sitting in trash free, and as clean as you found it.

## Classroom Etiquette

- You will be given ample breaks to stretch, use the restrooms, etc. Remember smoking is prohibited on all school property.
- If you do not finish this entire course, due to an unexpected illness, emergency, etc. unfortunately you will be required to re-take the entire class.
- **PLEASE BE PROMPT** – Class will start on time. Instructors will strive to also release on time. If you are tardy more than once, you may be required to re-take the entire course.
- Do not speak over your trainer! If you have questions, please be polite and raise your hand. Unnecessary interruptions cause disruption and may have an effect on your release time.

# Classroom Etiquette

- No question is a foolish question. ASK!
- Be rested and ready to learn.

Once you have completed this portion of the ELDT Training, you will need to attend additional classes prior to being able to go take your CDL Skills test.

# Testing

- There will be 10 questions at the end of each section of this training. **You must pass with a total of 80% proficiency accumulative score.** These test questions are to be completed individually, not via classroom discussion.
- All questions are taken directly from information provided throughout this training.
- If you have difficulty taking tests or need assistance of any kind, please speak with your instructor privately, and arrangements can be made.

## The Process of Obtaining a CDL

1. Applicant expresses interest in employment	4. Applicant receives Theory & BTW Training	7. Training provider sends electronic notification of applicant's pass rate
2. Driver-Trainer prepares applicant for CDL written test	5. Applicant obtains additional credentials	8. Applicant performs BTW examination with MDE Bus Instructor/Third-Party Examiner
3. Applicant obtains CDL written test permit	6. Applicant completes full training from training provider	9. Applicant receives CDL to become a driver

## **Class B Theory Consist of**

- B1.1 Basic Operation
- B1.2 Safe Operating Procedures
- B1.3 Advanced Operating Practices
- B1.4 Vehicle Systems and Reporting Malfunctions
- B1.5 Non-Driving Activities

# Basic Operation

## B1.1

# Orientation

**Orientation**

**Safety Fundamentals**

**Essential Regulatory Requirements (Overview of FMCSR's)**

**Driver disqualification provisions and fines for non-compliance**

**Non-compliance of 380, 382, 383 and 390-399**

**Applicable State and local laws**

**Stopping at weigh stations/scales**

**Hazard awareness of vehicle size and weight**

**Low Clearance areas**

**Bridge Formulas**

## Essential Regulatory Requirements

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

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 (GCWR) of 26,001 or more pounds, provided the GVWR of the vehicle(s) being towed is in excess of 10,000 pounds.

## Essential Regulatory Requirements

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

Any size vehicle which requires hazardous material placards or is carrying material listed as a select agent or toxin in 42 CFR part 73. Federal regulations through the Department of Homeland Security require a background check and fingerprinting for the Hazardous Materials endorsement. Contact your local department of driver licensing for more information.

## Vehicles exempt from CDL requirements

CMV's operated by military personnel for military purposes.

Any farm vehicles:

Controlled and operated by a farmer;

Used to transport agriculture products, farm machinery, or farm supplies to or from a farm;

Used within 150 miles of the person's farm;

Not used in the operation of a common or contract motor carrier.

## **Vehicles exempt from CDL requirements**

### **Firefighting Equipment**

Necessary to the preservation of life and property or the execution of emergency governmental functions; emergency equipment such as a fire truck, hook and ladder, foam or water transporter or other vehicles used only in response to emergencies are included in this exemption. Those employed as a volunteer or paid firefighting organization are included in the exemption.

# Vehicles exempt from CDL requirements

## Recreational Vehicles

When used for recreational purposes,

a motor home with truck or motor home is used exclusively for pleasure, enjoyment, other recreational purposes,

family transportation of the owner, lessee, or occupant and is not used to transport cargo or passengers for profit, hire, or otherwise in any business or commercial enterprise.

# CDL vehicle classes

## **Class A — Combination Vehicles**

Any combination of vehicles with a gross combination weight rating (GCWR) of 26,001 pounds or more provided the gross vehicle weight rating (GVWR) of the vehicle(s) being towed is in excess of 10,000 pounds.

## **Class B — Heavy Straight Vehicles**

Any single vehicle with a GVWR of 26,001 pounds or more, or any such vehicle towing a vehicle not in excess of 10,000 pounds GVWR.

# CDL vehicle classes

## Class C — Small Vehicles

Any single vehicle or combination of vehicles that meets neither the definition of Class A, nor that of Class B, but that is either designed to transport 16 or more passengers, including the driver, or is used in the transportation of materials found to be hazardous for the purposes of the Hazardous Materials Transportation Act and which require the motor vehicle to be placarded under the Hazardous Materials Regulations 49 CFR part 172, Subpart F.

# CDL endorsements

**T** – Double/Triple Trailers

**P** – Passenger (drive a vehicle designed for a capacity of 16 or more people including the driver)

**N** – Tank Vehicle (drive a vehicle designed to transport any liquid or gaseous materials within a tank or tanks having an individual rated capacity of more than 119 gallons and an aggregate rated capacity of 1,000 gallons or more that is either permanently or temporarily attached to the vehicle or the chassis.)

**H** – Hazardous Materials (Any driver, regardless of the vehicle Class/Group (A, B, or C) who wishes to haul any material that has been designated as hazardous under 49 U.S.C. 5103 and is required to be placarded under subpart F of 49 CFR part 172; or any quantity of a material listed as a select agent or toxin 42 CFR Part 73 must add a hazardous materials endorsement to their CDL. S/he must pass a special written examination on how to recognize, handle, and transport hazardous materials.)

**The Transportation Security Administration (TSA) and the U.S. Department of Transportation require background checks on commercial drivers who are certified to transport hazardous materials. The background checks include a review of criminal, immigration and FBI records. If the driver is found to represent a security threat, TSA will notify the person and the state will deny issuance of an endorsement.**

## CDL endorsements

**S** – School Bus (Drivers who wish to drive a school bus, must add a school bus endorsement to their CDL/CLP. They must pass a special knowledge examination on safety considerations when transporting passengers in a school bus and must pass skills tests in a school bus. The endorsement applies to applicants who wish to drive a school bus in any class (A, B, or C).)

**X** – Hazmat/Tanker Combination (Drivers of tank vehicles who haul hazardous materials or waste in amounts requiring placards must add an X endorsement to their CDL, showing that they have passed the special knowledge examinations for both tank vehicles and hazardous materials.)

## CDL restrictions

**L** – Air brake restriction. If an applicant either fails the air brake component of the knowledge test or performs the skill tests in a vehicle not equipped with a “full” air brake system, the person is restricted from operating a CMV equipped with a “full” air brake system.

**K** – Intrastate only. For individuals between the ages of 18 through 20, or for individuals who do not meet the Department of Transportation (DOT) medical requirements but have been issued a waiver from the Mississippi Department of Public Safety (DPS) to operate a CDL vehicle.

**E** – No manual transmission. Tests in a vehicle with a transmission other than a manual.

**C** – Corrective lenses.

## CDL restrictions

**M** - No Class A passenger vehicle: Tests in Class B Passenger Vehicle.

**N** - No Class A and B passenger vehicle: Tests in Class C Passenger Vehicle

**O** - No tractor trailer CMV: Tests in a vehicle with coupling system other than a Fifth Wheel

**P** - No passengers in a CMV bus. Passengers not allowed on the vehicle.

**V** - Medical variance

**X** - No cargo in CMV tank vehicle. Tank vehicle must be purged of all liquid.

**Z** - No full air brake equipped CMV. Tests in Vehicle with Air over Hydraulic Brake type system

## Legal Age

You must be at least 18 years of age to apply for a CDL Instruction Permit or to receive a CDL. Drivers 18 through 20 years of age will be issued the "K" restriction to operate a CDL vehicle within the boundaries of Mississippi.

Mississippi Code 63-1-208 Commercial Driver's License Qualification Standards. (1) Except as otherwise provided, the commissioner shall not issue a commercial driver's license and commercial learner's permit to any person under the age of twenty-one (21) years.

## Medical Certification

To obtain the Department of Transportation (DOT) medical examination form you should contact your employer, physician, or download the form at:

<https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/docs/regulations/medical/63066/medicalexaminerscertificatemcsa587611302021.pdf> and have a registered medical doctor certify the form.

<https://www.fmcsa.dot.gov/national-registry-certified-medical-examiners-search>

## CDL Permit Instruction

If you have an out-of-state driver's license, you must be issued a Mississippi Regular Driver's License before applying for a CDL Mississippi Permit. The CDL Permit is required before the CDL Driving Skill Tests are administered.

## To receive the CDL Permit you must:

Have a Mississippi regular driver's license.

Show acceptable legal presence documentation.

Show acceptable identification.

Be at least 18 years of age.

Show proof of your Social Security Number.

Show evidence of a current DOT medical examination certification.

Clear Commercial Driver License Information System (CDLIS) and National Driver Register (NDR) record's checks.

Pass the required CDL Knowledge tests.

Pay the Permit fee

## CDL Permit Instruction

The CDL Permit allows you to operate the class of vehicle shown on the permit only when you are accompanied by a person who is at least 21 years of age and holds a valid CDL of the same class of license or higher, with the required endorsements for the vehicle being operated. The person must be in the seat closest to the driver.

A person with a CDL Permit is prohibited from driving a commercial passenger vehicle with passengers on board.

## Driver Disqualification and Fines

If you fail to provide and keep up-to-date your medical examiner's certificate you become "not- certified" and may lose your CDL.

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.

When operating a CMV, you will be put out-of-service for 24 hours if you have any detectable amount of alcohol under .04%.

## **Disqualifications - 60+ Days – Serious Traffic Violations within a 3-year period**

Excessive speeding (15 mph or more above the posted limit).

Reckless driving, improper or erratic lane changes.

Following a vehicle too closely.

Traffic offenses committed in a CMV in connection with fatal traffic accidents.

Driving a CMV without obtaining a CDL or having a CDL in the driver's possession.

Driving a CMV without the proper class of CDL and/or endorsements for the specific vehicle group being operated or for the passengers or type of cargo being transported.

For at least 60 days if you have committed two serious traffic violations within a three-year period involving a CMV.

For at least 120 days for three or more serious traffic violations within a three-year period involving a CMV.

## Disqualification – Lose CDL for at least 1 Year

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.

Sexual assault

Manslaughter

Assault – Vehicular Assault

Vehicular homicide

## **Disqualification – Lose CDL for at least 1 year or more**

Causing a fatality through the negligent operation of a CMV, including but not limited to the crimes of motor vehicle manslaughter, homicide by motor vehicle, and negligent homicide.

Also, many of the major violations that occur in a non-CMV will result in a one-year CDL disqualification.

### **3 Years**

- if the offense occurs while you are operating a CMV that is placarded for hazardous materials.

### **Life**

- For a second offense, you will lose your CDL for life if you use a CMV to commit a felony involving controlled substances.

## Disqualification – Lose CDL for life

A person who operates a motor vehicle while under the influence of alcohol or drugs and is the proximate cause of serious bodily injury.

Kidnapping

Trafficking

Robbery/Theft

Drug and Alcohol

Failure to stop and give notice, information and aid after an accident in which he or she was directly involved, and which results in serious bodily injury or death to another person.

Driving a CMV when, as a result of prior violations committed operating a CMV, the driver's CDL is revoked, suspended, or canceled, or the driver is disqualified from operating a CMV.

## Railroad-Highway Grade Crossing Offenses

For at least 60 days for your first violation.

For at least 120 days for your second violation within a three-year period.

For at least one year for your third violation within a three-year period.

For drivers who are not required to always stop, failing to stop before reaching the crossing if the tracks are not clear.

For drivers who are not required to always stop, failing to slow down and check that the tracks are clear of an approaching train.

## Railroad-Highway Grade Crossing Offenses

For drivers who are always required to stop, failing to stop before driving onto the crossing.

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

## Other CDL rules

You cannot have more than one license.

You must notify your employer within 30 days of conviction for any traffic violations (except parking). This is true no matter what type of vehicle you were driving.

You must notify the Mississippi Department of Public Safety CDL office within 30 days if you are convicted in any other state of any traffic violation (except parking). This is true no matter what type of vehicle you were driving.

You must notify your employer if your license is suspended, revoked, or canceled, or if you are disqualified from driving.

## Other CDL Rules

Your employer shall not let you drive a commercial motor vehicle if you have more than one license or if your CDL is suspended or revoked. A court may fine the employer up to \$5,000 or put him/her in jail for breaking this rule.

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.

You are not allowed to hold a mobile telephone to conduct a voice communication or dial a mobile telephone by pressing more than a single button when driving.

## Other CDL Rules

You must give your employer information on all driving jobs you have held for the past 10 years. You must do this when you apply for a commercial driving job.

No one can drive a commercial motor vehicle without a CDL. A court may fine you up to \$5,000 or put you in jail for breaking this rule.

If you have a hazardous materials endorsement, you must notify and surrender your hazardous materials endorsement to the state that issued your CDL within 24 hours of any conviction or indictment in any state, civilian or military, for, or found not guilty by reason of insanity of a disqualifying crime listed in 49 CFR 1572.103; who is adjudicated as a mental defective or committed to a mental institution as specified in 49 CFR 1572.109; or who renounces his or her U.S. citizenship.

## Other CDL Rules

You are not allowed to send or read text messages while operating a commercial motor vehicle.

You must always be properly restrained by a safety belt while operating a commercial motor vehicle.

# **Federal Regulations (FMCSR)**

## **Part 40 – Drug and Alcohol Regulations**

**Describes required procedures for conducting workplace drug and alcohol testing for the Federally regulated transportation industry**

## **Part 382 – Controlled Substances and Alcohol Use and Testing**

**Describes regulations per FMCSA for testing**

**We will cover Drug and Alcohol Training in greater detail later in the training.**

## **Part 383 – Commercial Driver’s License Standards; Requirements and Penalties**

## **Part 391 – Qualifications of Drivers and Longer Combination Vehicle Driver Instructors**

# Drug and Alcohol Clearinghouse

## Overview

The Federal Motor Carrier Administration (FMCSA) established the Commercial Driver's License (CDL) Drug and Alcohol Clearinghouse (Clearinghouse). This new database contains information pertaining to violations of the U.S. Department of Transportation (DOT) controlled substances (drug) and alcohol testing program for holders of CDLs.

The Clearinghouse rule requires FMCSA-regulated employers, medical review officers (MROs), substance abuse professionals (SAPs), consortia/third party administrators (C/TPAs), and other service agents to report to the Clearinghouse information related to violations of the drug and alcohol regulations in 49 Code of Federal Regulations, Parts 40 and 382 by current and prospective employees.

# Drug and Alcohol Clearinghouse

The Clearinghouse final rule requires the following:

Employers must query the Clearinghouse for current and prospective employees' drug and alcohol violations before permitting those employees to operate a commercial motor vehicle (CMV) on public roads.

Employers must annually query the Clearinghouse for each driver they currently employ.

The Clearinghouse provides FMCSA and employers the necessary tools to identify drivers who are prohibited from operating a CMV based on DOT drug and alcohol program violations and ensure that such drivers receive the required evaluation and treatment before operating a CMV on public roads. Specifically, information maintained in the Clearinghouse enables employers to identify drivers who commit a drug or alcohol program violation while working for one employer, but who fail to subsequently inform another employer (as required by current regulations). Records of drug and alcohol program violations will remain in the Clearinghouse for five years, or until the driver has completed the return-to-duty process, whichever is later.

For more information on the Clearinghouse, please visit <https://clearinghouse.fmcsa.dot.gov/>.

The United States Congress recognized the need for a drug and alcohol-free transportation industry, and in 1991 passed the Omnibus Transportation Employee Testing Act, requiring DOT Agencies to implement drug and alcohol testing of safety-sensitive transportation employees. 49 CFR Part 40, or Part 40 as we call it, is a DOT-wide regulation that states how to conduct testing and how to return employees to safety-sensitive duties after they violate a DOT drug and alcohol regulation. Part 40 applies to all DOT-required testing, regardless of mode of transportation. For example, whether you are an airline covered by FAA rules or a trucking company covered by FMCSA rules, Part 40 procedures for collecting and testing specimens and reporting of test results apply to you. Each DOT Agency-specific regulation spells out who is subject to testing, when and in what situations for a particular transportation industry.

<https://www.fmcsa.dot.gov/regulations/drug-alcohol-testing/who-tested>

## Part 380 - Special Training Requirements

### §380.103 Applicability.

The rules in this part apply to all operators of LCVs in interstate commerce, employers of such persons, and LCV driver-instructors.

Longer combination vehicle (LCV) means any combination of a truck-tractor and two or more trailers or semi-trailers, which operate on the National System of Interstate and Defense Highways with a gross vehicle weight (GVW) greater than 36,288 kilograms (80,000 pounds).

# Federal Regulations (FMCSR)

## Part 381–Waivers, Exemptions, and Pilot Programs

### 381.200 What is a waiver?

A waiver is temporary regulatory relief from one or more FMCSR given to a person subject to the regulations, or a person who intends to engage in an activity that would be subject to the regulations.

A waiver provides the person with relief from the regulations for up to three months.

A waiver is intended for unique, non-emergency events and is subject to conditions imposed by the Administrator.

Waivers may only be granted from one or more of the requirements contained in the following parts and sections of the FMCSRs:

[https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.381#se49.5.381\\_1100](https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.381#se49.5.381_1100)

## FMCSR – Part 381 – Waivers, Exemptions, and Pilot Programs

### §381.300 What is an exemption?

(a) An exemption is temporary regulatory relief from one or more FMCSR given to a person or class of persons subject to the regulations, or who intend to engage in an activity that would make them subject to the regulations.

(b) An exemption provides the person or class of persons with relief from the regulations for up to 5 years, and may be renewed, upon request, for subsequent 5-year periods.

(c) Exemptions may only be granted from one or more of the requirements contained in the following parts and sections of the FMCSRs:

[https://www.ecfr.gov/current/title-49/subtitle-B/chapter-III/subchapter-B/part-381#p-381.300\(c\)](https://www.ecfr.gov/current/title-49/subtitle-B/chapter-III/subchapter-B/part-381#p-381.300(c))

# Federal Regulations (FMCSR)

## §381.400 What is a pilot program?

(a) A pilot program is a study in which temporary regulatory relief from one or more FMCSR is given to a person or class of persons subject to the regulations, or a person or class of persons who intend to engage in an activity that would be subject to the regulations.

(b) During a pilot program, the participants would be given an exemption from one or more sections or parts of the regulations for a period of up to three years.

(c) A pilot program is intended for use in collecting specific data for evaluating alternatives to the regulations or innovative approaches to safety while ensuring that the safety performance goals of the regulations are satisfied.

## **FMCSR – Part 382 – Controlled Substances and Alcohol Testing**

### **382.101 Purpose**

The purpose of this part is to establish programs designed to help prevent accidents and injuries resulting from the misuse of alcohol or use of controlled substances by drivers of commercial motor vehicles.

[https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.382#se49.5.382\\_1101](https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.382#se49.5.382_1101)

## FMCSR – Part 383 – Part and Accessories Necessary for Safe Operation

### 383.1 Purpose and scope

The purpose of this part is to help reduce or prevent truck and bus accidents, fatalities, and injuries by requiring drivers to have a single commercial motor vehicle driver's license and by disqualifying drivers who operate commercial motor vehicles in an unsafe manner.

(b) This part:

- (1) Prohibits a commercial motor vehicle driver from having more than one commercial motor vehicle driver's license;
- (2) Requires a driver to notify the driver's current employer and the driver's State of domicile of certain convictions;
- (3) Requires that a driver provide previous employment information when applying for employment as an operator of a commercial motor vehicle;
- (4) Prohibits an employer from allowing a person with a suspended license to operate a commercial motor vehicle;

## **FMCSR – Part 383 – Part and Accessories Necessary for Safe Operation**

- (5) Establishes periods of disqualification and penalties for those persons convicted of certain criminal and other offenses and serious traffic violations, or subject to any suspensions, revocations, or cancellations of certain driving privileges;**
- (6) Establishes testing and licensing requirements for commercial motor vehicle operators;**
- (7) Requires States to give knowledge and skills tests to all qualified applicants for commercial drivers' licenses which meet the Federal standard;**
- (8) Sets forth commercial motor vehicle groups and endorsements;**
- (9) Sets forth the knowledge and skills test requirements for the motor vehicle groups and endorsements;**
- (10) Sets forth the Federal standards for procedures, methods, and minimum passing scores for States and others to use in testing and licensing commercial motor vehicle operators; and**
- (11) Establishes requirements for the State issued commercial license documentation.**

**[https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.383#se49.5.383\\_11](https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.383#se49.5.383_11)**

## **FMCSR – Part 390 and Part 391 – Drivers/Combo Vehicles Driver Instructions**

### **390.1 Purpose**

This part establishes general applicability, definitions, general requirements and information as they pertain to persons subject to this chapter.

<https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.390>

### **391.1 Scope of the rules in this part; additional qualifications; duties of carrier-drivers.**

(a) The rules in this part establish minimum qualifications for persons who drive commercial motor vehicles as, for, or on behalf of motor carriers. The rules in this part also establish minimum duties of motor carriers with respect to the qualifications of their drivers.

(b) An individual who meets the definition of both a motor carrier and a driver employed by that motor carrier must comply with both the rules in this part that apply to motor carriers and the rules in this part that apply to drivers.

<https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.391>

# Federal Regulations (FMCSR)

## §392.1 Scope of the rules in this part.

(a) Every motor carrier, its officers, agents, representatives, and employees responsible for the management, maintenance, operation, or driving of commercial motor vehicles, or the hiring, supervising, training, assigning, or dispatching of drivers, shall be instructed in and comply with the rules in this part.

(b) The rules in this part do not apply to drivers of “pipeline welding trucks” as defined in 49 CFR 390.38(b)

[https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.392#se49.5.392\\_11](https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.392#se49.5.392_11)

## FMCSR – Part 393 – Part and Accessories Necessary for Safe Operation

### 393.1 Scope of the rules in this part

(a) The rules in this part establish minimum standards for commercial motor vehicles as defined in §390.5 of this title. Only motor vehicles (as defined in §390.5) and combinations of motor vehicles which meet the definition of a commercial motor vehicle are subject to the requirements of this part. All requirements that refer to motor vehicles with a GVWR below 4,536 kg (10,001 pounds) are applicable only when the motor vehicle or combination of motor vehicles meets the definition of a commercial motor vehicle.

(b)(1) Every motor carrier and its employees must be knowledgeable of and comply with the requirements and specifications of this part.

[https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.393#se49.5.393\\_11](https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.393#se49.5.393_11)

## **FMCSR – Part 395 – HOS and Applicable State and Local Laws**

### **395.5 Maximum driving time for passenger-carrying vehicles**

Subject to the exceptions and exemptions in §395.1:

(a) No motor carrier shall permit or require any driver used by it to drive a passenger-carrying commercial motor vehicle, nor shall any such driver drive a passenger-carrying commercial motor vehicle:

- (1) More than 10 hours following 8 consecutive hours off duty; or
- (2) For any period after having been on duty 15 hours following 8 consecutive hours off duty.

## FMCSR – Part 395 – HOS and Applicable State and Local Laws

(b) No motor carrier shall permit or require a driver of a passenger-carrying commercial motor vehicle to drive, nor shall any driver drive a passenger-carrying commercial motor vehicle, regardless of the number of motor carriers using the driver's services, for any period after—

Having been on duty 60 hours in any 7 consecutive days if the employing motor carrier does not operate commercial motor vehicles every day of the week;

Or

(2) Having been on duty 70 hours in any period of 8 consecutive days if the employing motor carrier operates commercial motor vehicles every day of the week.

[https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.395#se49.5.395\\_15](https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.395#se49.5.395_15)

# FMCSR – Part 396 and Part 397 Rules

## 396.3 Inspection, repair, and maintenance

(a) *General.* Every motor carrier and intermodal equipment provider must systematically inspect, repair, and maintain, or cause to be systematically inspected, repaired, and maintained, all motor vehicles and intermodal equipment subject to its control.

<https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.396>

## 397.1 Transportation of Hazardous Materials : Driving and Parking Rules

(a) The rules in this part apply to each motor carrier engaged in the transportation of hazardous materials by a motor vehicle which must be marked or placarded in accordance with §177.823 of this title

<https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.397>

# FMCSR – Part 398 – Transportation of Migrant Workers

## 398.1 Transportation of Migrant Workers

(a) *Migrant worker.* “Migrant worker” means any individual proceeding to or returning from employment in agriculture as defined in section 3(f) of the Fair Labor Standards Act of 1938, as amended (29 U.S.C. 203(f)) or section 3121(g) of the Internal Revenue Code of 1954 (26 U.S.C. 3121(g)).

(b) *General.* The regulations prescribed in this part are applicable to carriers of migrant workers by motor vehicle, as defined in §398.1(b), but only in the case of transportation of any migrant worker for a total distance of more than 75 miles (120.7 kilometers) in interstate commerce, as defined in 49 CFR 390.5.

[https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.398#se49.5.398\\_12](https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.398#se49.5.398_12)

## FMCSR – Part 399 – Employee Safety and Health Standards

### 399.201 Employee Safety and Health Standards

This subpart prescribes step, handhold, and deck requirements on commercial motor vehicles. These requirements are intended to enhance the safety of motor carrier employees.

This subpart applies to all trucks and truck-tractors, having a high-profile cab-over-engine (COE) configuration, for entrance, egress and back of cab access, manufactured on and after September 1, 1982.

<https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.399>

# Mississippi Regulations

## Mississippi Traffic Code 63

<https://advance.lexis.com/container?config=00JAAzNzhjOTYxNC0wZjRkLTQzNzAtYjJIYS1jNjExZWYxZGFhMGYKAFBvZENhdGFsb2cMIW40w5ilH7toHnTBIEP0&crid=116c4ff7-29dc-42a2-ae87-9602cc3e2f59&prid=6bb01802-9d6a-4e14-93e8-2c18f4406c55>

## MDE Minimum Standards

<https://www.mdek12.org/OSOS/PT>

## Mississippi Department of Public Safety

<https://www.driverservicebureau.dps.ms.gov/>

## **Stopping at Weigh Stations/Scales – Not required for School Buses**

### **Roadside Inspections**

Conducted roadside, fixed and mobile sites

Selection both random and risk-based, including traffic enforcement component

Approximately 3.5 to 4 million roadside inspections conducted per year

Inspection follows standard process

Average time to conduct: 15-60 minutes depending on level and violations discovered

Enforcement actions: Violations, warning, citations, fines, OOS orders, arrests and others

Data upload of inspection report information

## Weigh Stations

### Not Required for School Buses

Weigh stations are important for Department of Transportation (DOT) to make sure that you're traveling with a safe load.

When driving along an interstate highway, you'll occasionally find signs that look something like this one. Once you get within a half- to quarter-mile from the station, there will be signs that indicate whether it's open or closed. When you come to an open weigh station, get in the right lane and get in line for the scale. Some weigh stations will also note whether they have PrePass service, which, if equipped in your truck, will let you speed the process up significantly.



## Weigh Stations

Not Required for School Buses

Adhere to the speed limit as you drive toward and onto the scale. If you pass over the scale at the correct speed and with a proper load, you'll be sent on your way in the bypass lane. The scale will give directions as to slowing and stopping. You may be asked to move right over the scale, or you may be asked to stop so they can weigh each axle.



## Weigh Stations

### Not Required for School Buses

After you've been weighed, your DOT number will be entered in a computer system to ensure that your log is accurate in case you get inspected later down the road. They'll also pull your safety rating (no worries here if it's your first trip) and check your equipment and logbook. **As long as everything checks out,** you'll be on your way shortly. If there are any hiccups, prepare for a bit of a delay. Faulty or missing equipment will lead to a more detailed inspection, while a problem with your logbook can get you pulled off the road for hours until it's sorted out. (Another reason to make sure that your log and equipment are in good order all the time!)



**Stopping at Weigh Stations/Scales  
- Not Required for School Buses**

Roadside Inspections – Top 10 Driver violations

	Violation Code	Violation Description	OOS %
1	395.8	Log book violation	0.10%
2	395.8F1	Record of duty not current	0.15%
3	391.41A	Not in possession of Medical certificate	2.28%
4	391.11B2	Non-English speaking driver	5.18%
5	395.3A2	Permitting driving over 14 hours on duty	44.03%
6	392.2SLLS2	State/Local Laws – speeding 6-10 over	0.03%
7	392.16	Failing to use seatbelt	0.00%
8	392.2SLLS1	State/Local Laws – speeding 1-5 over	0.00%
9	395.3A1	Permitting driving over 11 hours	47.41%
10	392.8E	False report of drivers record of duty status	72.99%

## Stopping at Weigh Stations/Scales - Not Required for School Buses

### Roadside Inspections – Top 10 Vehicle Violations

	Violation Code	Violation Description	% of Total OOS
1	393.9A	Inoperative required lamps	9.35%
2	393.11	No/defective lighting devices/reflective devices	1.94%
3	396.3A1	Inspection/repair and maintenance parts and accessories	15.76%
4	393.75C	Tire—other tread depth less than 2/32 of inch	8.73%
5	396.5B	Oil and/or grease leak	1.95%
6	393.47E	Clamp/Roto-Chamber type brake(s) out of adjustment	0.11%
7	396.17C	Operating a CMV without periodic inspection	0.11%
8	393.45B2	Failing to secure brake hose/tubing against mechanical damage	6.88%
9	393.95A	No/discharged/unsecured fire extinguisher	0.01%
10	393.25F	Stop lamp violations	29.57%

# Hazard Awareness of Vehicle Size and Weight

## Vehicle Measurements

Maximum single unit length = 45 feet

Maximum width = 120 inches (excluding mirrors or safety devices)

Maximum height = 13 feet (exception – 14'6" may be operated on designated highways)

## Maximum Legal Dimensions Without A Permit

### Length:

53' trailer

99' overall

### Width:

8'6"

### Height:

13'6"

# Hazard Awareness of Vehicle Size and Weight

## Overhang:

3', front

14' 11", rear (28' forest products)

## Weight:

80,000 (GVW)

20,000 Single axle

34,000 tandem axle

42,000 tridem axle

## Mississippi Department of Transportation Restriction Maps

<https://mdot.ms.gov/portal/maps>

[https://mdot.ms.gov/documents/Planning/Maps/Truck%20Weights/2020\\_LEGAL\\_TRUCK\\_WT.pdf](https://mdot.ms.gov/documents/Planning/Maps/Truck%20Weights/2020_LEGAL_TRUCK_WT.pdf)

## Bridge Formula

The Federal Bridge Gross Weight Formula, also known as Bridge Formula B or the Federal Bridge Formula, is a mathematical formula in use in the United States by truck drivers and Department of Transportation (DOT) officials to determine the appropriate maximum gross weight for a commercial motor vehicle (CMV) based on axle number and spacing. The formula is part of federal weight and size regulations regarding interstate commercial traffic (intrastate traffic is subject to state limits). The formula is necessary to prevent heavy vehicles from damaging roads and bridges. CMVs are most often tractor-trailers or buses, but the formula is of most interest to truck drivers due to the heavy loads their vehicles often carry.

**<https://mdot.ms.gov/documents/Enforcement/Regulations/Truck%20Weights/Mississippi%20Maximum%20Weight%20Laws.pdf>**

## Federal Bridge Formula

- Gross weight =  $500 (LN/N-1 + 12N + 36)$
- L = Distance in feet between the extremes of any group of two or more consecutive axles
- N = Number of axles being considered. In computations of this formula no gross vehicle weight shall exceed 80,000 pounds except as may be authorized under Mississippi Code 63-5-34.

# Federal Bridge Formula

Objective is to spread load weights out to minimize damage to roads and bridges.

Two measures are included in the Federal law and enforced in Mississippi:

1. **Outer Bridge Formula** which determines the total weight allowed on a truck as a function of the distance between the centerline of the steering axle and the center-line of the rear trailer tandem.
2. **Inner Bridge Formula** which determines total weight allowed on any two sets of axles as a function of the distance between the two extreme axles. For example, between the centerline of the steering axle and the rear drive tandem on a tractor or between the front drive tandem and the rear trailer tandem.

## Federal Bridge Formula

Mississippi enforces the Outer Bridge, which requires a minimum distance between the center-line of the steering axle of 5 axle combination and the center line of the rearmost trailer axle of 51 feet. The maximum allowable gross vehicle weight decreases for shorter trailers as shown in Table 1 on the next slide. (The allowable weights are rounded to the nearest 500 pounds, the bold figures indicate spacings where rounding causes the allowable weight to drop by 1,000# per foot.)

## Bridge Formula – Table 1

Outer Bridge Distance	Maximum Allowable GVW	
	5 Axles	6 Axles
51	<b>80,000</b>	80,000
50	<b>79,000</b>	80,000
49	78,500	80,000
48	78,000	<b>80,000</b>
47	77,500	<b>80,000</b>
46	76,500	80,000
45	76,000	80,000
44	75,500	<b>80,000</b>
43	<b>75,000</b>	<b>80,000</b>
42	<b>74,000</b>	<b>79,000</b>
41	73,500	78,500
40	73,000	78,000
39	72,500	77,500
38	<b>72,000</b>	<b>77,000</b>
37	<b>71,000</b>	<b>76,000</b>
36	70,500	75,500

## **Dimensions for Federal Bridge Formula**

### **Minimum Measurements to Gross 80,000 pounds on Interstate Highways**

**Axle 1 to Axle 3 --13 feet**

**Axle 2 to Axle 5 – 36 feet**

**Axle 1 to Axle 5 – 51 feet**

# Basic Operation Test

## B1.1.1

## Basic Operations Test – True or False

1. Specific training requirements are mandated by the United States Congress.
2. Every CDL operator is required to receive this training. There are no exceptions.
3. There are four CDL Vehicle Classes: A, B, C, and D.
4. A person with a CDL Instruction Permit is prohibited from driving a commercial passenger vehicle with passengers on board.
5. If you fail to provide and keep up-to-date your medical examiner's certificate you become "not- certified" and may lose your CDL.

## Basic Operations Test – True or False

6. It is legal to have more than one CDL license.
7. CDL operators are required to be enrolled in a random drug and alcohol testing program.
8. School Buses are required to stop at roadside weight/scale station.
9. School Buses don't have to worry about height restrictions or any bridge weight restrictions. These restrictions don't apply to school buses.
10. You are not allowed to send or read text messages while driving.

# Control Systems/Dashboard - B1.1.2

# Control Systems/Dashboard

Objectives:

**Reading Gauges and Instruments correctly**

**Proper use of Vehicle Safety Components**

**Safety Belts and Mirrors**

**Vehicle Instruments and Controls**

**Identifying, locating and explaining the function of primary and secondary controls required for**

**Steering**

**Accelerating**

**Shifting**

**Braking Systems (e.g., ABS hydraulic, air)**

**Parking**

# Gauges and Instruments

**\*Note:** Normal varies between different vehicles depending on the manufacturer and the size of the motor.

**Oil pressure** - Should come up to normal within seconds after engine is started.

**Air pressure** - Pressure should build from 85 psi to 100 psi within 45 seconds. Build air pressure to governor cut-out (usually around 120 – 140 psi).

**Ammeter and/or Voltmeter** - Should be in normal range(s).

**Coolant temperature** - Should begin gradual rise to normal operating range.

**Engine oil temperature** - Should begin gradual rise to normal operating range.

**Warning lights and Buzzers** - Oil, coolant, charging circuit warning, and antilock brake system lights should go out right away.

# SAFETY EQUIPMENT

FIRE EXTINGUISHER

FIRST AID KIT

BODY FLUID KIT

TRIANGLE REFLECTIVE KIT

SEAT BELT CUTTERS (SPECIAL NEEDS BUS)

## Emergency Equipment

Emergency Reflectors: All buses shall carry three (3) emergency triangle reflectors in compliance with FMVSS 125, contained in a securely mounted case easily accessible to the driver or in a location plainly indicated by appropriate markings.

Emergency equipment shall be securely mounted. Emergency equipment shall be clearly visible or in a location plainly indicated by appropriate markings.

## Emergency Triangles – Mississippi School Bus Minimum Specs

Emergency Triangles - Each school bus shall be equipped with three emergency reflective triangles. In case of a breakdown, accident or other emergency, the driver, paraprofessional, or qualified individual will place the triangles as the law requires.

When you pull off the road and stop, activate the 4-way hazard lamps. Taillights may not provide adequate warning to motorists. Drivers have crashed into the rear of a parked vehicle because they thought it was moving normally.

If you must stop on a road or shoulder of a road, set your emergency reflective triangles within 10 minutes. Placement should be at the following locations:

On the traffic side of the vehicle, within 10 feet from the front or rear corners to mark the location of the vehicle.

About 100 feet behind and ahead of the vehicle, on the shoulder or in the lane you are stopped in. (See figure on next slide).

## Emergency Triangles - Placement

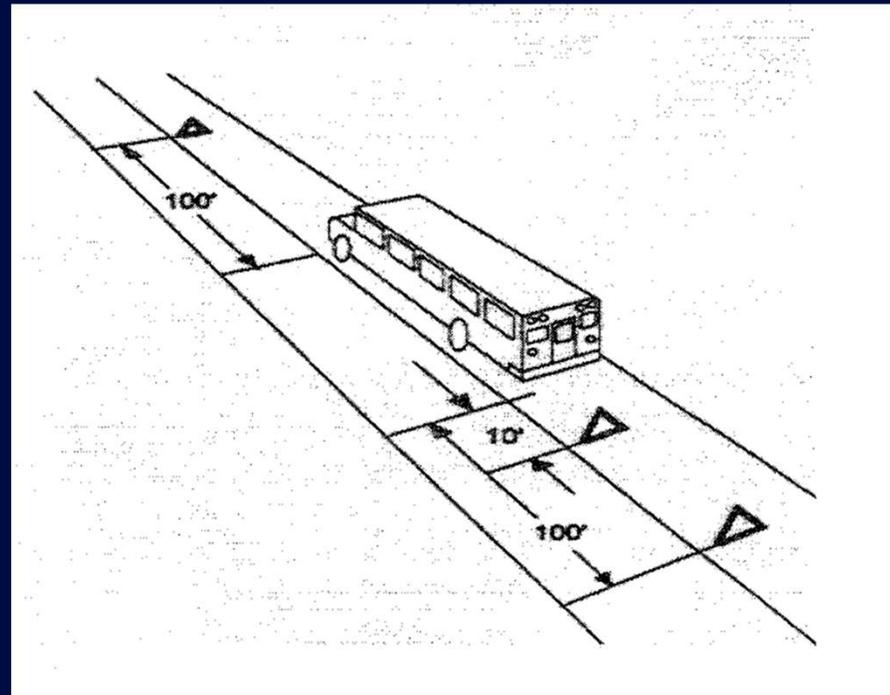
- (a) One at the traffic side of the stopped vehicle, within ten feet of the front or rear of the vehicle;
- (b) One at a distance of approximately one hundred feet from the stopped vehicle in the center of the traffic lane or shoulder occupied by the vehicle and in the direction toward traffic approaching in that lane; and
- (c) One at a distance of approximately one hundred feet from the stopped vehicle in the opposite direction from those placed in accordance with paragraphs (a) and (b) of this subsection (3) in the center of the traffic lane or shoulder occupied by the vehicle; or

## Emergency Triangle Placement

One at the traffic side of the stopped vehicle, within 10 feet of the front or rear of the vehicle

One at a distance of approximately one hundred feet from the stopped vehicle in the center of the traffic lane or shoulder occupied by the vehicle and in the direction toward the traffic approaching in that lane, and

One at a distance of approximately one hundred feet from the stopped vehicle in the opposite direction from those placed in accordance with the above paragraphs in the center of the traffic lane or shoulder occupied by the vehicle, or



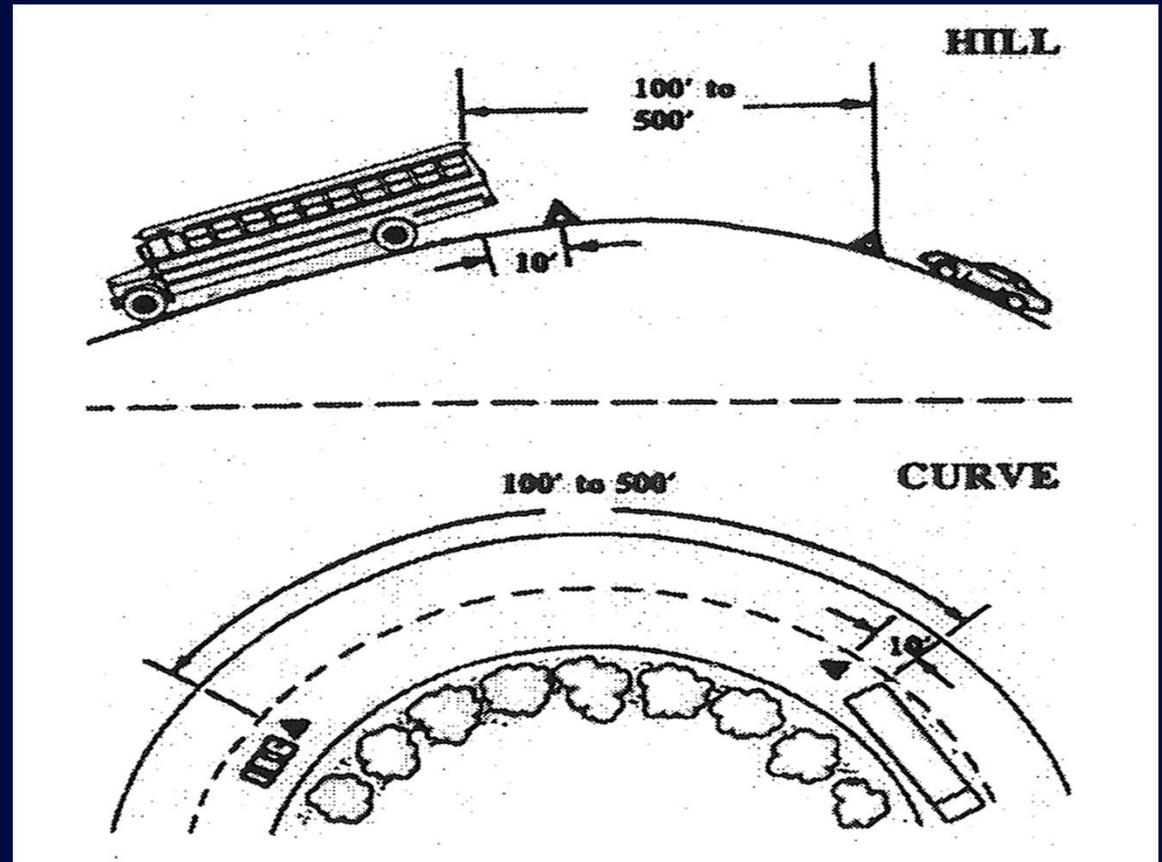
## Emergency Triangles - Placement

(d) If the vehicle is stopped within five hundred feet of a curve, crest of a hill, or other

obstruction to view, the driver shall place the emergency equipment required by this subsection

(3) in the direction of the obstruction to view at a distance of one hundred feet to five hundred

feet from the stopped vehicle so as to afford ample warning to other users of the highway; or



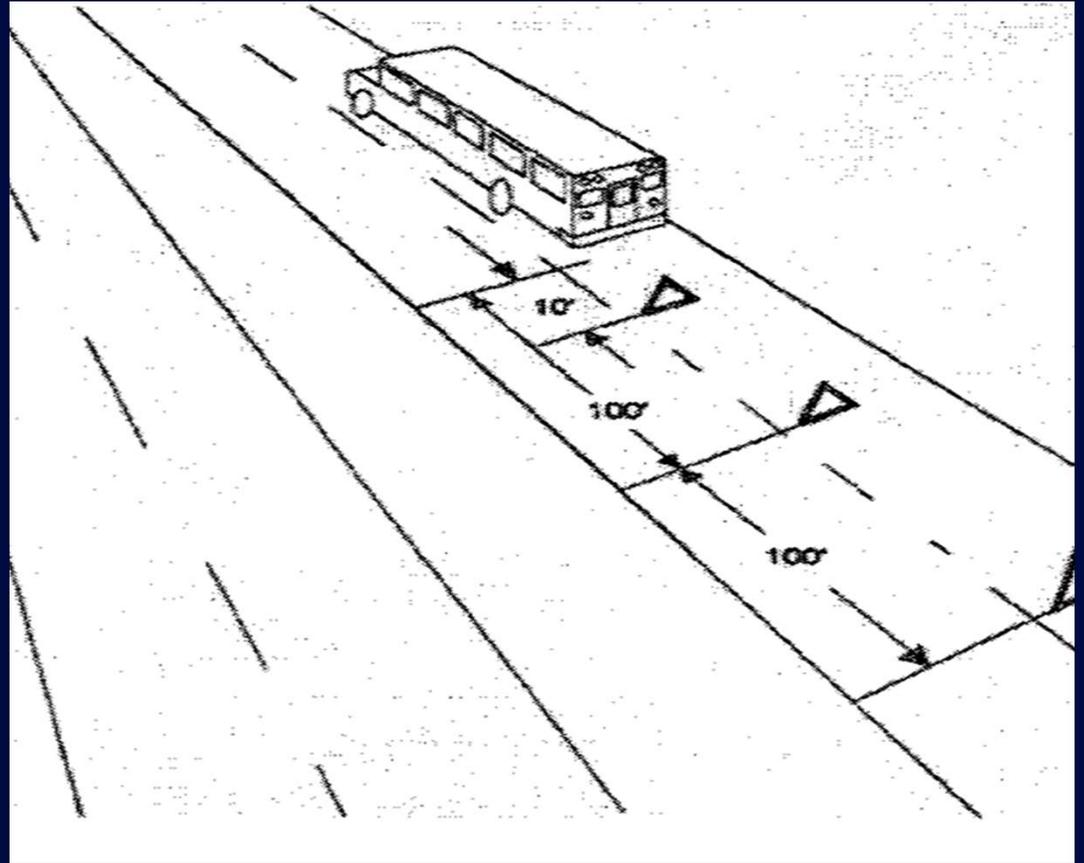
## Emergency Triangles - Placement

(e) If the vehicle is stopped upon the traveled portion or the shoulder of a divided or one way highway, the driver shall place the emergency equipment required by this subsection (3),

one at a distance of two hundred feet and one at a distance of one hundred feet in a direction

toward approaching traffic in the center of the lane or shoulder occupied by the vehicle, and

one at the traffic side of the vehicle within ten feet of the rear of the vehicle.



## Emergency Triangles - Placement



When placing the triangles, hold an assembled triangle toward the oncoming traffic. This enhances safety by increasing visibility to other drivers (especially at night).

When the triangles are unfolded for use, the weighted base must be turned so it makes a cross with the bottom of the triangle to keep the triangle from tipping over.

When folding triangles to place back into the case - do not force them down as they easily break and will only fold one way to store properly.

## Fire Extinguisher – Mississippi School Bus Minimum Specs

The bus shall be equipped with at least one (1) pressurized, dry, chemical fire extinguisher, complete with hose, to meet Underwriters Laboratories, Inc., approval. The extinguisher shall be securely mounted in an extinguisher bracket (automotive type), located in full view of and readily accessible to the driver. A pressure gauge shall be mounted on the extinguisher so as to be easily read without removing the extinguisher from its mounted position.

The fire extinguisher shall be of a type approved by Underwriter Laboratories, Inc., with a total rating of 2A10BC or greater. The operating mechanism shall be sealed with a type of seal which will not interfere with the use of the fire extinguisher.

# Fire Extinguisher

## Fire Extinguisher Operation

Hold the extinguisher upright. It should not be held on its side when operating.

Twist and pull safety pin, breaking the seal.

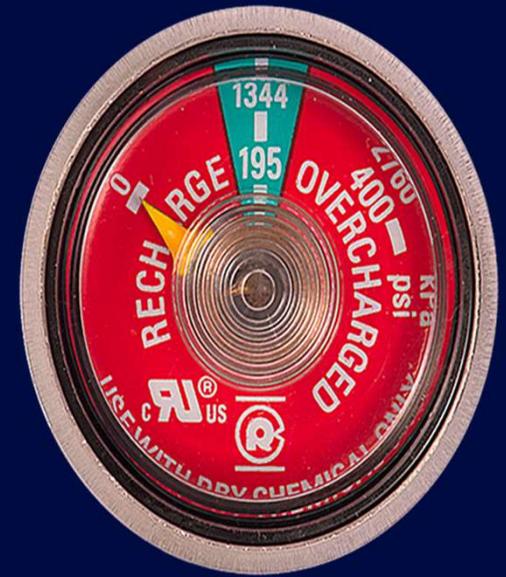
Squeeze the handle to discharge powder. Aim at the base of the fire closest to you and progress forward, moving the discharge cone from side to side in a sweeping motion.

Discharge power as desired to control the fire

After use, report extinguisher for replacement or recharge.



## Check The Charge



## How to use a fire extinguisher – PASS

- **P**ull the pin. Hold the extinguisher with the nozzle pointing away from you and release the locking mechanism.
- **A**im low. Point the extinguisher at the base of the fire.
- **S**queeze the lever slowly and evenly.
- **S**weep the nozzle from side-to-side

## First Aid Kit – Mississippi School Bus Minimum Specs

First Aid Kit: The bus shall carry one first aid kit which shall be securely mounted in full view of the driver or with the location plainly indicated by appropriate markings. Additional kits may be installed. The kit(s) shall be mounted for easy removal. The kit shall be sealed. The seal verifies the integrity of the contents without opening the kit. The seal shall be designed to allow easy access to the kit's content.

## First Aid Kit – Mississippi School Bus Minimum Specs

Each kit shall include:

- 2 - 1" x 2 1/2 yards adhesive tape rolls
- 24 - sterile gauze pads 3" x 3"
- 100 - 3/4" x 3" adhesive bandages
- 8 - 2" bandage compress
- 10 - 3" bandage compress
- 2 - 2" x 6' sterile gauze roller bandages
- 2 - non-sterile triangular bandages approximately 40" x 36" x 54" with 2 safety pins
- 3 - sterile gauze pads 36" x 36"
- 3 - sterile eye pads
- 1 - round end scissors
- 1 - pair latex gloves
- 1 - mouth-to-mouth airway

Moisture and dustproof kit of sufficient capacity to store the required items

# First Aid Kit

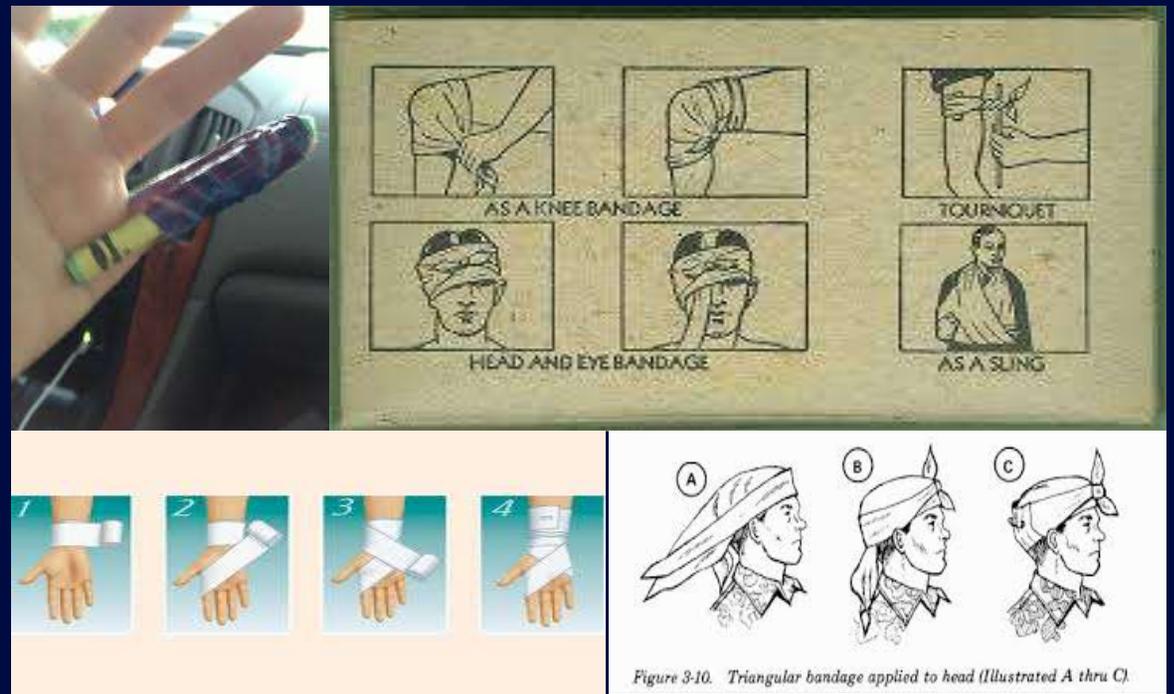


Figure 3-10. Triangular bandage applied to head (Illustrated A thru C).

# CPR Mask or Mouth to Mouth Airway



If it is wet, warm, and not yours, use  
universal precautions and  
**WEAR GLOVES!!!!**

## Body Fluid Clean-up Kit – Mississippi School Bus Minimum Specs

Each bus shall have a removable and moisture proof body fluid clean-up kit accessible to the driver. It shall be properly mounted and identified as a body fluid clean-up kit.

Each kit shall include:

- 1 - 2 oz. package infectious liquid spill control powder
- 1 - odor reducing mask
- 2 - latex gloves
- 2 - antiseptic wipes
- 2 - paper crepe towels
- 1 - scraper
- 1 - plastic disposal bag with scoop and tie

## **Body Fluid Clean-up Kit – Bloodborne Pathogens**

**Bloodborne pathogens are infectious microorganisms in human blood that can cause disease in humans. These pathogens include, but are not limited to, hepatitis B (HBV), hepatitis C (HCV) and human immunodeficiency virus (HIV). Needle sticks and other sharps-related injuries may expose workers to bloodborne pathogens.**

**For a bloodborne pathogen to be spread, the bodily fluids of an infected person must enter into the bloodstream of another person. The most common cause of transmission in the workplace is when an infected person's blood enters another person's bloodstream through an open wound.**

## Body Fluid Clean-up Kit: Universal Precautions

Universal precautions is an approach to infection control to treat all human blood and certain human body fluids as if they were known to be infectious for HIV, HBV and other blood borne pathogens, Blood borne Pathogen Standard 29 CFR 1910.1030(d)(1) requires:

Employees to observe Universal Precautions to prevent contact with blood or other potentially infectious materials (OPIM).

When differentiation between body fluid types is difficult or impossible, **all** body fluids shall be considered potentially infectious materials.

## **Body Fluid Clean-up Kit: Universal Precautions**

**Treat all blood and other potentially infectious materials with appropriate precautions such as**

**Use gloves, masks, and gowns if blood or OPIM exposure is anticipated.**

**Use engineering and work practice controls to limit exposure.**

## **Body Fluid Clean-up Kit**

**Body fluids of all persons should be treated as if they contain infectious agents (germs). The term “body fluids” includes blood, semen, drainage from scrapes and cuts, feces, urine, vomit, respiratory secretions (e.g. nasal discharge) and saliva.**

**Contact with body fluids presents a risk of infection with a variety of germs. However, in general, the risk is very low and dependent on a variety of factors including the type of fluid with which contact is made. Put on disposable gloves prior to the cleanup process. Body fluids must be contained or removed immediately, using established district procedures. Wash contacted area with warm, soapy water as soon as possible.**

## Seatbelts

Accidents and collisions are a part of driving. So, make sure your vehicle is equipped with a Seat Belt to keep you from flying off your seat when it happens.

Flimsy as it may seem, your vehicle's seat belt plays a significant role in your driving safety. When you use a seat belt, you're five times safer than when you don't wear it. Isn't this benefit enough for you to use the seat belt on the road?



# Seatbelts

## §392.16 Use of seat belts.

(a) *Drivers.* No driver shall operate a commercial motor vehicle, and a motor carrier shall not require or permit a driver to operate a commercial motor vehicle, that has a seat belt assembly installed at the driver's seat unless the driver is properly restrained by the seat belt assembly.

(b) *Passengers.* No driver shall operate a property-carrying commercial motor vehicle, and a motor carrier shall not require or permit a driver to operate a property-carrying commercial motor vehicle, that has seat belt assemblies installed at the seats for other occupants of the vehicle unless all other occupants are properly restrained by such seat belt assemblies.



## Seatbelts

A school transportation vehicle operator shall have the safety belt fastened, worn correctly and properly adjusted prior to the school transportation vehicle being placed in motion.

All passengers in a school transportation vehicle under 10,000 lbs. GVWR shall have their safety belts fastened, worn correctly and properly adjusted prior to the school transportation vehicle being placed in motion.

## Seatbelt/Lap Restraint Assembly

The lap restraints in most vehicles are the standard three-point belt. This restraint uses one continuous line of durable material to comfortably strap your body to the seat. This restraint is designed to go over your pelvis, chest, and shoulders, to hold back more of your body during sudden stops and collisions.

Pelvic restraint means a seat belt assembly or portion thereof intended to restrain movement of the just the pelvis.

Retractor means a device for storing part or all of the webbing in an assembly.

Seat back retainer means the portion of some seat belt assemblies designed to restrict forward movement of a seat back.



## School Bus Driver Falls Out Of Seat

<https://youtu.be/xCObYDxa3Do>

<https://youtu.be/JK6GRov01gY>

## Mirrors

The interior mirror shall be either clear view, laminated glass or clear view glass bonded to a backing which retains the glass in the event of breakage. The mirror shall have rounded corners and protected edges. Type A bus shall have a minimum of a six-inch by sixteen-inch (6" x 16") mirror and Type B, C and D buses shall have a minimum of a six-inch by thirty-inch (6" x 30") mirror.

Each school bus shall be equipped with exterior mirrors meeting the requirements of FMVSS - 111. Mirrors shall be easily adjustable but shall be rigidly braced so as to reduce vibration.

Mirror shall be attached to the body in such a manner as to minimize fender breakage due to excessive vibration.

# Mirrors

The left front tires makes contact with the ground and along the side to the rear of the bus to reduce the left side blind spot



Not less than 12 feet in the front of the school bus. All the way across the front bumper of the bus plus not less than 2 feet on either side of the ground to the point where direct observation is observed



## Guideline for Mirror Adjustment – Right Convex Mirror

Right front tires making contact with the ground, the entrance door area and along the side of the rear of the school bus



## Guideline for Mirror Adjustments – Left and Right Side Flat Mirrors

Using the side flat mirrors you should be able to see:

The side of the bus in the edge of the mirror but not enough to enable you to count the windows.

Parallel to sides of the bus at least on traffic lane

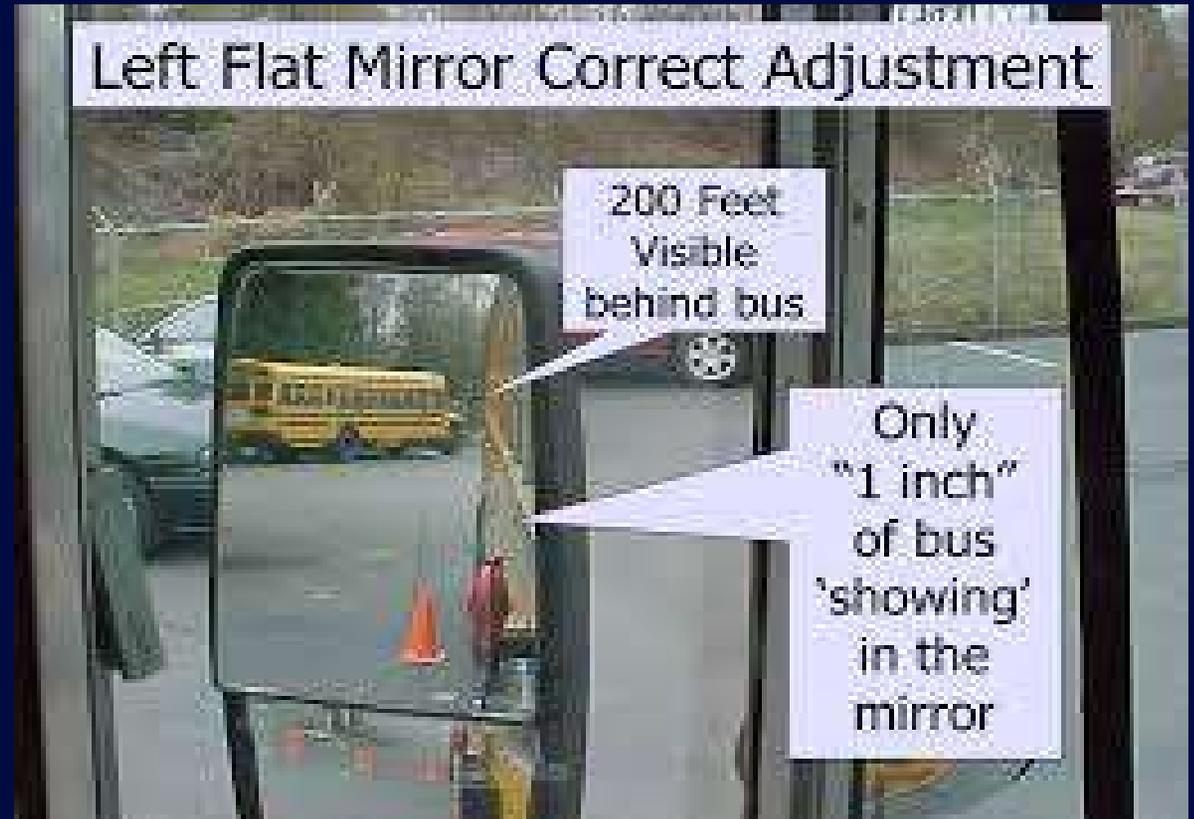
The rear tires touching the ground

Approximately four (4) bus lengths behind the bus or 200 ft.

**Remember: Your side flat mirrors when adjusted and properly used will give you a wider viewing area, but they also create blind spots that can hide a vehicle as large as a semi-truck. When approaching an intersection, be cautious and lean towards the steering wheel to peer around the mirrors to see if traffic has cleared.**

## Guideline for Mirror Adjustments

### Left Flat Mirror Correct Adjustment



## Guideline for Mirror Adjustments



## Guideline for Mirror Adjustments – Inside Rear-View Mirror

The rear-view mirror should be adjusted to see the students inside the bus, the top of the rear window in the top of the mirror and any traffic directly behind the bus. If you cannot adjust the mirrors to your satisfaction, you may need to ask your supervisor and/or mechanic for bracket adjustment.



## Identifying, Locating, and Explaining the function

Steering

Acceleration

Shifting

Braking Systems

Parking

# Steering



## Steering: What does this mean?



## Steering Wheel Function

A steering wheel (also called a driving wheel or a hand wheel) is a type of steering control in vehicles and vessels (ships and boats).

The steering wheel is the part of the steering system that is manipulated by the driver; the rest of the steering system responds to such driver inputs.



# Accelerating



## Function of Accelerator

The accelerator in a vehicle controls the flow rate of the fuel into the combustion chamber. Whenever we apply the accelerator, it opens the throttle valve which increases fuel input to the engine, therefore increasing the speed of the vehicle.

## Shifting



## Shifting

**A gear stick, gear lever (both UK English), gearshift or shifter (US English) is a metal lever attached to the shift assembly in a manual transmission-equipped automobile and is used to change gears.**

**In an automatic transmission-equipped vehicle, a similar device is known as a gear selector.**

## **Gear Selector**

**P = "Park", which locks the transmission and driving wheels.**

**R = "Reverse", which propels the vehicle rearward.**

**N = "Neutral", which disengages the transmission and rear wheels, permitting the vehicle to roll freely but not go anywhere under its own power.**

**D= "Drive", which propels the vehicle forward under the transmission's control; the transmission is free to select gear ratios on its own.**

## **Gear Selector**

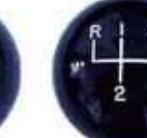
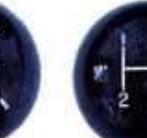
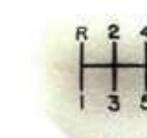
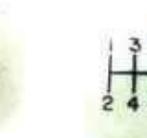
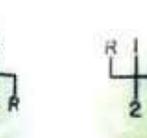
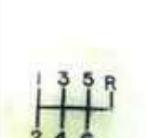
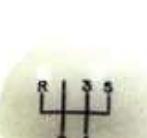
**3 = "3rd gear", like D except that the transmission is instructed not to shift to any gear higher than 3rd gear and, in some transmissions, may also be instructed to attempt to always keep 3rd gear engaged regardless of road speed.**

**2 = "2nd gear", like 3 except 2nd gear instead of 3rd gear.**

**L = "Low", like 2 except 1st gear instead of 2nd gear.**

**OD = "Overdrive", which permits the transmission to shift into a gear ratio above normal for maximum top speed and/or maximum fuel efficiency at highway speeds, but which may greatly reduce torque available for overtaking and passing other vehicles.**

# Manual Shift Patterns

				
3RUL	4RDL	4RDR	4RUL	4RUR
				
5R-DR	5RDR	5RUL	6RDR	6RUL
		<p>EXAMPLE</p>  		
6RUR	5UR-RUL	<p>AUTO      4 X 4</p> <p>Auto &amp; 4 x 4 Shift patterns available upon request. E-mail or fax in your pattern.</p>		

# Shifting

Push the clutch pedal all the way down before starting the vehicle.

Engage the brake pedal. ...

Turn the key or push the ignition button to start it up.

With the clutch depressed, put the vehicle in 1st gear.

Release the parking brake.

Rev the engine to between 1,500 RPM and 2,000 RPM.

To change gear:

Release the accelerator pedal and at the same time press the clutch pedal down.

Remove your right hand from the steering wheel, cup it around the gear knob and move the lever gently but positively from one position to another.

Return your right hand to the steering wheel

## How to Drive A Manual Transmission

<https://youtu.be/Y-bq9NoFaf8>

## **Braking System – Anti-Lock, ABS Warning Lights**

### **ABS – Anti-lock Brake System/Automatic Brake System**

**An anti-lock braking system or anti-skid braking system (ABS) is an automobile safety system that allows the wheels on a motor vehicle to maintain tractive contact with the road surface according to driver inputs while braking, preventing the wheels from locking up (ceasing rotation) and avoiding uncontrolled skidding**

**Check that the ABS warning light comes on during start up then shuts off.**

**You may have to drive the bus for the light to go off.**

**Check with your technicians prior to driving the vehicle.**

# ABS Indicator Lights

**When you first start up the vehicle the Brake light will come on for a few seconds and if all is working correctly it will go out on it's own.**

When you first start up the vehicle the Anti-lock Breaking System (ABS) light will come on for a few seconds and if all is working correctly it will go out on it's own, as will the rest of the systems self checks.

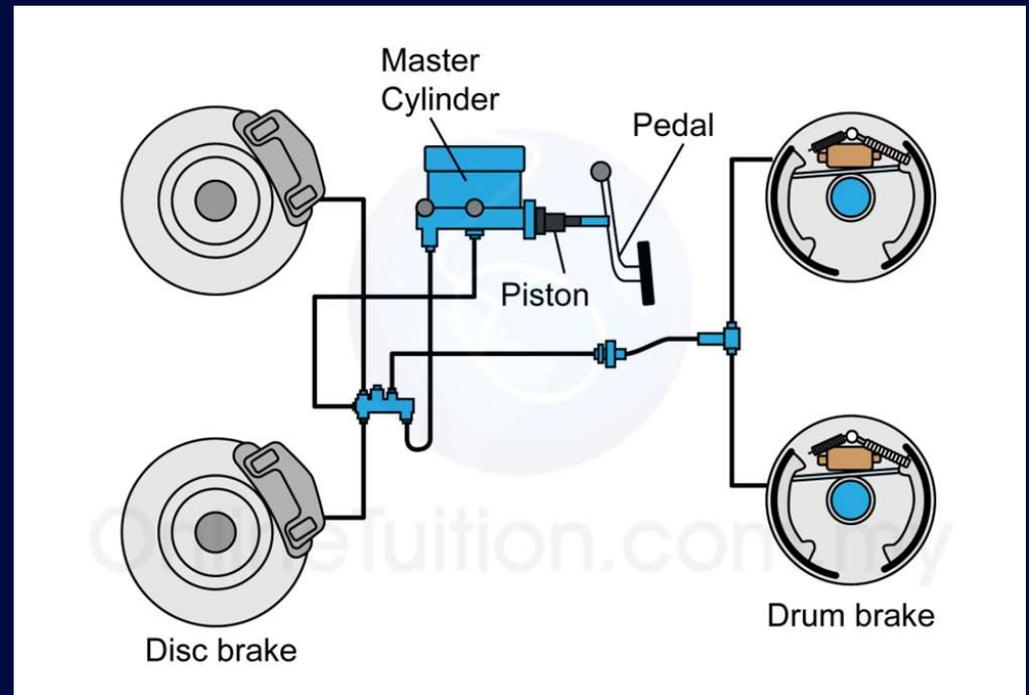


If a indicator light stays on it is an indication of a problem with a vehicle system and should be checked by a qualified Technician

## Hydraulic Braking System

A hydraulic braking system is a brake pedal attached to a piston full of a nearly incompressible brake fluid connected to another piston near the wheels attached to brake pads which push on the rotors on a wheel. When you push down on the brake pedal of a car, you make some fluid pressure  $P = \text{Force} / \text{Area}$  where the force is the force of your foot on the pedal (equal to the force of the pedal back on your foot) and the area is the cross-sectional area of the piston. That pressure is a lot higher than the pressure of your foot on the pedal, because the foot-pedal contact is much more spread out than the little piston area. Fluids will transmit pressure throughout the whole fluid, so the piston at the other end will push harder on the brake pads, pressing them against the rotors. The friction between them causes the rotational energy of the wheels to turn to heat and stop the vehicle.

## Braking System: Hydraulics



## Braking System: Air Brakes (Drum Brakes)



## Braking System: Air Brakes

An air brake or, more formally, a compressed air brake system, is a type of friction brake for vehicles in which compressed air pressing on a piston is used to apply the pressure to the brake pad needed to stop the vehicle.

## Park Brake Check

Apply parking brake only to make sure that it will hold the vehicle by shifting into a low gear and gently pulling against the brake by placing pressure on the accelerator.

# Hydraulic Brake Check

## Check Fluid Level

Make sure that it is between minimum and maximum.

**DO NOT remove the cap to check fluid level.**

## Start Engine

Pump the brake pedal three times, and then hold it down for 5 seconds. The brake pedal should NOT move (depress) during the 5 seconds. If equipped with hydraulic brake reserve (back up) system, with key on, depress the brake pedal and listen for the sound of the reserve system electric motor.

Check that the warning buzzer or light is off.

## Dual Air Brake Check

**SET WHEEL CHOCKS (not required for test)**

**Start engine to build up air pressure to maximum.**

**When system cut-out pressure is reached, note the pressure (125psi).**

**Apply service brake pedal enough times to allow the air pressure to drop and the air governor to cut in. (The system should build from 85psi to 100psi within 45 seconds at 1,000 – 1,200 RPM)**

**This system shows the cut in and the cut-out pressure. Then allow the system to build to maximum at normal engine RPM 1,000 – 1,200**

**Shut the engine off. Turn ignition switch on (do not start engine).**

# Dual Air Brake Check

**Static Test, release park brake, watch air pressure needles for 1 minute, checking for any air loss. Should not lose more than 2 psi for single vehicles (3 psi for combination vehicles).**

**Apply the service brake all the way down. This initial press should not have more than 9 psi loss. Continue holding for 1 minute. Should not lose more than 3 psi in one minute for single vehicles. (4 psi for combination vehicles) (Tap gauges occasionally for sticking needles). This is the Applied Test".**

**Begin fanning brake pedal, the warning light & audible signal should activate between (75 psi and 50 psi).**

**Continue to fan off air pressure; note the pressure at which the parking brake closes (pops out) is (max 45 psi and min 20 psi). Trailer brakes should pop out as well.**

## **Dual Air Brake Check**

**Start the engine and restore air pressure to maximum.**

**REMOVE WHEEL CHOCKS AT THIS TIME**

**With park brake applied; gently attempt to move (forward 1000 rpm's) make sure that the vehicle will hold in place. (Park Brake Test)**

**When you leave the bus parking lot, perform service brake check before you exit the bus lot. (Service Brake Test)**

## **Service Brake Check**

**Check the service brakes by -**

- **Releasing the emergency/parking brake**
- **Placing the vehicle in gear**
- **Pull forward at 5 mph**
- **Apply the service brake**

**This will assist in determining if the brakes are working properly and to see if the vehicle pulls to one side of the other.**

# Control Systems Test – B1.1.2

## Control Systems Test – True or False

1. When placing emergency triangles on a two-way street, the triangle in front of the vehicle should be placed 10 feet in front of the front bumper.
2. When operating a fire extinguisher, you always hold it sideways to get a better angle on the fire.
3. Body fluids of all persons should be treated as if they contain infectious agents (germs).
4. The belt cutter shall be mounted in a location accessible to the seated driver.
5. When driving a stick shift and changing gears, do not release the accelerator pedal, and at the same time press the clutch pedal down.

## Control Systems/Dashboard Test: True or False

6. When the ABS light on my dashboard comes on and then turns off it means that the system is not working.
7. A hydraulic braking system is a brake pedal attached to a piston full of a nearly incompressible brake fluid connected to another piston near the wheels attached to brake pads which push on the rotors on a wheel.
8. During a parking brake check, apply parking brake only to make sure that it will hold the vehicle by shifting into a low gear and gently pulling against the brake by placing pressure on the accelerator.
9. When doing a Hydraulic Brake Check, do not start the engine, pump the brake pedal five times, and then hold it down for 3 seconds. The brake pedal should NOT move (depress) during the 3 seconds.
10. During the dual air brake check - apply the service brake all the way down. This initial press should not have more than 9 psi loss. Continue holding for 1 minute. Should not lose more than 3 psi in one minute. (Tap gauges occasionally for sticking needles). This is the Applied Test.

# Pre-Trip and Post Trip Inspections - B1.1.3

## Pre-trip

This Pre-trip presentation was designed to prepare for the CDL Skills Test. You are not required to utilize this material in the order that it is presented and can teach this in any order that will work for your district, except for the Air Brake Check which must be performed in the proper order.

District items may be added only after the trainee has passed their CDL Skills Test.

## Pre-Trip Inspection

Upon approach of the bus check that all lights are clean, clear, not missing, not broken, or damaged in any way and are of proper color.

Check that reflectors are clean, none are missing or broken, and they are of proper color - amber.



## Pre-Trip Inspection

Check clearance lights to be sure they are clean, clear, not missing, not broken, damaged in any way, and are of proper color.



## Pre-Trip Inspection

Check student lights to be sure they are clean, clear, not missing, not broken, damaged in any way, and are of proper color.



## Pre-Trip Inspection

Inspect windshield to make sure it is clean, clear and has no obstructions or damage to the glass.



## Pre-Trip Inspection

Check mirrors for proper mounting, damage, and proper adjustment.



## Pre-Trip Inspection

Check turn signal/hazard lights to be sure they are clean, clear, not missing, not broken, damaged in any way, and are of proper color.



## Pre-Trip Inspection

Check headlights/signal/hazard lights to be sure they are clean, clear, not missing, not broken, damaged in any way, and are of proper color.



## Pre-Trip Inspection

If equipped, check that safety arm is securely mounted and functions properly in conjunction with stop arm.

Check for loose fittings and damage.

Check that arm extends fully when operated.



## Pre-Trip Inspection

Check for puddles or dripping fluids on the ground under the engine and transmission.



# Engine Compartment



Check that air hoses, electrical lines, and electrical line insulation are not cracked, chafed, spliced, taped, or worn.

Check that air and electrical lines are not tangled, crimped or pinched or showing wear marks.

Look for puddles or dripping fluids on the ground under the engine or the underside of the engine and transmission.

Inspect engine heater hoses for condition and securement.



Check oil level while engine is off.  
Indicate where dipstick is located.

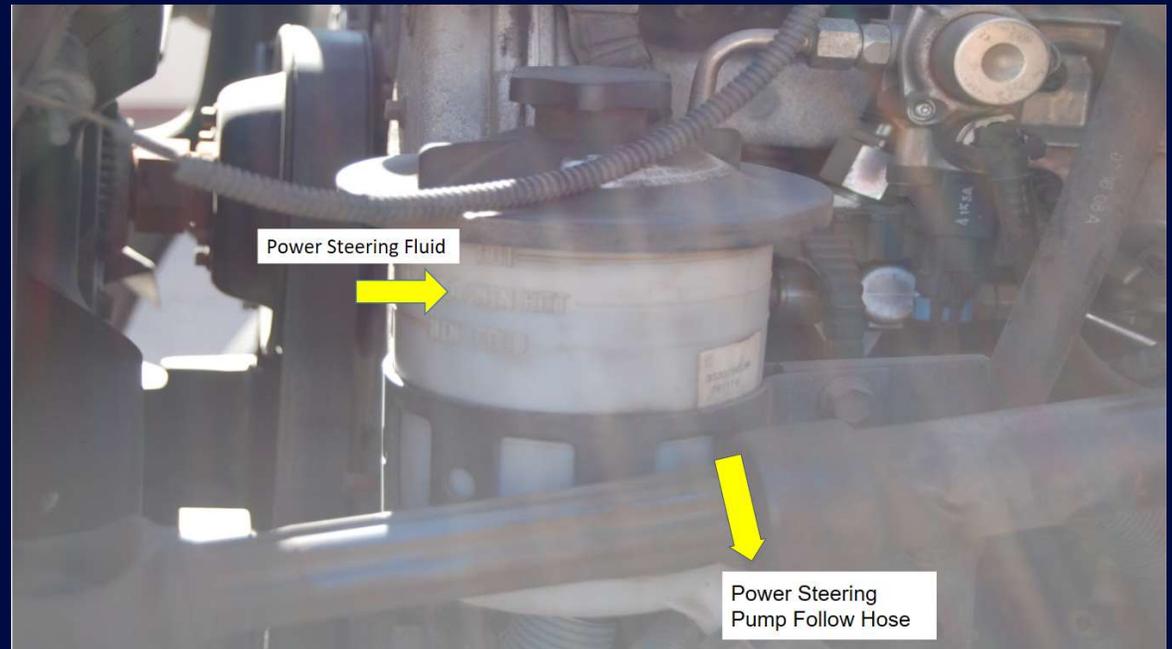
Note – Transmission dipstick may be located near the oil dipstick.

Check that the oil level is above the refill mark, in a safe operating range.



With the engine stopped, check the dipstick and see where the fluid level is relative to the refill mark or check sight glass.

Check to make sure unit is mounted securely with no leaks, or damage of any kind.



With the engine off, locate the air compressor.

Check that compressor is securely mounted, not leaking, or damaged in any way.

Identify that compressor is belt, or gear driven.

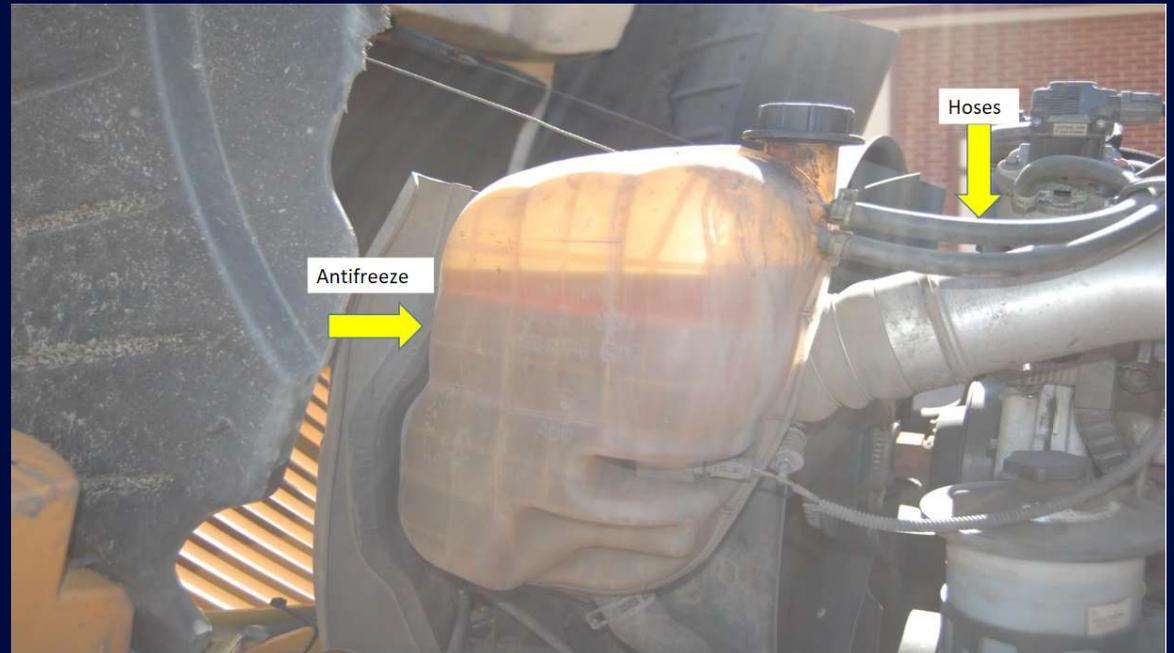
If compressor is belt driven test the belt to make sure it is snug.

Check that the belt is not frayed, has no visible cracks, loose fibers, or signs of wear. Push belt with hand, and if it deflects more than  $\frac{1}{2}$  to  $\frac{3}{4}$  of an inch note that slippage is probably excessive.



Check sight glass on the radiator or coolant reservoir; adequate level should show in sight glass. If no sight glass is available, and engine is cool, remove cap and inspect fluid level.

Check to make sure unit is mounted securely with no leaks, or damage of any kind.



Check that the steering box is securely mounted and not leaking, or damaged in any way.

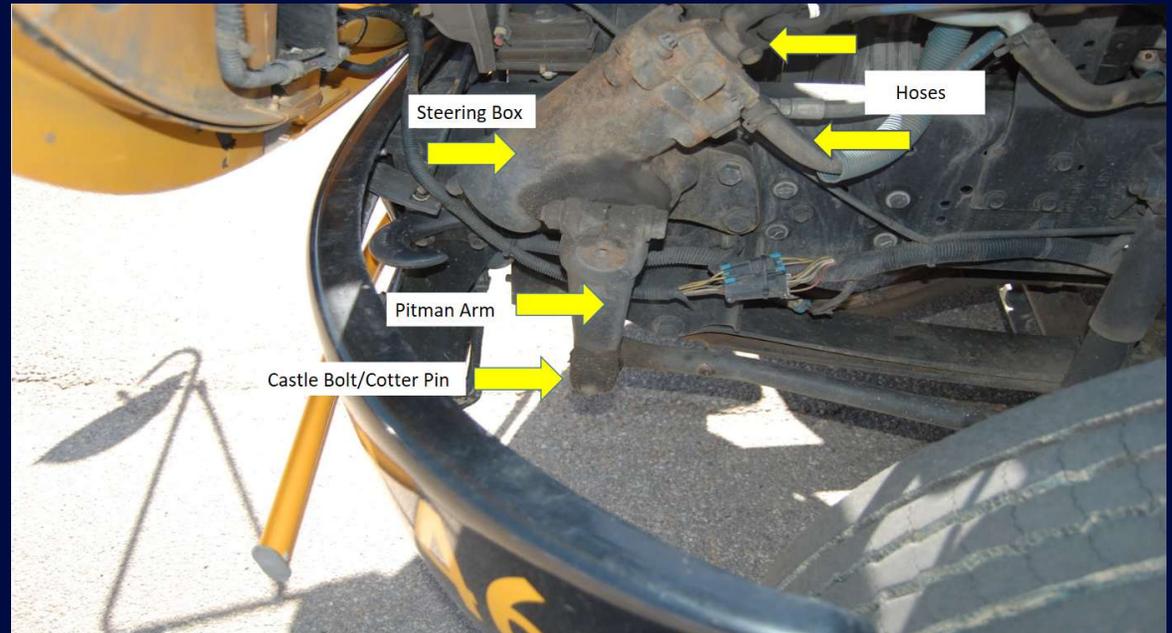
Check for any missing or loose nuts and bolts.

Check for power steering fluid leaks or damage to power steering hoses.

Check that connecting links, arms, and rods from steering box to the wheel are not worn or cracked, or damaged in any way.

Check that joints and sockets are not worn or loose.

Check for loose or missing nuts, bolts, or cotter pins.

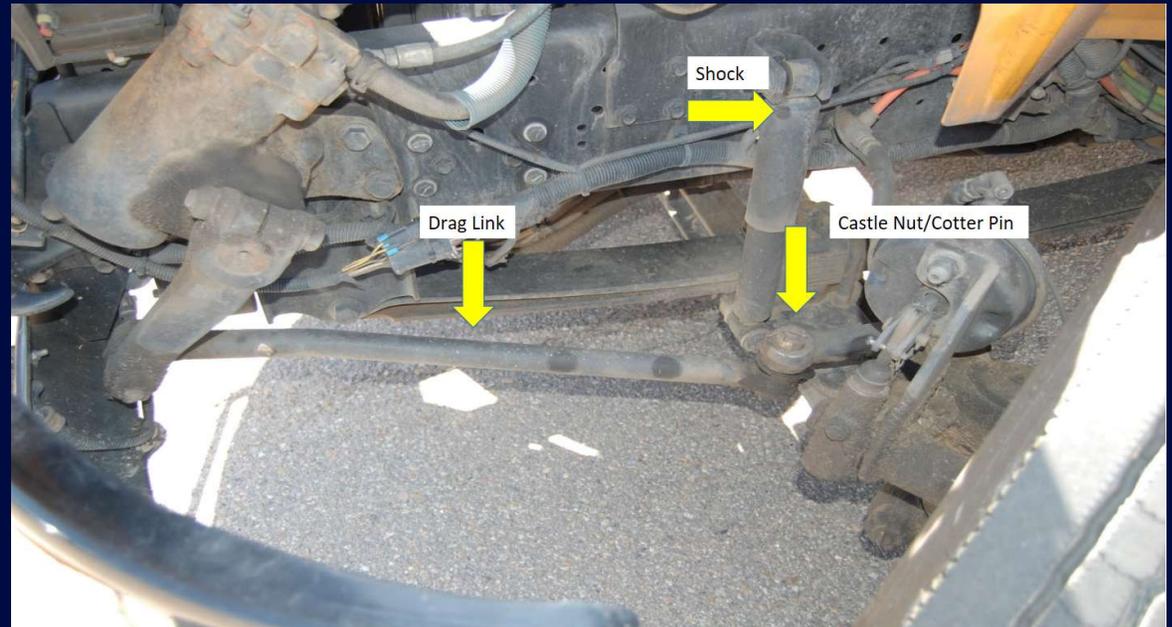


Check that connecting links, arms, and rods from steering box to the wheel are not worn or cracked, or damaged in any way.

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Check for loose or missing nuts, bolts, or cotter pins.

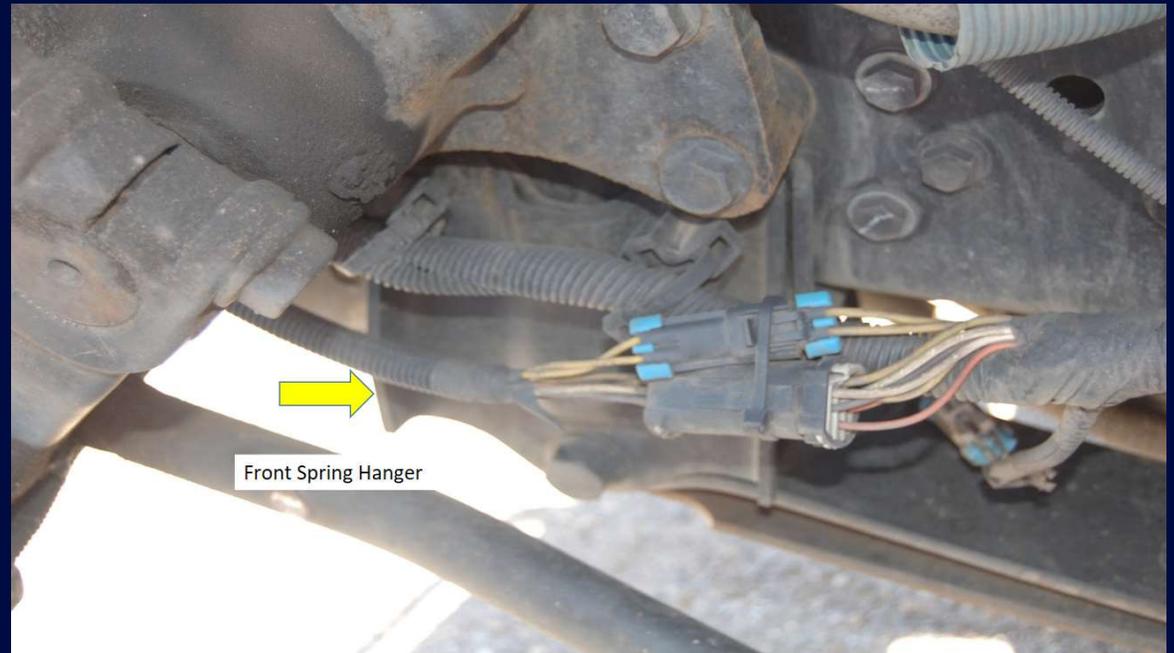
Check that shock absorbers are mounted properly, not leaking and show no damage of any kind.



Check that spring attachments (brackets, bolts, bushings) are in place.

Check for cracked or broken spring hangers.

Check for missing or damaged bushings.



Check that spring attachments (brackets, bolts, bushings) are in place.

Check for cracked or broken spring hangers.

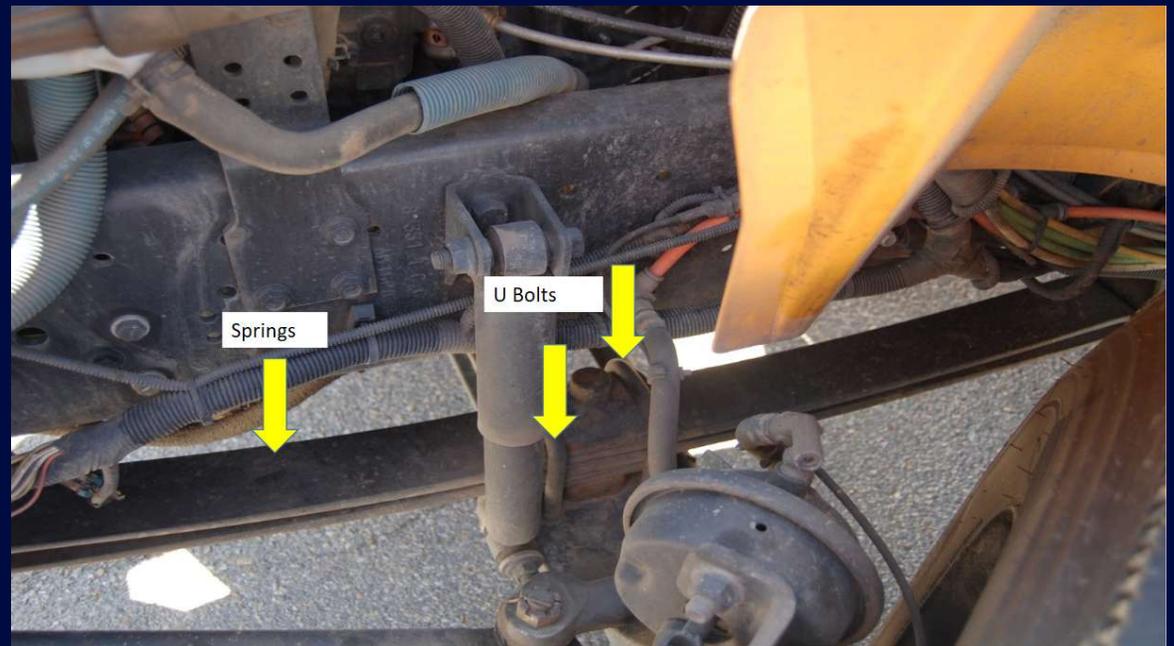
Check for missing or damaged bushings.



Check for missing, shifted, cracked, or broken leaf springs.

Check for broken or distorted coil springs.

Check U bolts for broken, missing bolts or loose nuts.



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

Check that brake linings or disk pads (where visible) are not worn dangerously thin.

Check brake drums and linings for contaminants such as grease, oil, etc.



Check for minimum tread depth (4/32 on steering axle tires, 2/32 on all other tires.)

Check that the tread is evenly worn and look for cuts, bulges, or other damage to tread or sidewalls. Also, make sure that valve caps and stems are not missing, broken, or damaged.

Check for proper inflation by using a tire gauge.



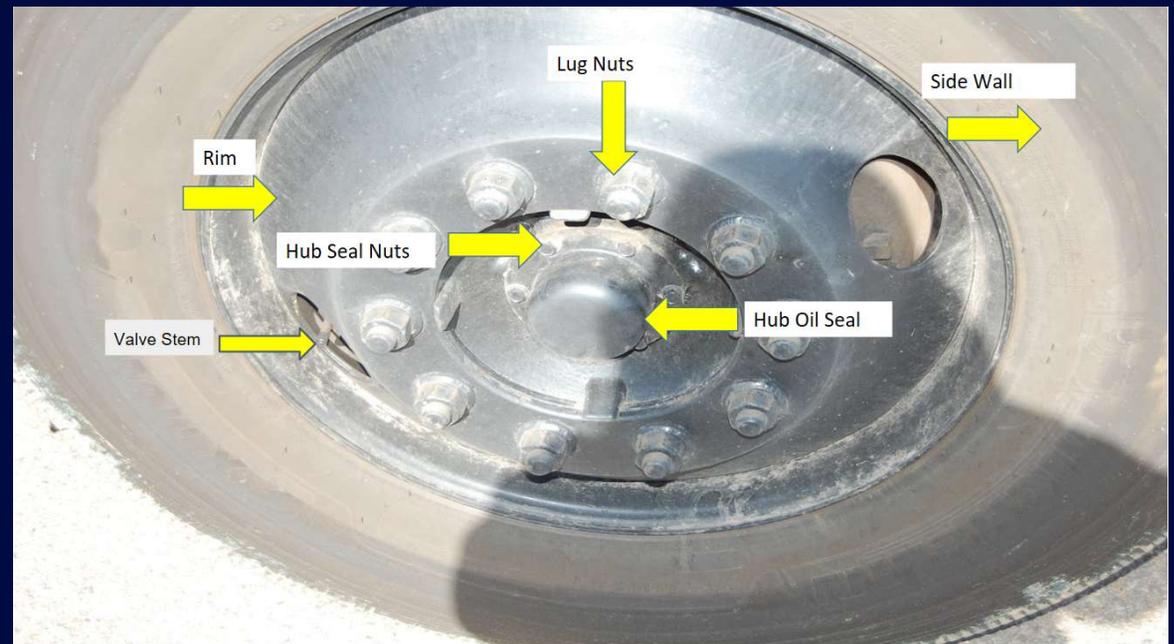
Check for damaged or bent rims.

Rims should not have welding repairs. Check for rust trails that may indicate rim is loose on wheel.

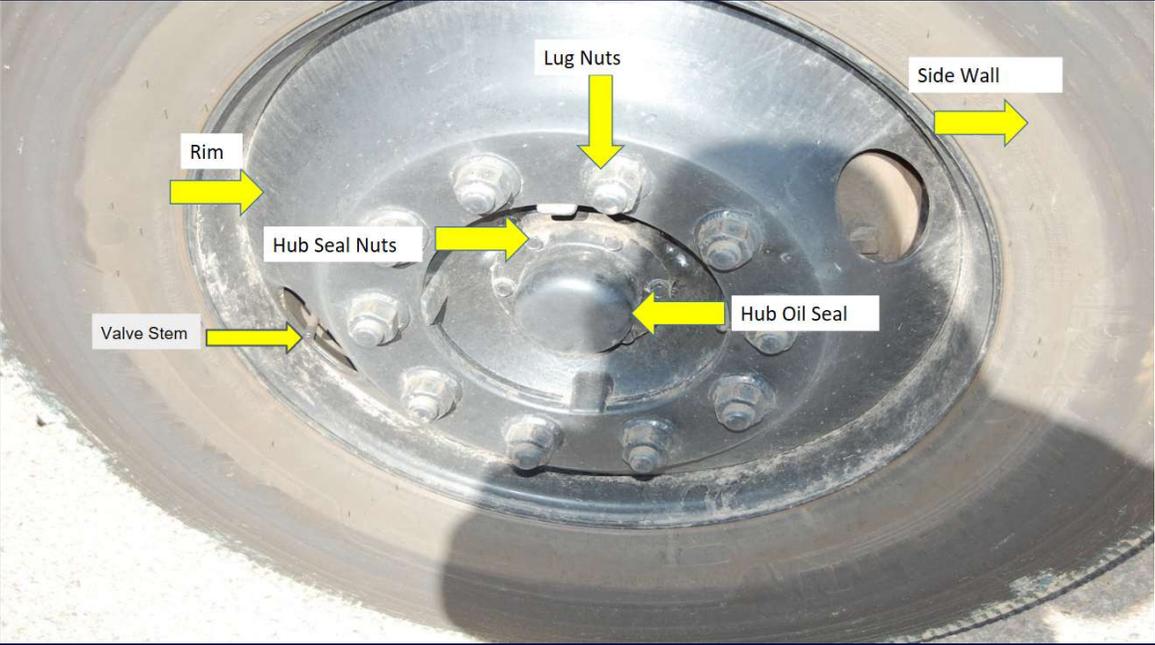
Check that all lug nuts are present.

Check that lug nuts are not loose (rust trails around nuts).

Check that there are no cracks radiating from lug bolt holes or distortion of the bolt holes.

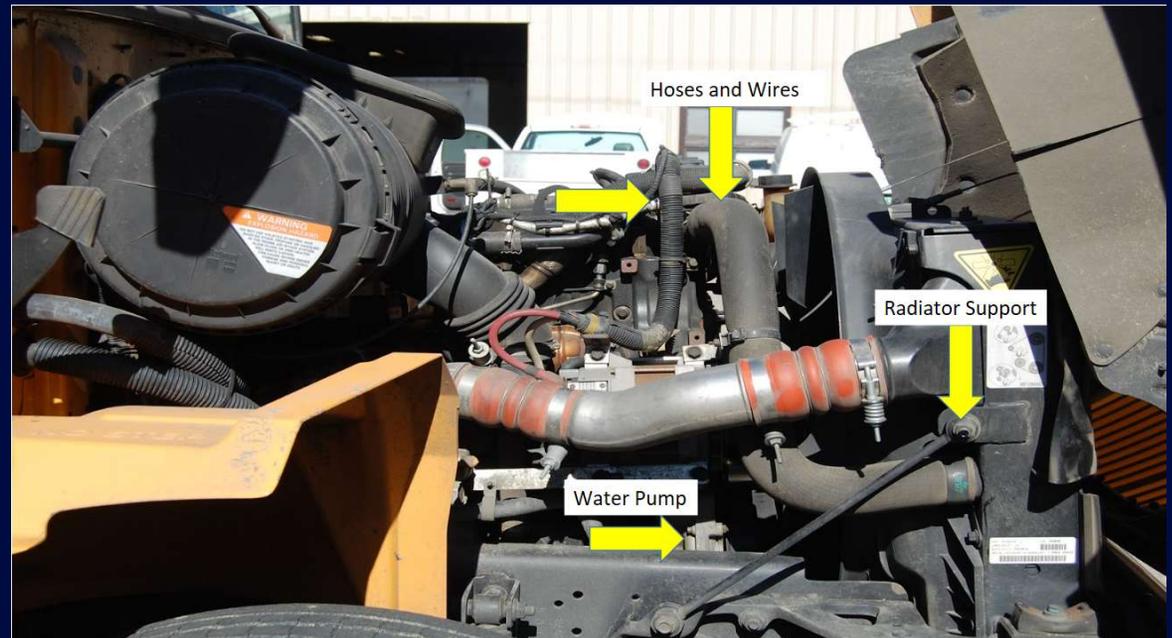


Check that hub oil/axle (grease) seals are not leaking. If a sight glass is present, check that the oil level is adequate.



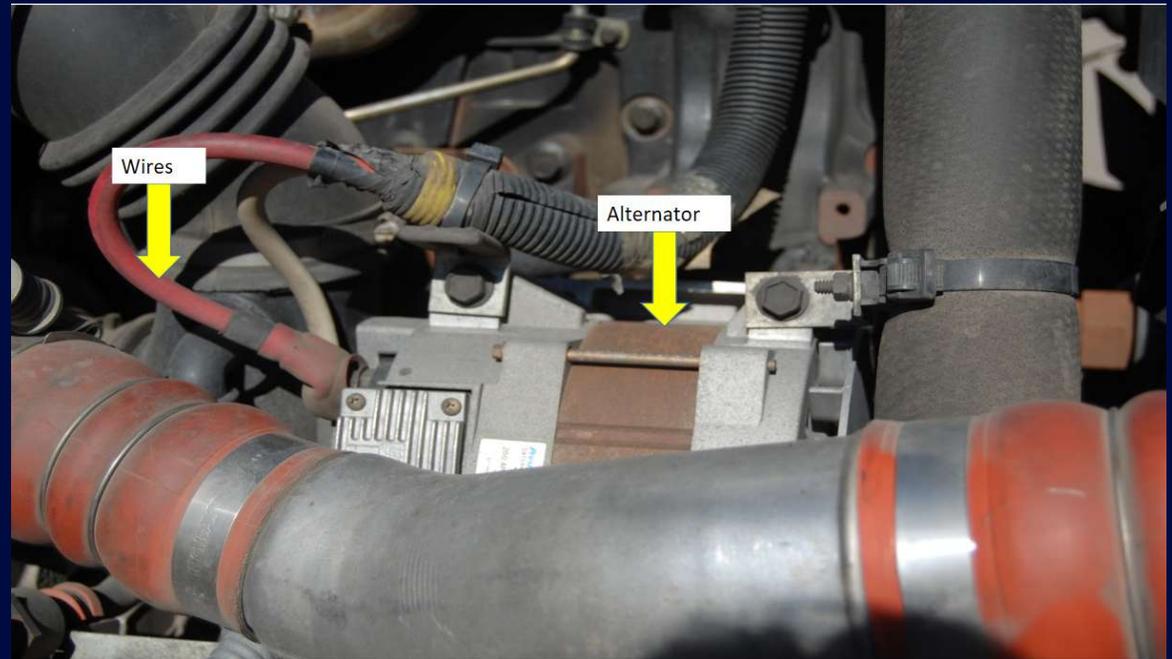
Check that water pump is mounted properly, not loose or leaking. Identify belt that drives water pump, or acknowledge pump is gear driven. If water pump is belt driven test the belt to make sure it is snug.

Check that belt is not frayed, has no visible cracks, loose fibers, or signs of wear. Push belt with hand, and if it deflects more than  $\frac{1}{2}$  to  $\frac{3}{4}$  of an inch note that slippage is probably excessive.



Check that alternator is securely mounted and that all wires are securely fastened and not damaged.

Identify belt that drives alternator or generator or that it is driven by gears. If alternator is belt driven test the belt to make sure it is snug. Check that the belt is not frayed, has no visible cracks, loose fibers, or signs of wear. Push belt with hand, and if it deflects more than  $\frac{1}{2}$  to  $\frac{3}{4}$  of an inch note that slippage is probably excessive.



# Walk Around and Underneath

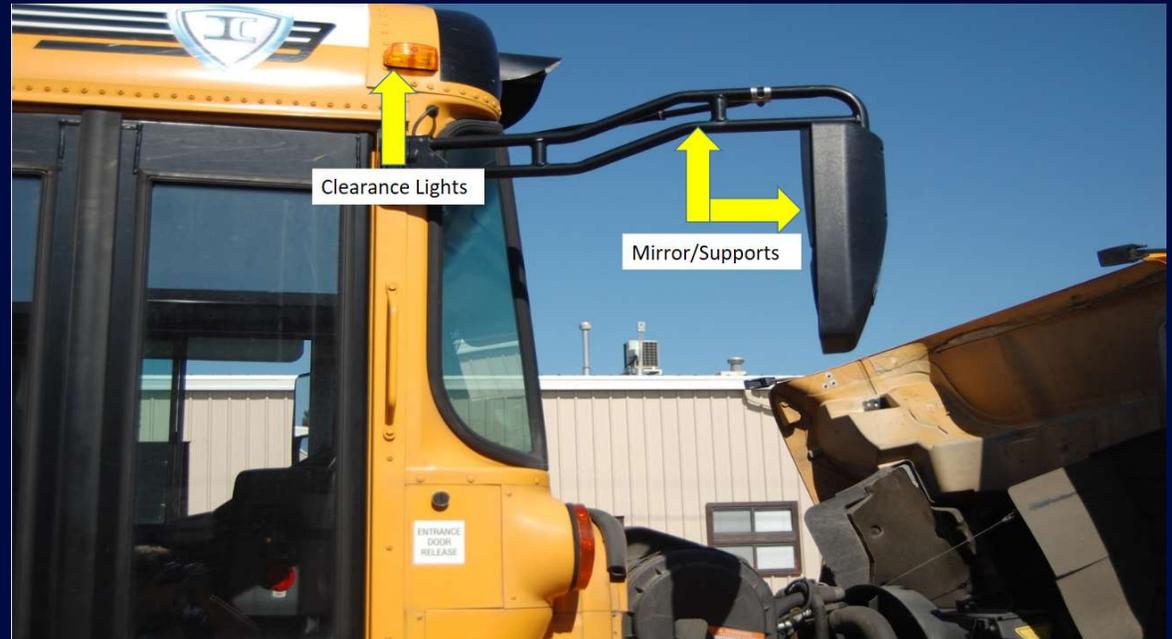


## Walk Around and Underneath

Check that external mirrors and mirror brackets are securely mounted, not damaged, and free of excessive dirt.

Check mirrors for proper adjustment.

Check clearance lights to be sure they are clean, clear, not missing, not broken, or damaged in any way and are of proper color.

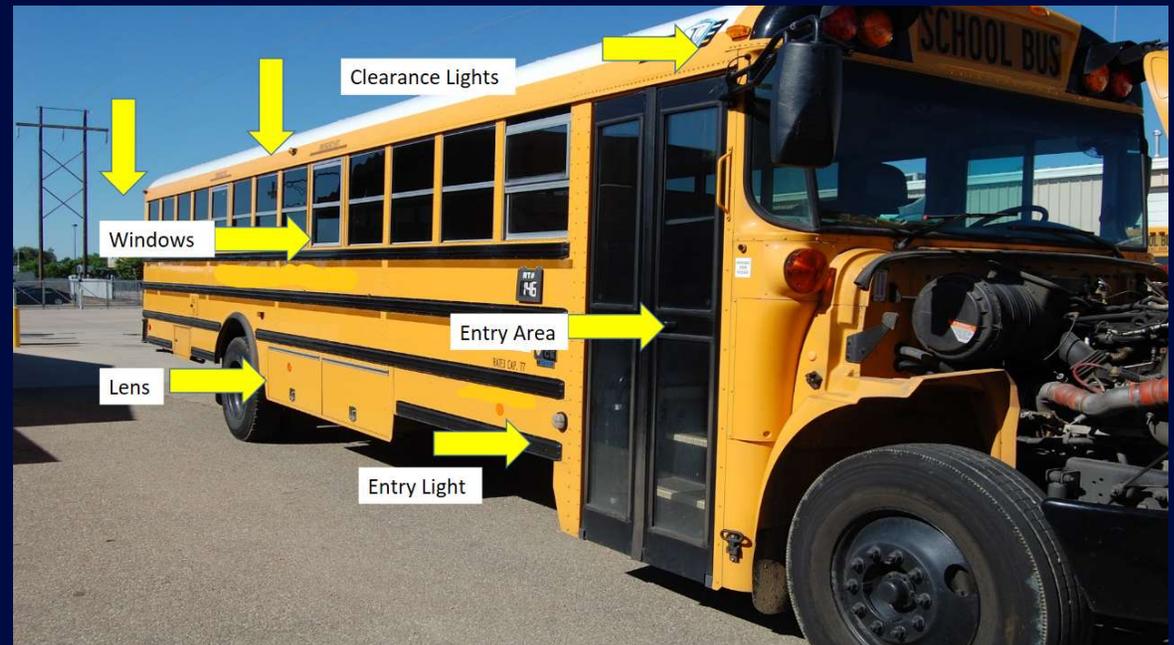


## Walk Around and Underneath

Check that door(s) are not damaged and that they open and close properly. Hinges should be secure with seals intact. Check door windows for damage and excessive dirt.

Check lights to be sure they are clean, clear, not missing, not broken, or damaged in any way and are of proper color.

Check that reflectors are clean, none are missing or broken, and they are of proper color (red on rear, amber elsewhere). Check that reflector tape is present and affixed securely to the vehicle.



## Walk Around and Underneath

Check that reflectors are clean, none are missing or broken, and they are of proper color (red on rear, amber elsewhere).



## Walk Around and Underneath

Check that baggage compartment doors are not damaged, operate properly, and latch securely.



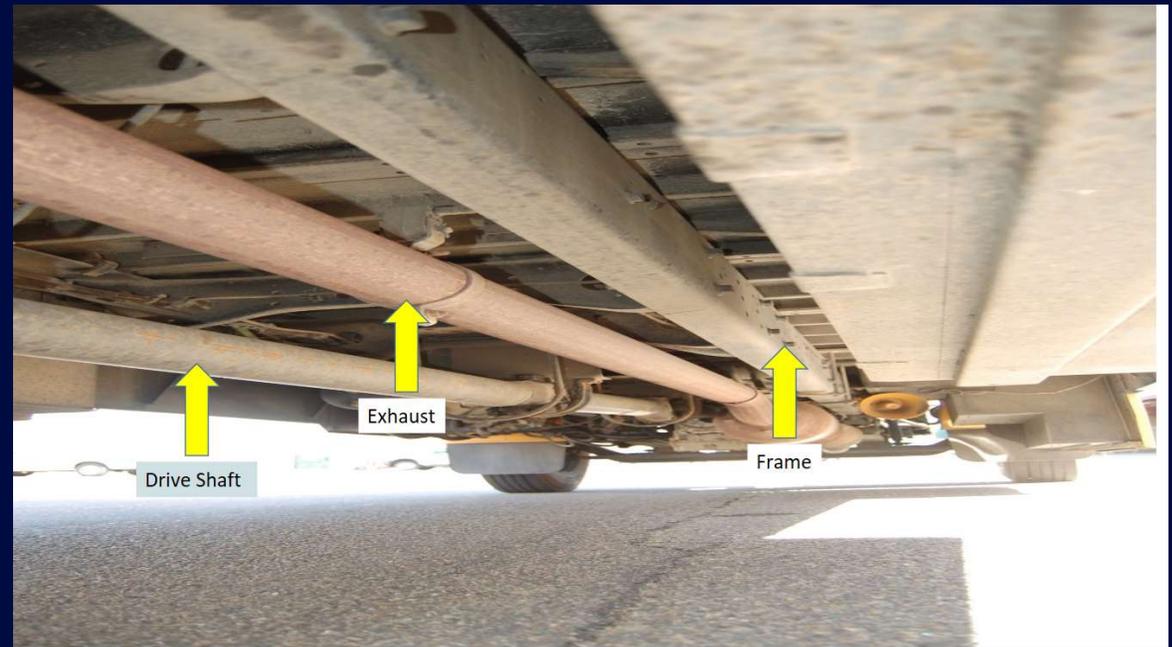
## Walk Around and Underneath

Check that exhaust system is connected tightly, mounted securely, and there are no loose clamps. Check exhaust system for damage and signs of leaking (rust or carbon soot). Exhaust system should have no cracks, holes, or severe dents.

Check for cracks or bends in longitudinal frame members.

Check that drive shaft is not bent, twisted, or cracked.

Check that U-joints appear to be secure and free of foreign objects.

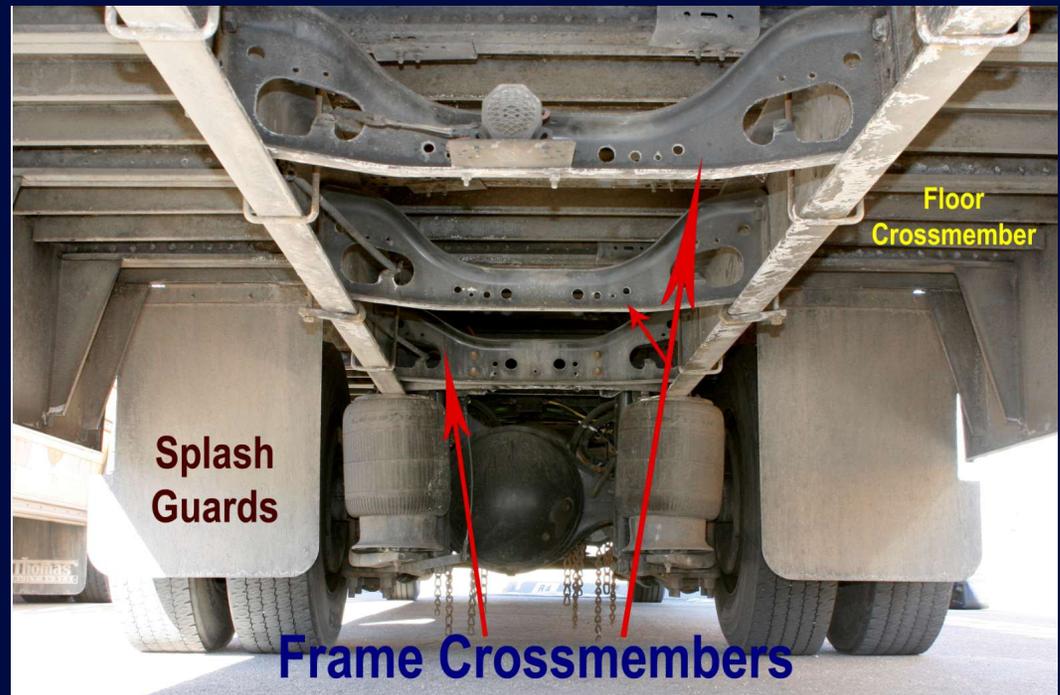


## Walk Around and Underneath

Check for cracks or bends in longitudinal frame members.

Check for loose, cracked, bent, broken, or missing cross members.

Look for signs of breaks or holes in box or floor.



## Walk Around and Underneath

Check that spring mount attachments (brackets, bolts, bushings) are in place and not damaged.

Check for cracked or broken spring hangers.

Check for missing or damaged bushings.



## Walk Around and Underneath

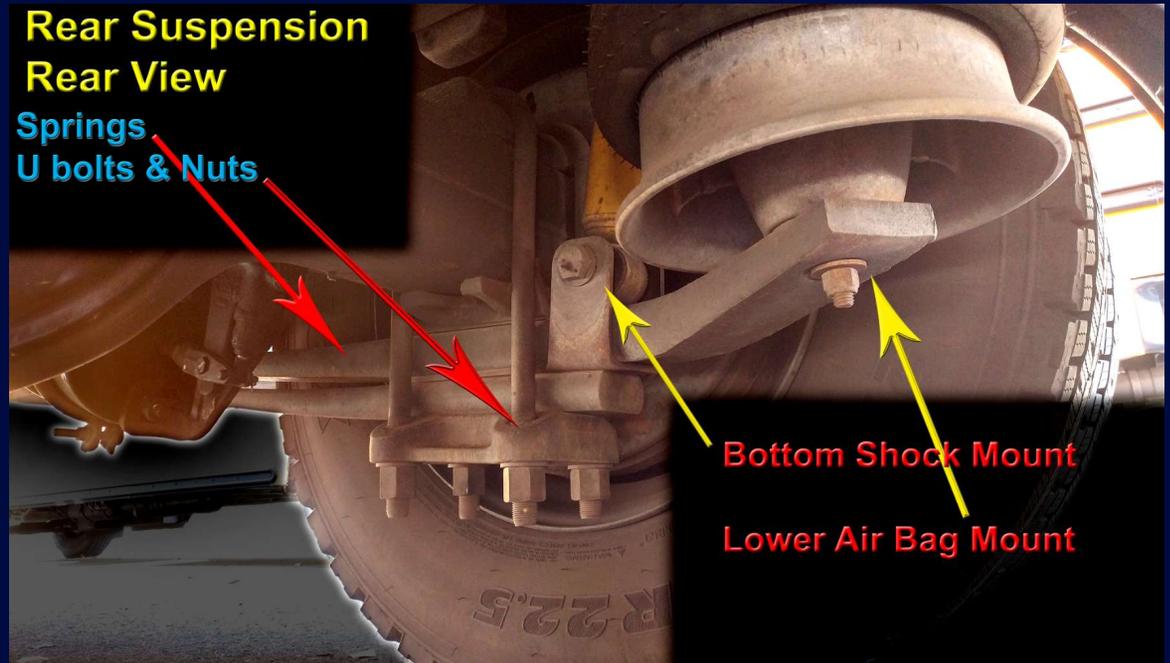
Check that air bag mounts (bolts) are in place and not damaged.

Look for missing, shifted, cracked, or broken leaf springs.

Check for broken or distorted coil springs if applicable.

Check air-ride suspension for damage and leaks.

Check U-bolts for broken, missing bolts, or loose nuts.



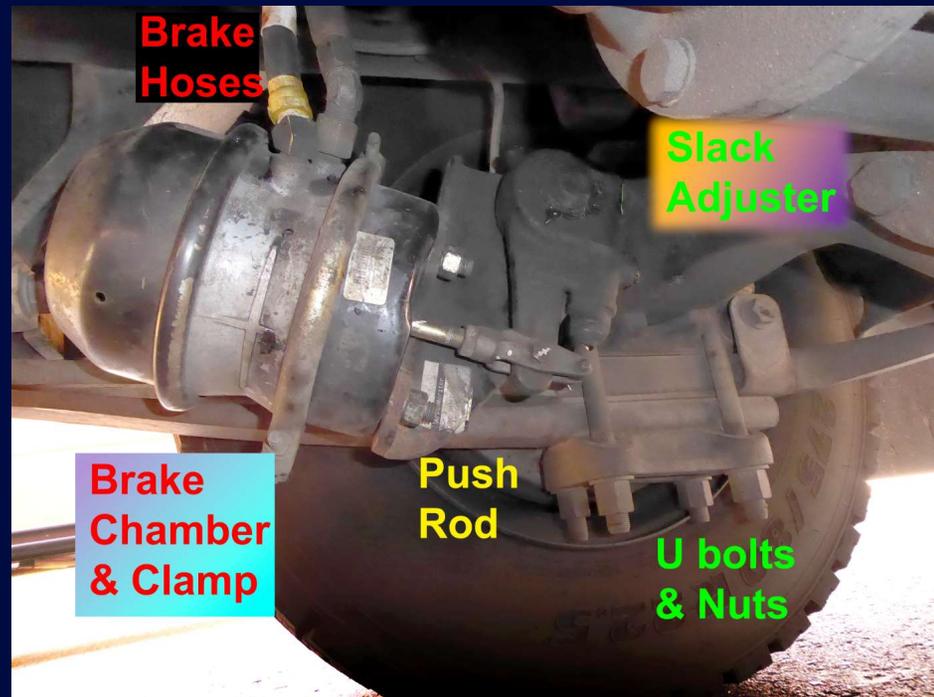
## Walk Around and Underneath

Check that brake chambers are not leaking air, cracked or dented, and are mounted securely.

Check for loose or missing clamps.

Check that hoses or lines can supply air to brakes.

Check for cracked, worn, or frayed hoses, and that all couplings and fittings are secure and not leaking.

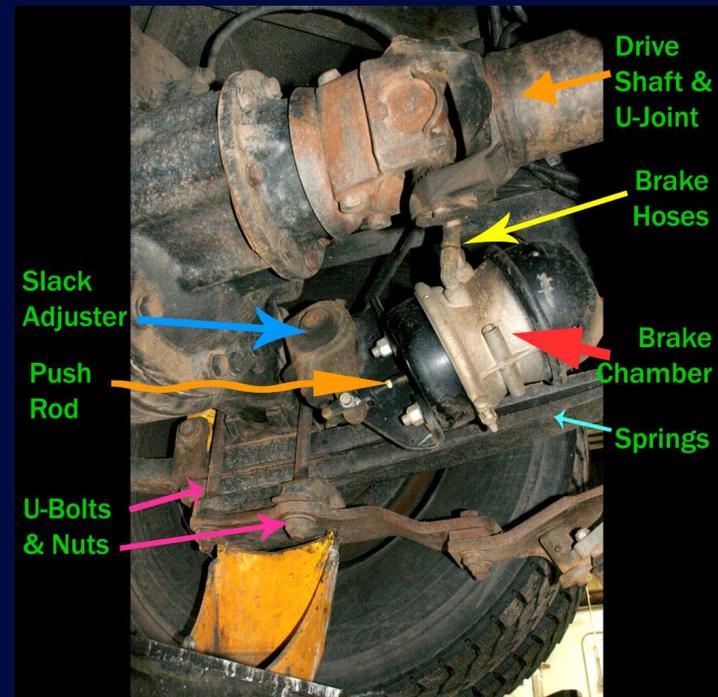


## Walk Around and Underneath

Check that slack adjuster is securely mounted.

Check slack adjuster and push rod for bent, broken, loose, or missing parts.

Check that if brakes were released and then pulled by hand, push rod should not move more than approximately one inch.

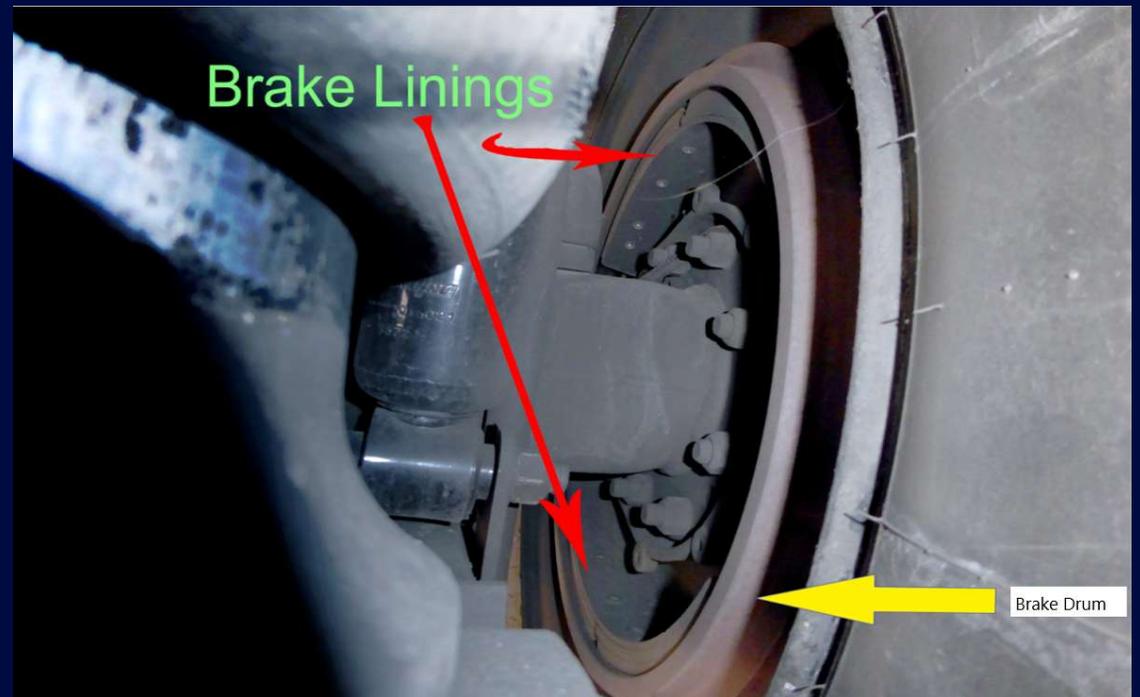


## Walk Around and Underneath

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

Check that brake linings or disk pads (where visible) are not worn dangerously thin.

Check brake drums and linings for contaminants such as grease, oil, etc.

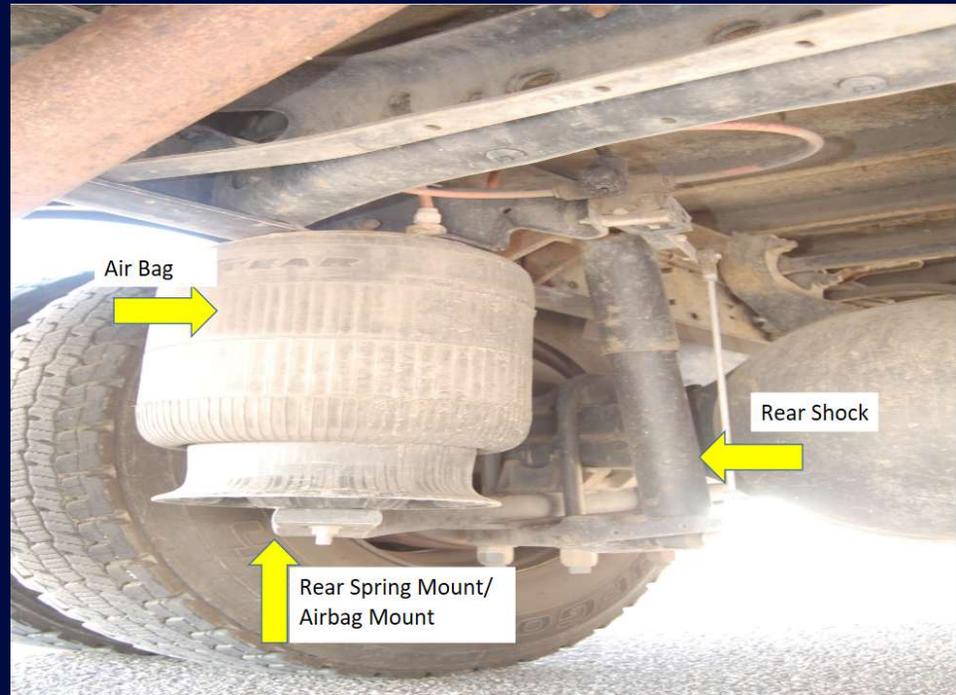


## Walk Around and Underneath

Check that air bag mounts (bolts) are in place and not damaged.

Check air-ride suspension for damage and leaks.

Check that shock absorbers are secure, not leaking, or damaged in any way.



**Check that fuel tank(s)  
are secure.**



## Walk Around and Underneath

Check that fuel cap(s) are tight.  
Check for leaks from fuel tank(s) and fuel cap(s).



## Walk Around and Underneath

Check for minimum tread depth (4/32 on steering axle tires, 2/32 on all other tires).

Check that tread is evenly worn and looks for cuts, bulges, or other damage on tread or sidewalls.

Also make sure that valve caps and stems are not missing, broken, or damaged.

Check for proper inflation by using a tire gauge. Note – Retreads shall not be utilized on steering axles.



## Walk Around and Underneath

If equipped, check that spacers are not bent, damaged, or rusted through. **(No spacers on Mississippi School Buses)**

Check disc (Budd) wheels for even spacing, damage and foreign objects.

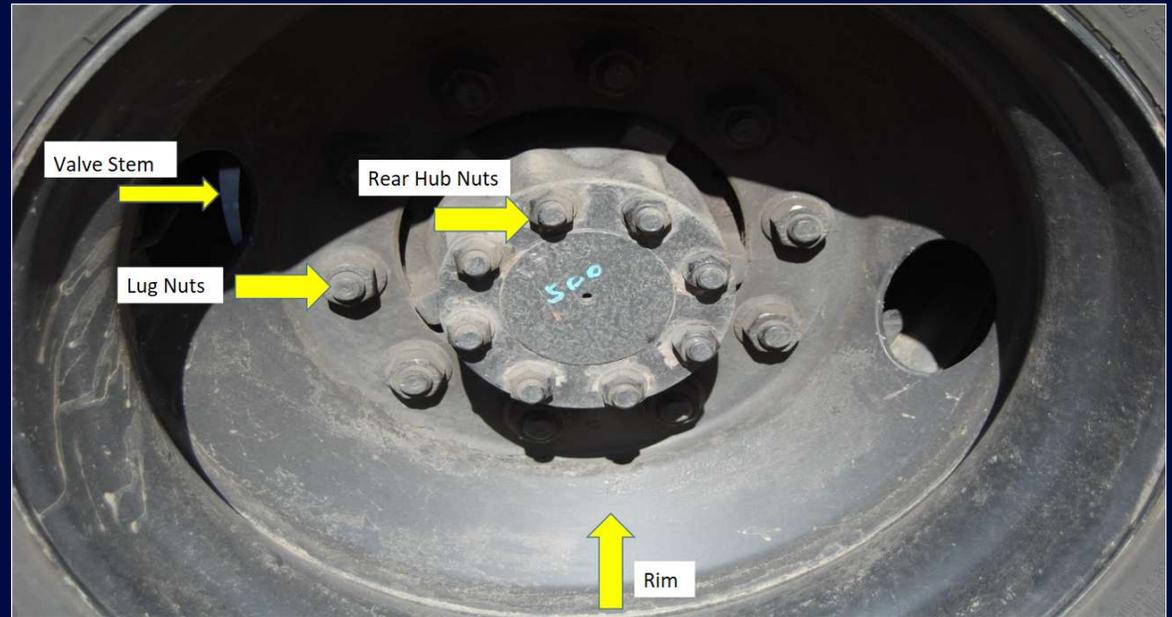


## Walk Around and Underneath

Check for damaged or bent rims. Rims should not have welding repairs. Check for rust trails that may indicate rim is loose on wheel.

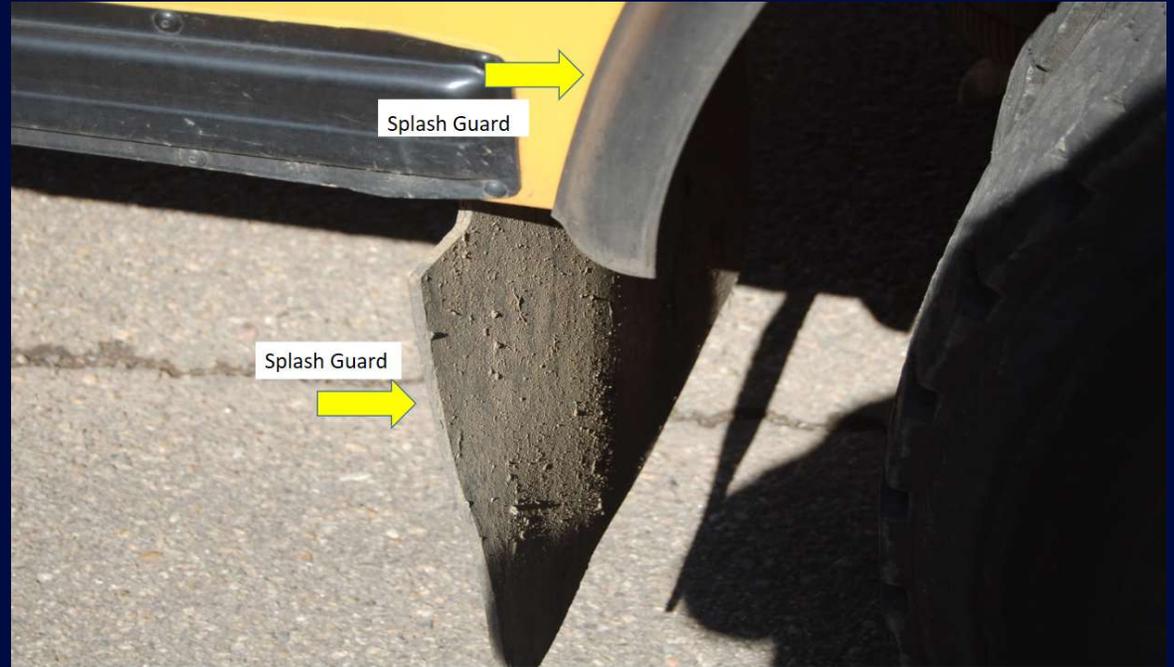
Check that all lug nuts are present. Check that lug nuts are not loose (rust trails around nuts). Check that there are no cracks radiating from lug bolt holes or distortion of the bolt holes.

Check that hub oil/axle (grease) seals are not leaking, and if a sight glass is present, that the oil level is adequate.



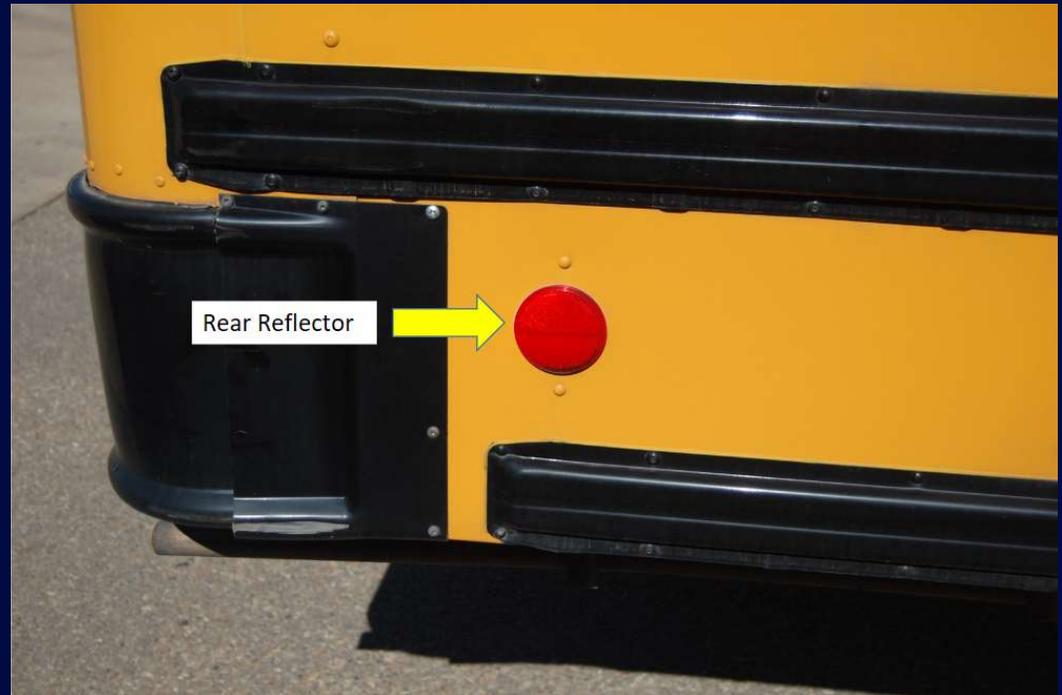
## Walk Around and Underneath

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



## Walk Around and Underneath

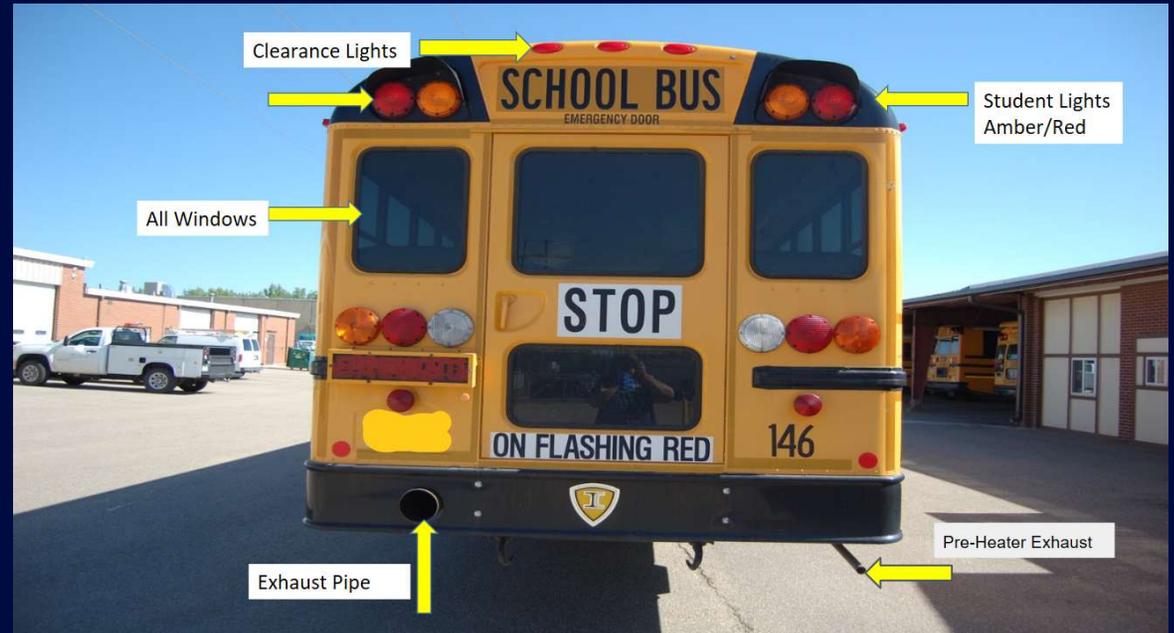
Check that reflectors are clean, none are missing or broken, and they are of proper color (red on rear, amber elsewhere).



## Walk Around and Underneath

Inspect clearance lights to be sure they are clean, clear, not missing, not broken, or damaged in any way and are of proper color.

Inspect student lights to be sure they are clean, clear, not missing, not broken, or damaged in any way and are of proper color.



## Walk Around and Underneath

Inspect turn signal/hazard lights to be sure they are clean, clear, not missing, not broken, or damaged in any way and are of proper color. Check brake lights and reverse lights to be sure they are clean, clear, not missing, not broken, or damaged in any way and are of proper color.

Check that reflectors are clean, none are missing or broken, and they are of proper color (red on rear, amber elsewhere). Check that reflector tape is present and affixed securely to the vehicle. Check that rear lights lenses are clean, not broken.



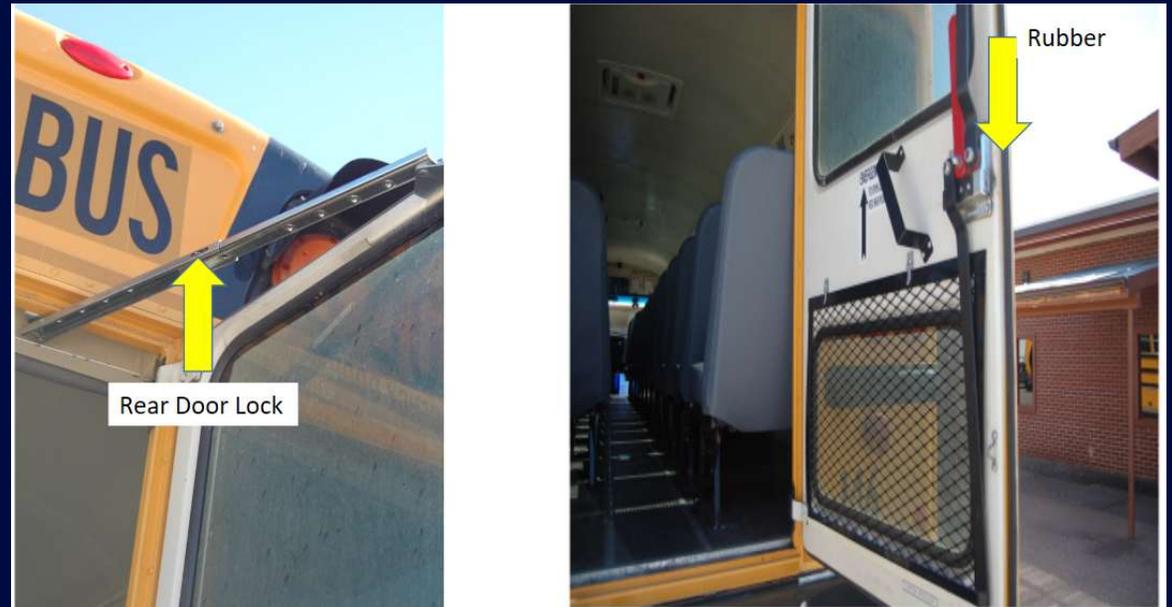
## Walk Around and Underneath

Check that door(s) are not damaged and that they open, close, and latch properly. Hinges should be secured with seals intact.

Check door windows for damage and excessive dirt.

Check that release handle can be operated properly both from the inside and outside of the vehicle.

Point out and describe how emergency exit operates.



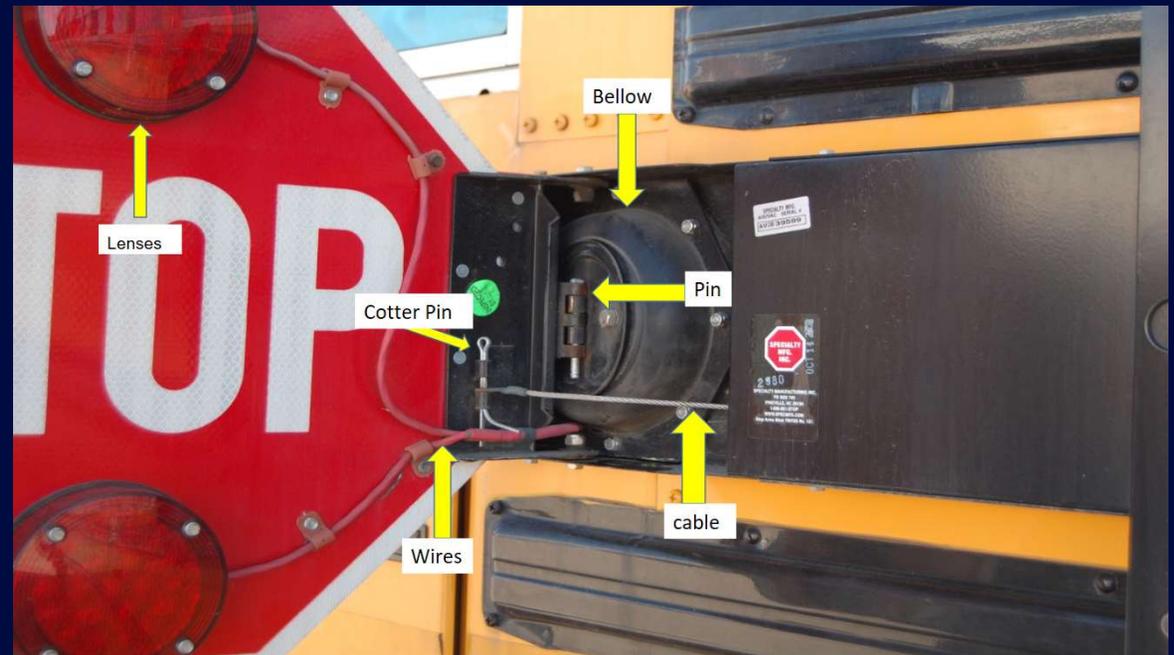
## Walk Around and Underneath

Check the stop arm to see that it is mounted securely to the vehicle frame.

Check for loose fittings and damage.

Check that stop arm extends fully when operated. Check that stop arm lights are operational.

Check that safety arm is securely mounted and functions properly in conjunction with stop arm.



# External Light Operation

## ON THE FRONT:

Check that clearance lights, low beam and high beam headlights are in proper working order.

Check that each turn signal and 4-way flasher light works.

Check that alternately flashing amber lights (if equipped) are operational and not broken.

Check that alternately flashing red lights (if equipped) are operational and not broken.

Check that stop arm lights are operational.

# External Light Operation

## SIDES AND REAR:

Check that clearance lights are in proper working order.

Check that rear running lights (tail) are in proper working order.

Check that each turn signal and 4-way flasher lights works.

Check that brake lights come "on" when brakes are applied and turn "off" when brakes are released.

Check that alternately flashing amber lights (if equipped) are operational and not broken.

Check that alternately flashing red lights (if equipped) are operational and not broken.

Check that stop arm lights are operational.

## SCHOOL BUS INTERIOR

## School Bus Interior

Check that entry door is not damaged, operates smoothly, and closes securely. Check that handrails are secure, and the step light is working, if equipped. Check that entry steps are clear with treads not loose or worn excessively.

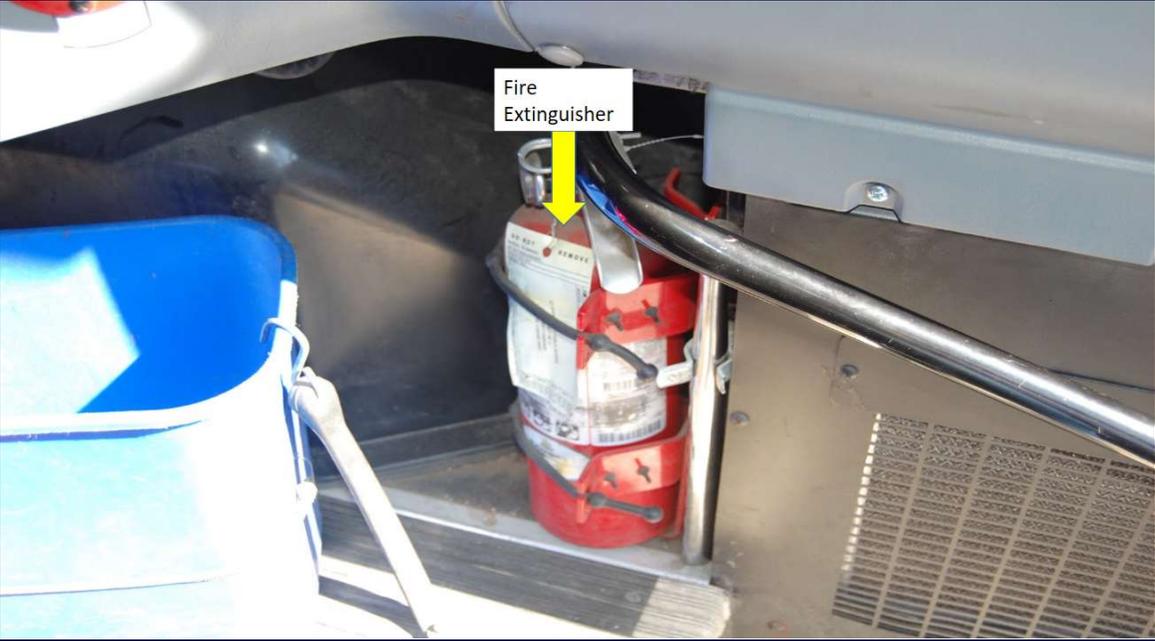
If equipped with a handicap lift. Look for leaking, damaged or missing parts and explain how lift should be checked for correct operation. Lift must be fully retracted and latched securely.



**Check that handrails are secure, and the step light is working, if equipped.**



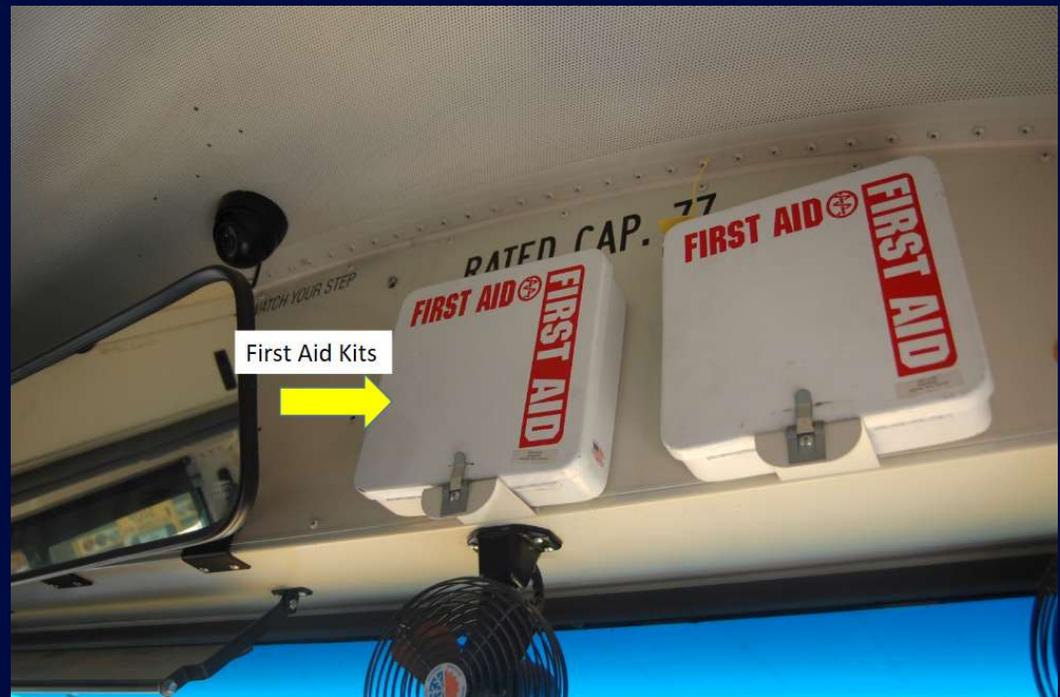
**Check for a properly charged and properly secured fire extinguisher.**



## School Bus Interior

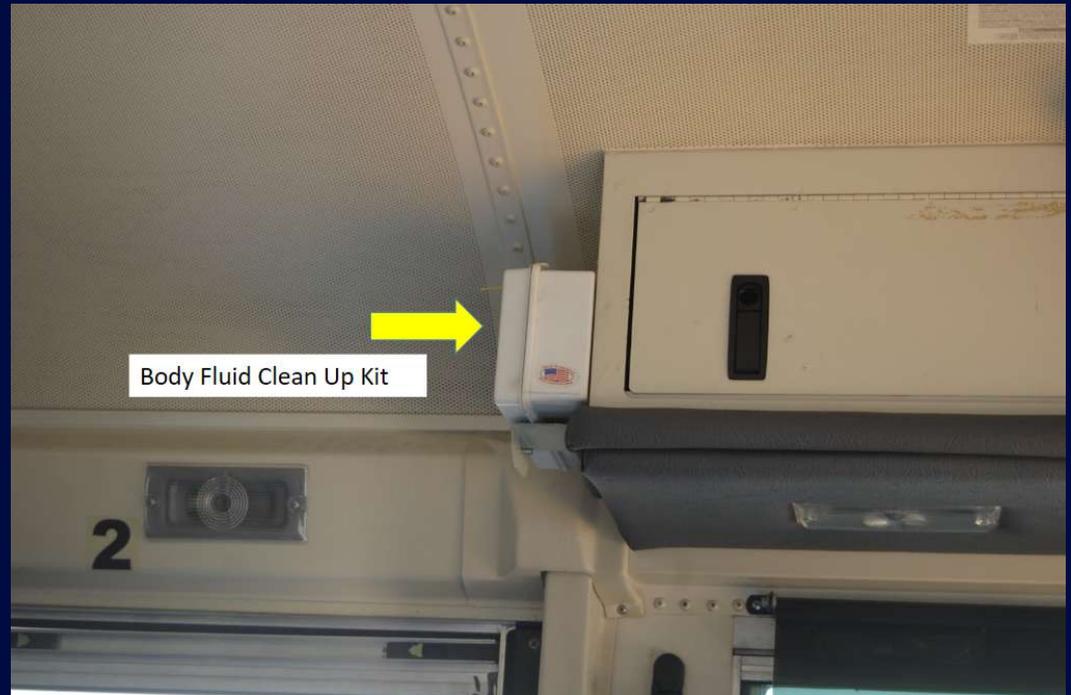
Check that first aid kit(s) are securely mounted in full view of the driver, or that the location is plainly indicated by appropriate markings.

Check that first aid kit(s) are sealed.

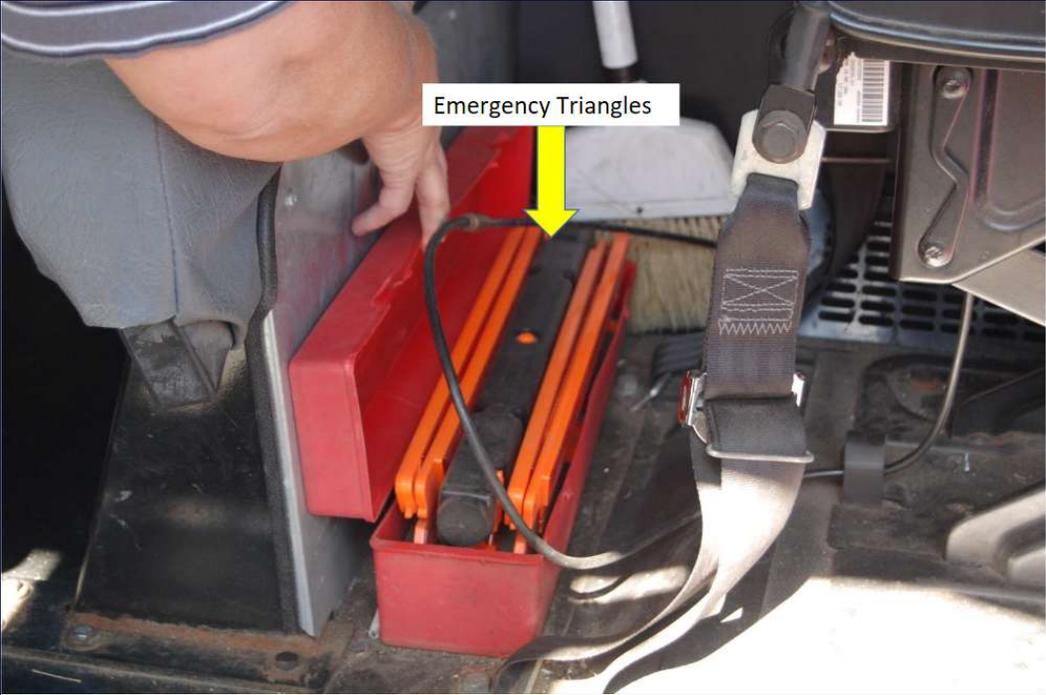


## School Bus Interior

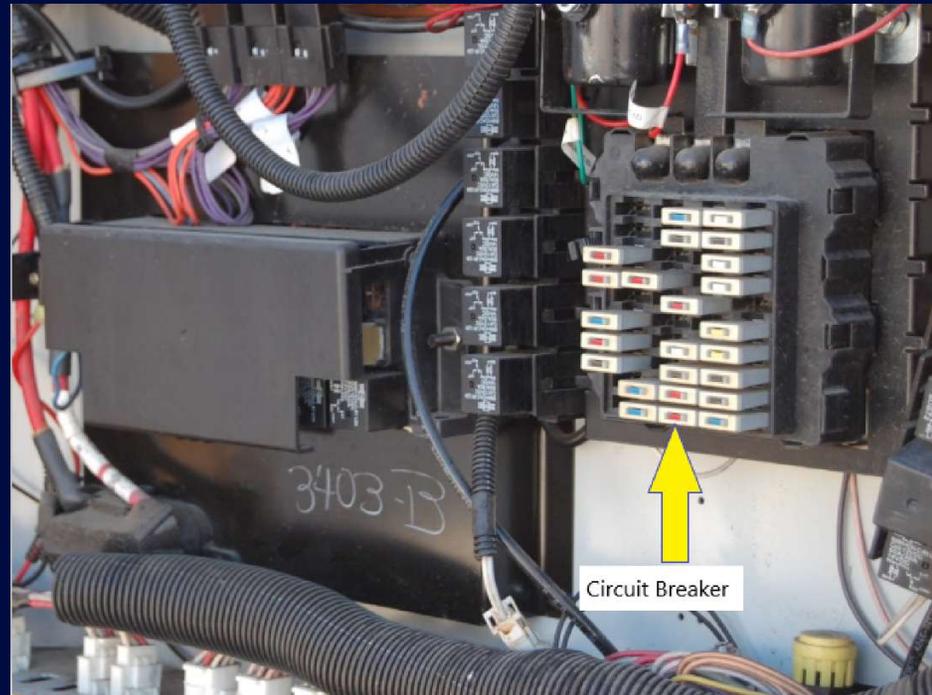
Check that bus is equipped with a properly secured body fluid clean-up kit accessible to the driver.



**Check for three red reflective triangles in a securely mounted case.**



**Check for spare electrical fuses (if used) or identifies circuit breakers.**



## School Bus Interior

Demonstrate that at least one of each type of emergency exit operates smoothly, closes securely, and is not damaged.

Confirm that exit works properly. Check that release handle can be operated properly both from the inside and outside of the vehicle.

Point out and describe how all other emergency exits operate.

Check emergency exit-warning devices for proper operation.



## School Bus Interior

Demonstrate that at least one of each type of emergency exit operates smoothly, closes securely, and is not damaged.

Confirm that the exit works properly.

Check that release handle can be operated properly both from the inside and outside of the vehicle.

Point out and describe how all other emergency exits operate.

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## School Bus Interior

Demonstrate that at least one of each type of emergency exit operates smoothly, closes securely, and is not damaged.

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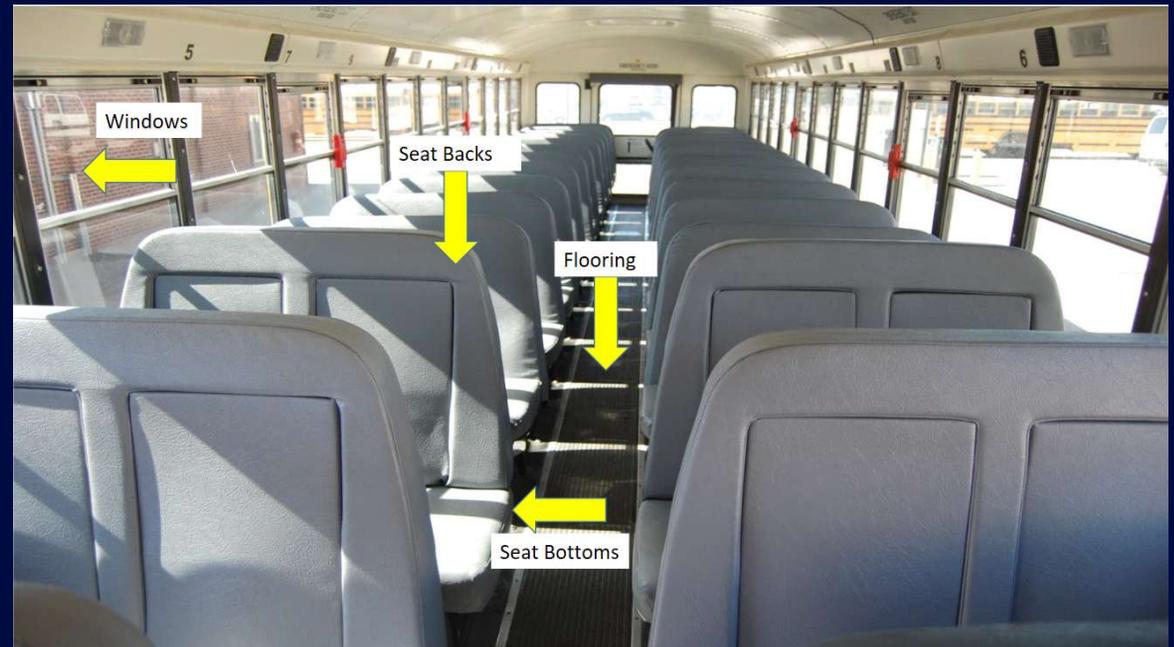
Check emergency exit-warning devices for proper operation.



## School Bus Interior

Check that there are no broken seat frames and that the seats are firmly attached to floor.

Confirms that the cushions are securely attached to the seat frames.



## School Bus Interior

Check for properly secured, mounted, and adjusted safety belt.

Safety belt should not be ripped or frayed.



## School Bus Interior

Check that bus is equipped with a durable webbing cutter having a full width handgrip and a protected blade.

Cutter shall be mounted in a location accessible to the seated driver.



## School Bus Interior

Demonstrate that at least one of each type of emergency exit operates smoothly, closes securely, and is not damaged.

Confirm that exit works properly.

Check that release handle can be operated properly both from the inside and outside of the vehicle.

Point out and describe how all other emergency exits operate.

Check emergency exit-warning devices for proper operation.



**Check that air horn and/or electric horn(s) work.**



## School Bus Interior

Check student mirror for proper mounting and adjustment.

Check that visibility is not impaired due to a dirty mirror.



## School Bus Interior

Check windshield to make sure it is clear and has no obstructions or damage to the glass.

Check mirrors for proper adjustment.



## School Bus Interior

Check that wiper arms and blades are secure, not damaged, and operate smoothly.

If equipped, check for windshield washer fluid and that windshield washers operate correctly.



## School Bus Interior

Depress clutch before turning on the starter. Keep clutch depressed until engine reaches idling speed.

On an automatic transmission, check to see that the gear selector is in the "park" or "neutral" position.

On a standard transmission check that gear shift is in "neutral".



## School Bus Interior

When starting engine, check the dashboard to ensure the ABS lighting indicator illuminates and then promptly turns off.

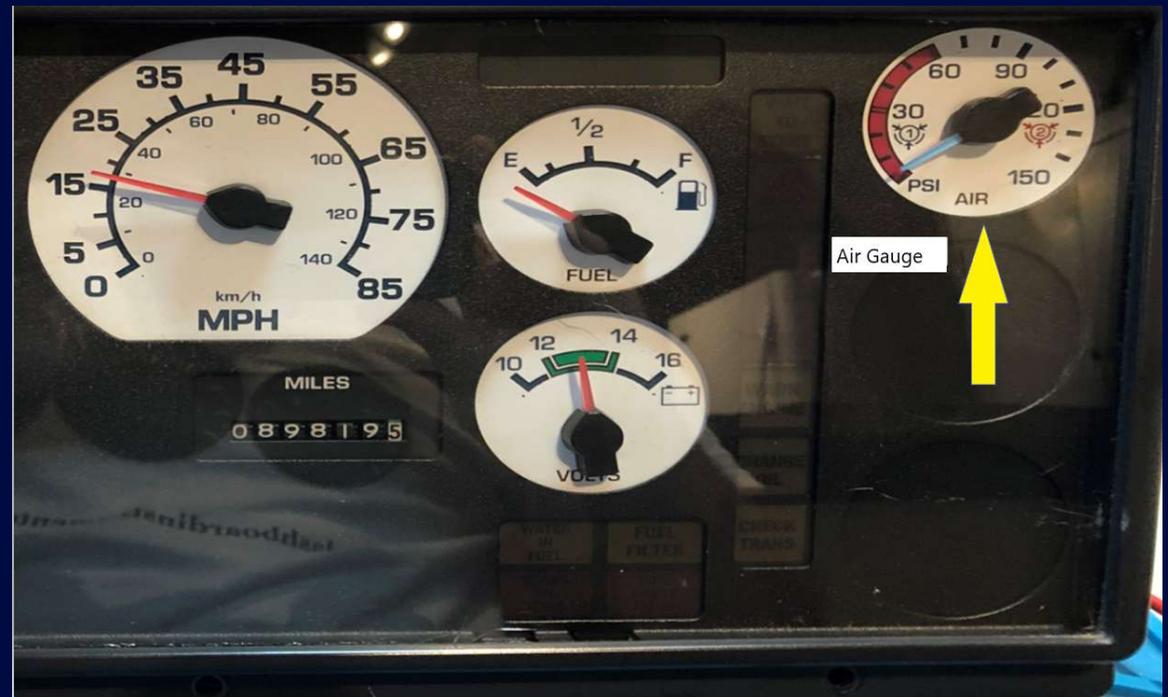
If the ABS indicator remains illuminated the ABS is **not** functioning properly and needs to be serviced.

Check that clicks or puffs of air are audible when the ABS system cycles.



## School Bus Interior

Check that air gauge is working properly and that the air compressor builds the air pressure to governor cut out at roughly 120-140 psi or as specified by manufacturer.



## School Bus Interior

With the engine running and the key in the "on" position. Check that gauge(s) show alternator or generator is charging or warning light is "off".

Needle will jump and flutter, then indicate charge.



## School Bus Interior

With the key in the "on" position and engine running, check that oil pressure is building to "normal".

Check that the gauge shows increasing or "normal" oil pressure or warning light goes off.



## School Bus Interior

Check that (dash) indicators for turn signals, flashers, and headlight high beams illuminate when corresponding lights are turned on.



## School Bus Interior

Check that the heater(s) and defroster(s) operate properly by demonstrating and describing the operation of each switch.



## **Air Brake Check**

**Air brake safety devices vary. However, this procedure is designed to make certain that a given device is operating correctly as air pressure drops from “normal” to “low air” conditions.**

**When performing the air brake check be sure to verbalize all three-air brake checks correctly.**

**For safety purposes, in areas where an incline is present, driver must use wheel chocks during the air brake check.**

## Air Brake Check

1. With the air pressure built up to governor cutoff (approximately 120 – 140 psi), shut off engine, chock the wheels, if necessary, release the parking brake (all vehicles), and the tractor protection valve (combination vehicle) and fully apply the foot brake. Then hold the foot brake for one minute after stabilization of the air gauge. Then check the air gauge to see that the air pressure drops no more than three pounds in one minute (single vehicle) or four pounds in one minute (combination vehicle) and listen for leaks.

## Air Brake Check

2. Without re-starting the engine, turn the key to the "on " or "battery charge" position. Next, begin fanning off the air pressure by rapidly applying and releasing the foot brake. Low-air warning devices (buzzer, light, flag) should activate before air pressure drops below 60 psi or level specified by manufacturer.
3. Continue to fan off the air pressure. At approximately 40 psi on tractor-trailer combination vehicle (or level specified by manufacturer), the tractor protection valve and parking brake valve should close (pop out).

## Air Brake Check

4. Crank the engine. When the engine is at operating rpms, the pressure should build from 85 to 100 psi within 45 seconds in dual air systems.
5. With a fully-charged air system (120-125 psi), turn off the engine, and release the park brake, and time the air pressure drop. The loss rate should be less than 2 psi in one minute for single vehicles and less than 3 psi in one minute for combination vehicles.
6. Apply 90 psi or more with the brake pedal. After the initial pressure drop, if the air pressure falls more than 3 psi in one minute for single vehicles (more than four psi for combination vehicles), the air loss rate is too much.

## Air Brake Check

7. Pumping by the air compressor should start at about 100 psi and stop at about 125 psi. Run the engine at a fast idle. The air governor should cut-out the air compressor at the manufacturer's specified pressure. With the engine idling, step on and off the brake to reduce the air tank pressure. The compressor should cut-in at about the manufacturer's specified cut-in pressure. The pressure should begin to rise.

## **Air Brake Check**

**8. To test parking brake, make sure the parking brake is engaged and gently pull against it in a low gear to test that the parking brake will hold.**

**9. To test the service brake, release the parking brake, move the vehicle forward slowly (about 5 mph), and apply the brakes firmly using the brake pedal. Note any pulling to one side, unusual feel, or delayed stopping action.**

## Air Brake Check

With the air pressure built to governor cutout and parking brake engaged (trailer brakes released on combination vehicles), check that parking brake will hold vehicle by gently trying to pull forward with parking brake on.



## Air Brake Check

Check by pulling forward at 5 mph, apply service brake to check that brakes are working properly and to see if vehicle pulls to one side or the other.



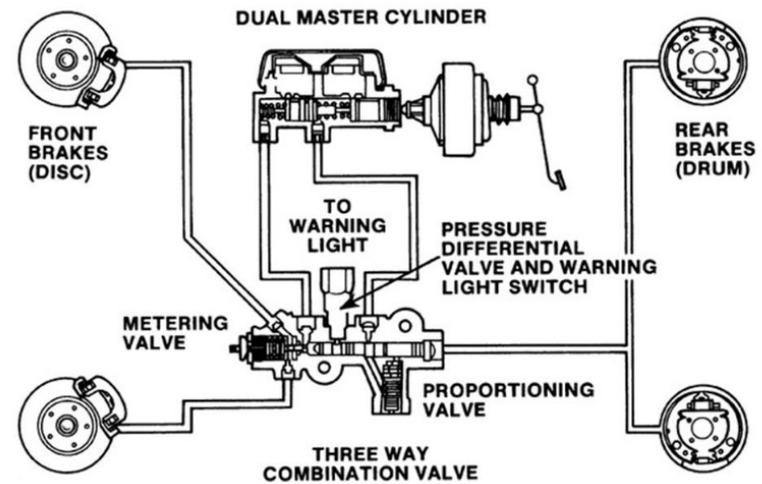
## Hydraulic Brake Check

Damaged hydraulic hoses or low hydraulic fluid will result in a partial or total loss of the braking system.

1. Pump the brake pedal three times, then hold it down for five seconds. The brake pedal should not move (depress) during the five seconds.
2. If equipped with a hydraulic brake reserve (backup) system, with key off, depress the brake pedal and listen for the sound of the reserve system electric motor.

## Hydraulic Brake Check

### Dual-circuit Disc/Drum Hydraulic Brake System



# Post-Trip Inspection

## Post-Trip Inspection

Inspect the bus at the end of each shift

If you work for an interstate carrier, you must complete a written inspection report for each bus driven.

The report must specify each bus and list any defect that would affect safety or result in a breakdown.

If there are no defects, the report should say so.

## Post-Trip Inspection

Handrails, Seats, Emergency Exits, and Windows can be damaged

Report this damage at the end of the shift, so repairs can be made by the mechanic before the bus goes out again

Mass transit drivers should make sure passenger signaling devices and brake-door interlocks work properly.

School Buses may be equipped with Child Check System.

## Post Trip Inspection

Check the interior of the bus for damages to seats, articles left behind, emergency exits, and open windows at the end of each trip!

**ALWAYS CHECK FOR SLEEPING STUDENTS!!!!**

**May have to deactivate a child check system on the bus**

**May have to place a bus empty sign at the rear of the bus**

**Complete a written inspection report for each bus driven. Report should indicate any defects that would affect safety or result in a mechanical breakdown and should be reported immediately, especially for mirrors, 8-way student lights, stop arm(s), and crossing arm.**

**Secure the bus when you exit.**

## Accident Procedures

When you're in an accident you should assess your own physical condition immediately after the crash, if you are not seriously hurt, you need to act to prevent further damage or injury. The basic steps to be taken at any accident are to:

Secure the bus

Notify authorities

Care for injured students

# Accident Procedures

## Secure the Bus

Do not move the bus. Send someone to flag traffic (trained and mature student or Bus Aid)

Set out reflective triangles/turn on 4-way flashers

Guard against fire

Unless the school bus is severely damaged or endangered by fire, keep the students inside the bus. The bus driver should not leave the bus unless it is absolutely necessary. The driver should stay near the school bus in order to give close supervision to students

Check for injured students

# Accident Procedures

## Notify Authorities

Notify school authorities/transportation office of the accident and injury to students via cell phone or radio.

Call an ambulance if necessary

Call a law enforcement official

Be courteous to the other driver, if another vehicle is involved. **DO NOT ADMIT FAULT!!!! ONLY SPEAK WITH LAW ENFORCEMENT AND SCHOOL AUTHORITIES!!**

# Accident Procedures

## Care For Injured Students

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.

# Things to Consider Post Crash

Evacuate?

Injuries?

- Call for medical assistance

How many students on board?

- Names, seat location, age

Type of fuel a concern?

Transferring students?

Releasing students?

Photographs?

Stay with students?

Drug and Alcohol Testing?

# Pre-Trip Inspection Test

## Pre-Trip Test – True or False

1. Engine oil level must be checked while the engine is running, and the vehicle is on a level surface.
2. Maximum tread depth on steering axle tires can be no more than 4/32.
3. Reflectors must be checked to ensure they are clean, none are missing or broken, and they are of proper color (red on rear, amber elsewhere).
4. Proper tire inflation can be determined by thumping a tire.
5. You must check for two red reflective triangles in a securely mounted case.
6. You must check the windshield to make sure it is clear and has no obstructions or damage to glass

## Pre-Trip Test – True or False

7. When starting the engine, check the dashboard to ensure the ABS lighting indicator illuminates and then promptly turns off. If the ABS indicator remains illuminated the ABS is not functioning properly and needs to be serviced.
8. During the pre-trip, dash indicators for turn signals, flashers, and headlight high beams must illuminate when corresponding lights are turned on.
9. During a hydraulic brake check you must pump the brake pedal three times, then hold it down for five seconds. The brake pedal should not move (depress) during the five seconds.
10. The vehicle horn is not an item that needs to be included in a pre-trip.

# Basic Control

## B1.1.4

## **Basic Control Objectives**

**Executing Left and Right Turns**

**Centering the Vehicle**

**Maneuvering in Restricted Areas**

**Entering and exiting the  
interstate or controlled access  
highway**

## **Basic Control**

**Turns can be dangerous and costly if you don't take the necessary precautions before and during these maneuvers. They are among the most common type of accident in the school bus and motor coach industry**

## Turns and Tail Swings

<https://youtu.be/FMJ4mATWQk>

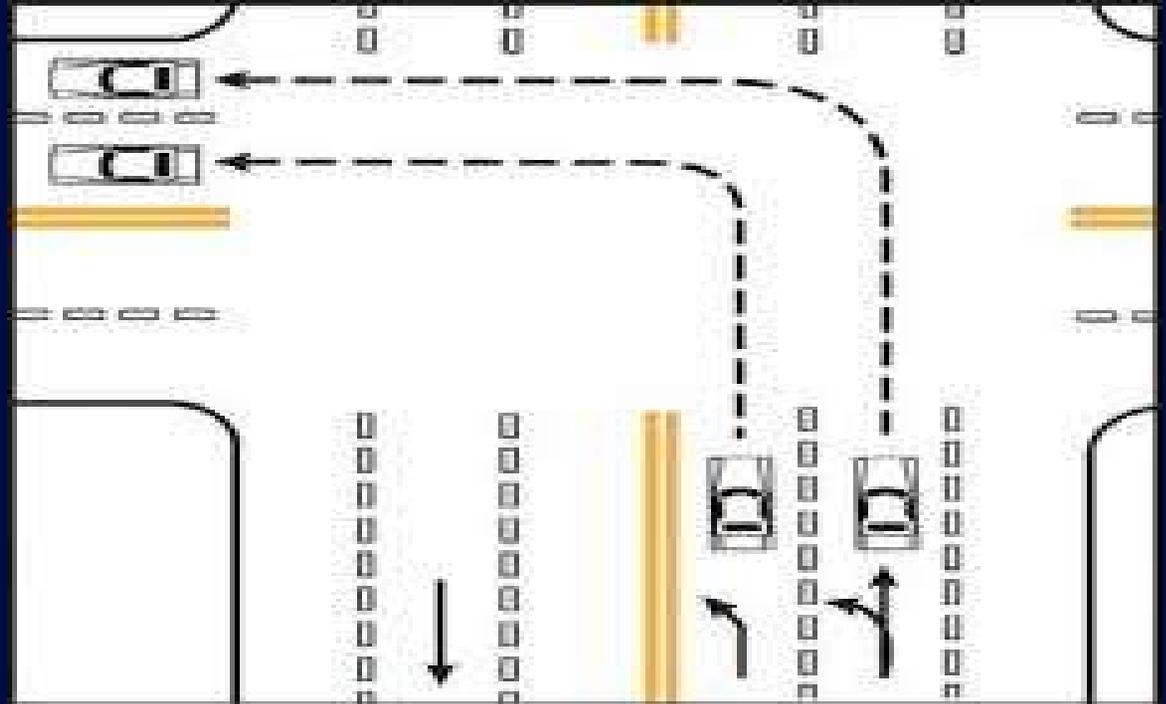
<https://youtu.be/mdrx8oSH2pC>

## Left Turns

On a left turn, make sure you have reached the center of the intersection before you start the left turn. If you turn too soon, the left side of your vehicle may hit another vehicle because of off-tracking.

If there are two turning lanes, always take the right turn lane. Don't start in the inside lane because you may have to swing right to make the turn. Drivers on your left can be more readily seen.

All commercial vehicles use the right, left turn lane



## Right Turns

Turn slowly to give yourself and others more time to avoid problems. If you are driving a truck or bus that cannot make the right Turn slowly to give yourself and others more time to avoid problems. If you are driving a truck or bus that cannot make the right turn without swinging into another lane, turn wide as you complete the turn. Keep the rear of your vehicle close to the curb. This will stop other drivers from passing you on the right. Don't turn wide to the left as you start the turn. If there are two turning lanes, always take the left turn lane. If you must cross into the incoming lane to make a turn, watch out for vehicles coming toward you. Give them room to go by or to stop. However, don't back up for them, because you might hit someone behind you ht turn without swinging into another lane, turn wide as you complete the turn. Keep the rear of your vehicle close to the curb. This will stop other drivers from passing you on the right. Don't turn wide to the left as you start the turn. If there are two turning lanes, always take the left turn lane. If you must cross into the incoming lane to make a turn, watch out for vehicles coming toward you. Give them room to go by or to stop. However, don't back up for them, because you might hit someone behind you

Right Turns

Figure 2-12  
Correct turning

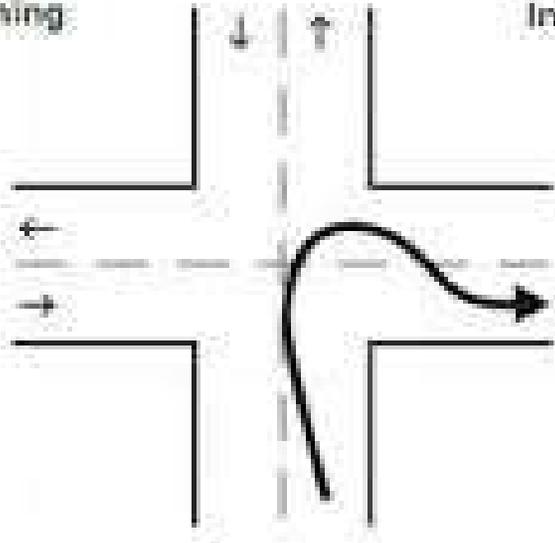
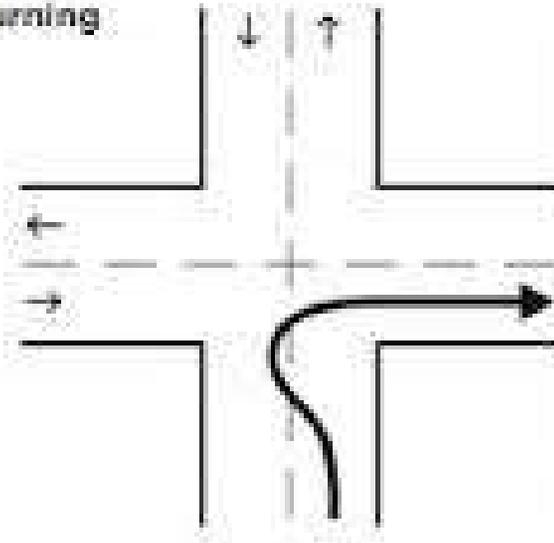


Figure 2-13  
Incorrect turning



## **Centering the Vehicle**

**Commercial vehicles are often wide and take up most of a lane. Safe drivers will manage what little space they have. You can do this by keeping your vehicle centered in your lane and avoid driving alongside others.**

**You need to keep your vehicle centered in the lane to keep safe clearance on either side. If your vehicle is wide, you have little room to spare.**

# Conventional Style vs Transit Style

Will you have to drive this different?



See any differences?



## **Maneuvering in Restricted Areas**

**Use the space that you are given.**

**Due to the size of your vehicle, if you do not think that you have ample space to turn, don't try. Find a different route.**

**Always keep your speed low to permit reaction time and adjustments as needed.**

**Watch where your tires are tracking.**

**Closely monitor all mirrors.**

**In high pedestrian areas, they are unpredictable, keep alert. Pedestrians in a crosswalk have the right-of-way.**

**Know the height of your vehicles, be mindful of awnings, overpasses, signs, etc.**

## Entering/Exiting Interstate/Controlled Access Highway

Freeway and turnpike exits can be particularly dangerous for commercial vehicles.

Off ramps and on ramps often have speed limit signs posted. Remember, these speeds may be safe for automobiles, but may not be safe for larger vehicles or heavily loaded vehicles.

Exits that go downhill and turn at the same time can be especially dangerous. The downgrade makes it difficult to reduce speed. Braking and turning at the same time can be a dangerous practice. Make sure you are going slowly enough before you get on the curved part of an off ramp or on ramp.



## Shifting/Operating Transmissions

Shifting Patterns

Executing up and down shifting techniques

Increased Fuel Economy

# Safe Start

## Description

Disengages engine from drive train so vehicle won't move and reduces load on starting motor.

## Rationale

Ensures the vehicle will not move during the starting procedure.

## Scoring Criteria

Depresses clutch before turning on the starter. Keeps depressed until engine reaches idling speed.

On an automatic transmission, places the gear shifter in the "neutral" or "park" position.

On a standard transmission, places gear shift in "neutral"

# Manual Transmission Shifting

**Most heavy vehicles require double clutching, but on a single axle school bus this is not required. Correct shifting of gears is important. If you can't get your vehicle into the right gear while driving, you will have less control of your vehicle.**

**Safe Start check first; manual shift should move freely back and forth in neutral.**

**Check clutch; push clutch down to floor then slowly release back until you feel tension. Continue to release all the way out- should have 2 inches of free travel.**

**Check shifting pattern; push clutch in put shift into first gear then release. Repeat process through all gears.**

# Manual Transmission Shifting

**To get started:**

**Make sure in neutral; apply brake pedal, push clutch in, start engine**

**Put transmission in gear: 1st or Reverse**

**Release Air brake**

**Slowly apply accelerator and releasing clutch until you feel the tension.**

**Applying more accelerator as you are fully releasing clutch**

## Shifting Techniques – Manual Transmission

### Best method for shifting up:

Release accelerator, push in clutch and shift from one gear to the next gear in one smooth motion.

Let engine and gears slow down to the RPM required for the next gear (this takes practice).

Slowly accelerate while releasing the clutch at the same time; this takes practice.

Push in clutch and shift to the higher gear at the same time.

Release clutch and press accelerator at the same time. If you shift to fast/slow you may lug engine



## Shifting Technique – Manual Transmission

### Best method for shifting down:

Release accelerator, push in clutch and shift to neutral at the same time.

Release clutch.

Press accelerator, increase engine and gear speed to the RPM required in the lower gear.

Push in clutch and shift to lower gear at the same time.

Release clutch and press accelerator at the same time.

Gear	Vehicle speed
1 to 2	24 km/h (15 mph)
2 to 3	42 km/h (26 mph)
3 to 4	60 km/h (37 mph)
4 to 5	75 km/h (46 mph)
5 to 6	79 km/h (49 mph)

## **Shifting Technique – Automatic Transmission**

**All Mississippi school buses have automatic transmissions; however, automatic transmissions need to be shifted just as manual transmission when you are going up or down steep grades.**

**Select a low gear to get greater engine braking when going down grades.**

**The lower gear prevents the transmission from shifting up beyond the selected gear (unless the governor RPM is exceeded).**

**It is very important to use this braking effect when going down grades.**

## Shifting Technique

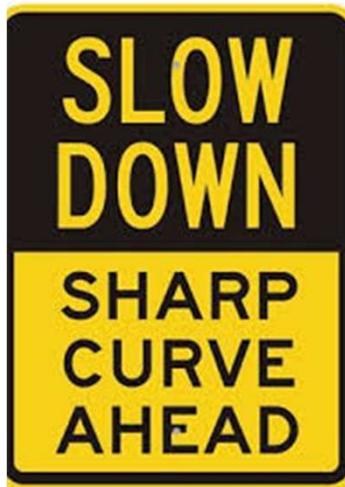
**Special condition where you should downshift is:**

**Before Starting Down a Hill.** Slow down and shift down to a speed that you can control without using the brakes hard. This should be done at the top of a grade before you proceed down, along with your brake check. Otherwise, the brakes can overheat and lose their braking power. Downshift before starting down the hill.

Make sure you are in a low enough gear, usually lower than the gear required to climb the same hill.



## Shifting Techniques



**Special condition where you should downshift is:**

**Before Entering a Curve. Slow down to a safe speed, and downshift to the right gear before entering the curve. This will allow you to use some power through the curve to help the vehicle be more stable while turning. It also allows you to speed up as soon as you are out of the curve.**

## **Shifting Techniques**

### **Multi-speed Rear Axles/Auxiliary Transmissions**

**Multi-speed rear axles/auxiliary transmissions are used on many vehicles to provide extra gears.**

**You usually control them by a selector knob or switch on the gearshift lever of the main transmission.**

**There are many different shift patterns, learn the right way to shift gears in the vehicle you will drive.**

## **Backing and Docking**

**“Get Out and Look” (GOAL)**

**Evaluation of Backing/Loading Facilities**

**Knowledge of Backing Set Ups**

**How to Back - Using Spotters**

# **G.O.A.L.**

## **Get Out And Look**

**According to the National Safety Council, 1 out of 4 vehicle accidents can be attributed to poor backing techniques.**

**Backing accidents cause 500 deaths and 15,000 injuries per year.**

**Most backing incidents result in property damage only, however the 10% of liability can be costly**

**The AAA Foundation, FMCSA, NHSTA, National Safety Council**

## Backing Techniques

Because you cannot see everything behind your vehicle, backing is always dangerous. Avoid backing whenever you can. Park so you will be able to pull forward when you leave.

When you must back, follow these safety rules:

**Start in the Proper Position - Put the vehicle in the best position to allow you to back safely. This position will depend on the type of backing to be done.**

## **Backing Techniques**

**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.**

## Backing Techniques

### **Back and turn toward drivers' side –**

Back to the drivers' side so you can see better. Backing toward the right side is very dangerous because you cannot see as well. If you back and turn toward the drivers' side, you can watch the rear of your vehicle by looking out the side window. Use driver-side backing—even if it means going around the block to put your vehicle in this position. The added safety is worth it.



# **Backing Techniques**

## **Backing With a Trailer**

**When backing a trailer, turn the steering wheel in the opposite direction. Once the trailer starts to turn, you must turn the wheel the other way to follow the trailer.**

**Back slowly - This will let you make corrections before you get too far off course.**

**Use the mirrors - The mirrors will help you see whether the trailer is drifting to one side or the other.**

## Backing Techniques

Correct drift immediately - As soon as you see the trailer getting off the proper path, correct it by turning the top of the steering wheel in the direction of the drift.

Pull forward - When backing a trailer, make pull-ups to reposition your vehicle as needed.

### **Backing a car, straight truck or bus.**

Turn the top of the steering wheel toward the direction you want to go

## **Backing Techniques**

**Use a helper - Use a helper when you can. There are blind spots you cannot see.**

**The helper should stand near the back of your vehicle where you can see the helper. Before you begin backing, work out a set of hand signals that you both understand. The most important signal to agree on is a signal for "stop".**

**If you lose sight of your helper, you should stop immediately and get out of the vehicle to look.**

## **Evaluation of Backing/Loading Facilities**

**Walk around your vehicle to get a complete picture of what you are backing into.**

**Walk the pavement surface looking for depressions and fixed objects, and be certain pedestrians are a safe distance from your vehicle.**

**Look up!! Hazards may come in the form of power lines, awnings, or even building overhangs.**

## Evaluation of Backing/Loading Facilities

Check side clearances and adjust your mirrors.

Signal your intentions by giving your horn a light tap.  
Use your four-way flashers.

Get to it! After checking, start backing procedures before the picture changes.

# New Modernized CDL Skills Testing

New Modernized CDL Skills Test

## Class B Passenger Vehicle Inspection

[https://youtu.be/EAqfEOJCiLo  
?si=eMOH83V-DXsNT0v9](https://youtu.be/EAqfEOJCiLo?si=eMOH83V-DXsNT0v9)

New Modernized CDL Skills Test

## Forward Stop – 1<sup>st</sup> Maneuver

[https://youtu.be/AbRj\\_ULKrdI](https://youtu.be/AbRj_ULKrdI)

New Modernized CDL Skills Test

## Straight Line Backing – 2<sup>nd</sup> Maneuver

<https://youtu.be/oFTOAHCLQ6s?si=2yIPJQ4b-diCQiN3>

New Modernized CDL Skills Test

## Forward Offset Tracking – 3<sup>rd</sup> Maneuver

[https://youtu.be/ajkxxeyKjg4?  
si=qRI9E-4RyxbMr2Qm](https://youtu.be/ajkxxeyKjg4?si=qRI9E-4RyxbMr2Qm)

New Modernized CDL Skills Test

## Reverse Offset Backing – 4<sup>th</sup> Maneuver

<https://youtu.be/uAYfhhlwFOc?si=To3RgJI9DiVyC75m>

# Basic Operation Test

## B1.1

## Basic Control Test – True or False

1. **On a left turn, make sure you have reached the center of the intersection before you start the left turn. If you turn too soon, the left side of your vehicle may hit another vehicle because of off-tracking.**
2. **Off ramps and on ramps often have speed limit signs posted. These speeds may be safe for automobiles but may not be safe for larger vehicles or heavily loaded vehicles.**
3. **When operating a manual transmission, you slowly apply accelerator and quickly release the clutch for a smooth start from a stop.**
4. **Most school buses have automatic transmissions; however, automatic transmissions never need to be shifted just as manual transmission when you are going up or down steep grades.**

## Basic Control Test – True or False

5. **When downshifting prior to going down a hill, make sure you are in a low enough gear, usually lower than the gear required to climb the same hill.**
6. **When downshifting in a curve, slow down to a safe speed, and downshift to the right gear right after you have entered the curve.**
7. **Brakes can smoke and get warm when used on a down grade however, they never lose their braking power.**
8. **GOAL stands for Get Out And Look.**
9. **When backing, there isn't any need to check the overhead clearance.**
10. **When backing up a trailer, turn the bottom of the steering wheel toward the direction you want to go.**

# Non-School Bus Items

Check that trailer connectors are sealed and in good condition.

Check fittings out of truck and trailer.

Check all connections from truck and trailer.

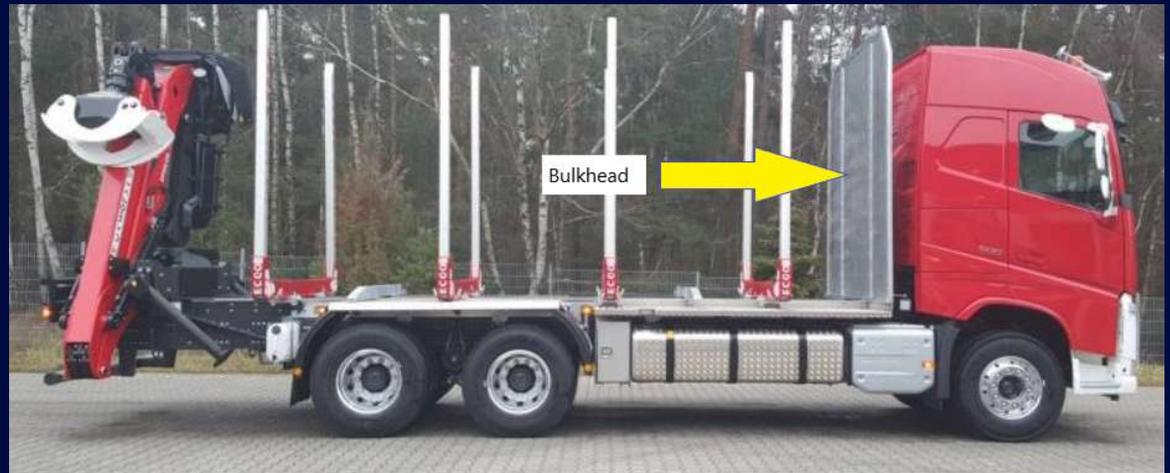
Check that glad hands are locked in place and free of damage.

Check that trailer electrical plug is firmly seated and locked in place on both truck and trailer.



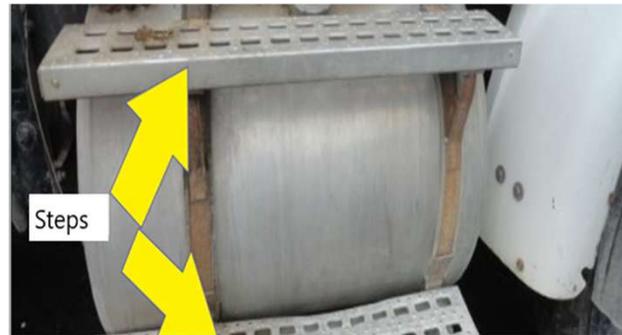
If equipped, check header board or bulkhead to see that it is secure, free of damage, and strong enough to contain cargo.

On enclosed trailers, check the front area for signs of damage (i.e., cracks, bulges, holes, or missing rivets).



Check that catwalk is solid, securely bolted to tractor frame, and clear of loose objects.

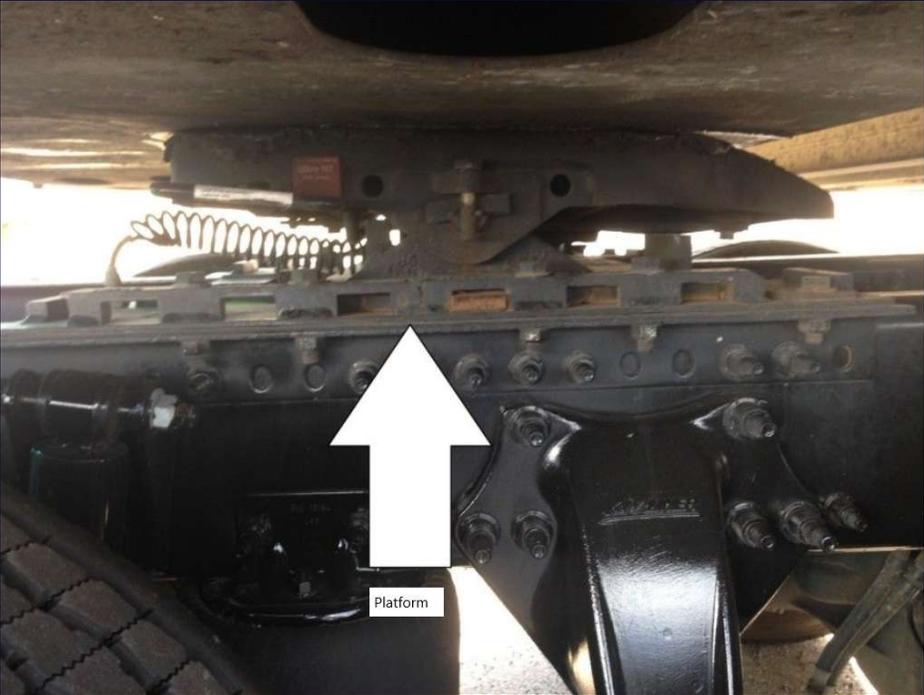
Check that the steps are solid, securely bolted to the tractor frame, and clear of loose objects.



Check that the trailer is laying flat on the fifth wheel skid plate and that there is no space between the apron and fifth wheel (no gap).



Check for cracks or breaks in the platform structure, which supports the fifth wheel, skid plate.



Check that the release arm is secure and all the way in.

If equipped with safety latch, check that the release arm is in the engaged position and the safety latch is in place.



Check that kingpin is not bent or damaged.

Check that visible part of apron is not bent, cracked or damaged.

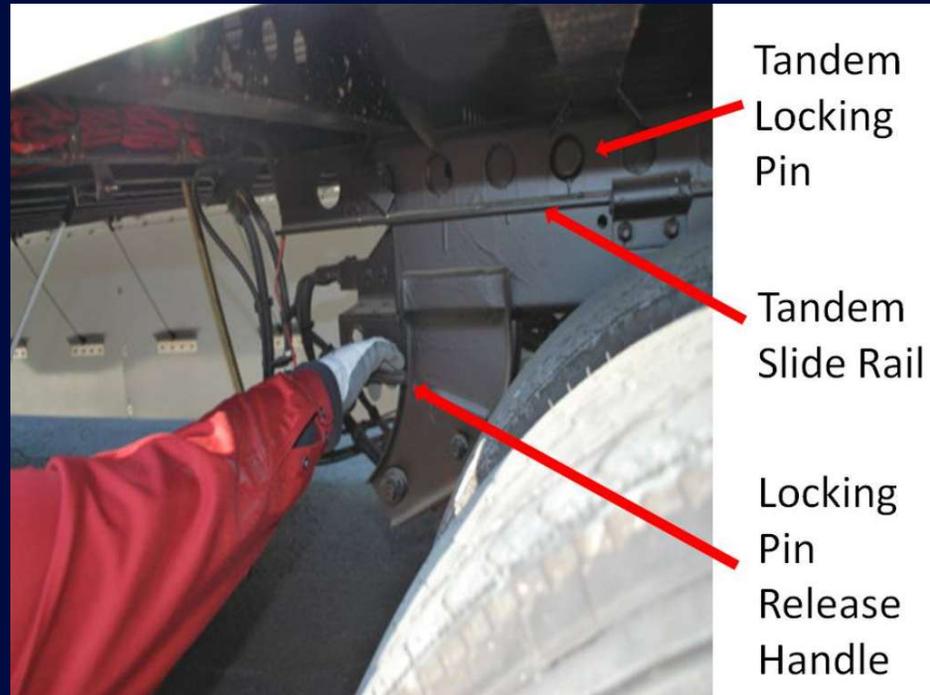


Check that landing gear is fully raised, has no missing parts, crank handle is secure, and the support frame and landing pads are not damaged.

If power operated, check for air or hydraulic leaks.



If equipped, check that the locking pins are locked in place and release arm is secured.



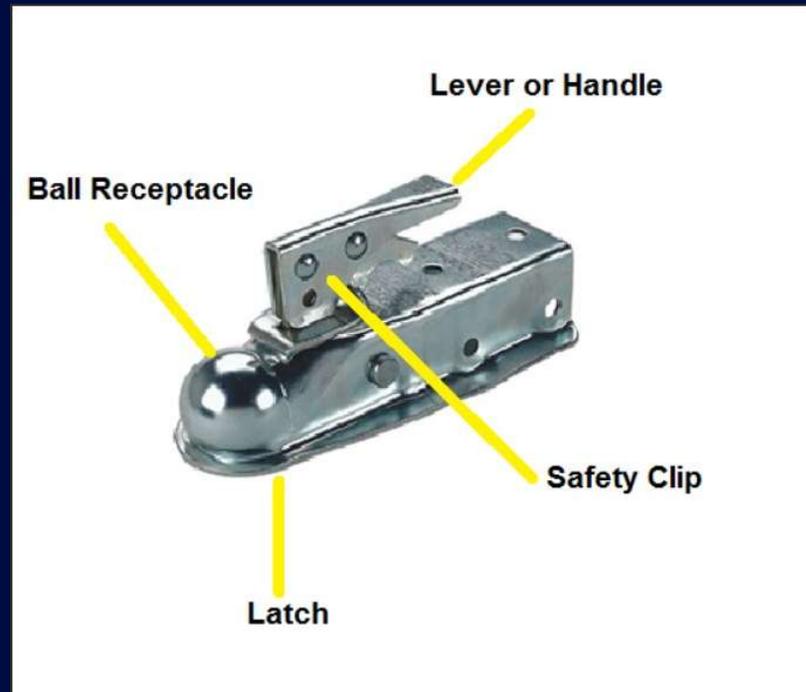
Check that doors and hinges are not damaged and that they open, close, and latch properly.

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

If equipped with cargo lift, check for leaking, damaged, or missing parts and explain how to check for correct operation. Check that lift is fully retracted and latched securely.



Check to see that hitch release lever is in place and secure.



Check locking mechanism for missing or broken parts and security.

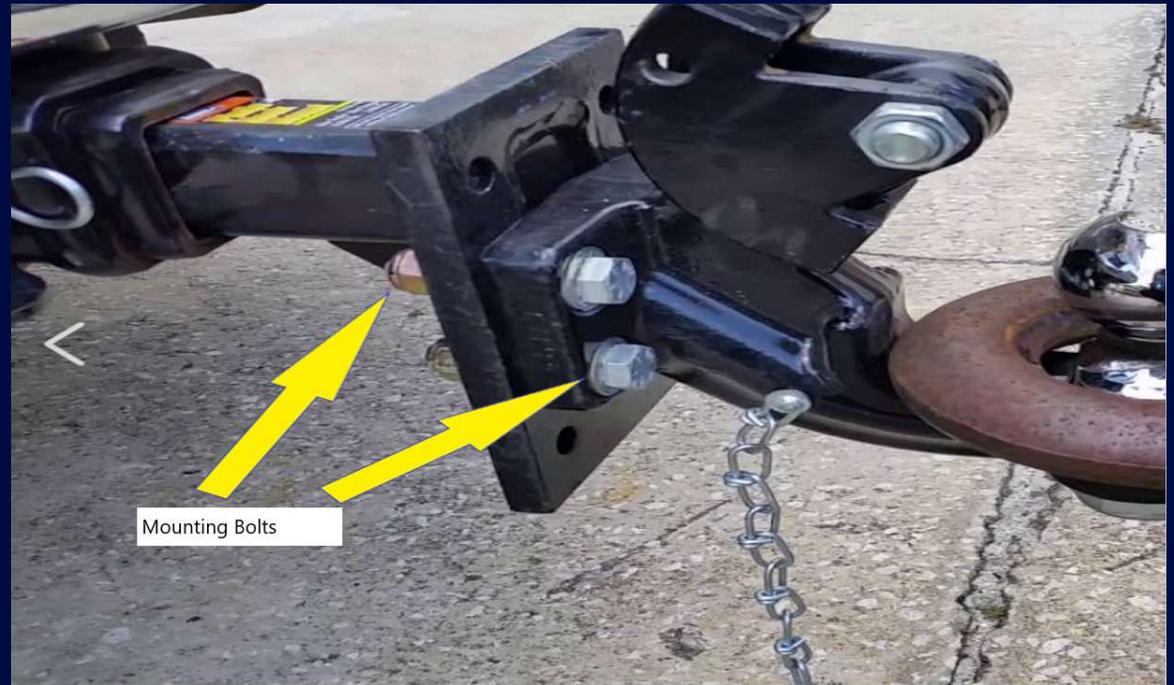
Check that fifth wheel locking jaws or lever are secure around the king pin.



Check for loose or missing brackets, clamps, bolts, or nuts.

Check that fifth wheel and sliding mounting appear solidly attached in place.

Check for loose or missing mounting bolts and for broken welds for pintle hook or other type of hitch mount, and tongue/draw-bar assembly, to ensure that they are solidly attached in place.



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



Check to make sure the latch is secured and locked in place, cotter pin is not missing, is in place and not damaged.

Safety chains are hooked and crisscrossed, free of kinks and excessive slack, cotter pins to hooks are in place and hooks are secured with hooks pointing in an outward position.

If trailer is equipped with electric brakes, check that breakaway chains or cables with battery backup are not missing or damaged.



If equipped, check that the sliding pintle is secured with no loose or missing nuts or bolts and cotter pin is in place.



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

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



Check that the storage area is solid and secure to the tongue; cargo in the storage area i.e., chains, binders etc., are secure.



# Safe Operating Procedures

## B1.2

# **Safe Operating Procedures**

**Visual Search**

**Communication**

**Distractive Driving**

**Speed Management**

**Space Management**

**Night Operation**

**Extreme Driving Conditions**

# Visual Search

# Visual Search

Potential Hazards

Critical Objects

Recognizing Distracted Pedestrians

Recognizing Distracted Drivers

How to Ensure Personal Security

General Awareness of common Surroundings

Truck Stops/Rest Areas

## Visual Search – Securing the Bus Yard

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31  
2

[https://youtu.be/ROj\\_c4hnA1I](https://youtu.be/ROj_c4hnA1I)

# Visual Search

## Potential Hazards

Just getting to your vehicle walking on the ground surfaces (slippery floors, parking lots, sidewalks, etc.) will account for approximately 61% of our injuries.

Wear appropriate clothing

Wear appropriate shoes/boots

Pay attention where you are walking

Poor Lighting

Intruders (people, animals, etc.)

# Visual Search

## Critical Objects

- Trees
- Curbs
- Light Poles
- Other People
- Other Vehicles
- Cement Barriers
- Walls



## Visual Search – Recognizing Distracted Walkers

[https://youtu.be/G4WAhH\\_buFQ](https://youtu.be/G4WAhH_buFQ)

## **Visual Search – Recognizing Distracted Drivers**

**Vehicle that may drift over the lane divider lines or within their own lane.**

**Vehicles traveling at inconsistent speeds**

**Drivers who are preoccupied with maps, food, cigarettes, cell phones, or other objects**

**Drivers who appear to be involved in conversations with their passengers**

**Give them plenty of room**

**Maintain safe following distance**

**Be extremely careful when passing**

# Visual Search

## Truck Stops and Rest Areas

Pre-plan your route so you know you will be stopping at a location that is has good lighting and plenty of room. Choose your stops, don't let them choose you.

Be alert.

As you pull into the rest area, take notice of its name or the closest mile marker, in case there is an emergency, and you need to tell authorities where you are.

Avoid parking close to tractor-trailers, which need a lot of space to maneuver, and which could also block other people from seeing your car, providing the kind of cover that criminals often seek out.

# Communication

# Communication



# Communication

**What Is Meant By Communication in the Context of CMV Driving?**

Intentions to Other Road Users

Different Types of Communication on the Road

Headlights

Turn Signals

Four-Way Flashers

Horns

Eye Contact with Other Drivers, Bicyclists and Pedestrians

# Communication

**Communication is giving advanced notice to other vehicles or pedestrians:**

Of an intended action on your part

To warn others of upcoming hazards

To alert others when your vehicle is travelling unusually slowly on the roadway

To alert others when you have stopped on the roadway

To alert others when you have parked off the roadway

# Communication

## What Tools Are Available for the CMV Driver to use to Communicate to Others?

Brake lights

Head lights

Student lights (school buses)

Legal hand signals

Turn signals

Back up lights

Horn

Strobe light

Eye contact

Clearance Lights

Back up audible alarm

Emergency flashers

Warning triangles/flares

## Communication

### Brake Lights

Essential to signal that your vehicle is slowing or stopping.

Tapping the brakes serves as a warning of a hazard or danger ahead that other drivers may not be able to see

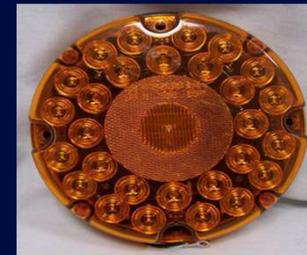


## Turn (directional) Signals

Turns – directional signals must be activated 100 ft. prior to beginning the turn if speed limit is 40mph or less, 200 ft. prior if the speed limit is over 40mph.

Lane changes – must activate directional signals same as for turns.

Before beginning to move from a stopped situation.



## Communication

### 4-Way Flashers – Hazard Lights

Can be used when driving 25mph or less to warn fast approaching vehicles.

Used when approaching RR-crossing (when required)

Stopped/disabled on the roadway or the shoulder

Used to warn of a danger or hazard that other drivers might not see



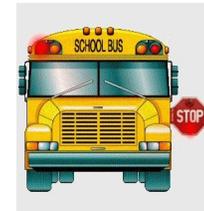
## Student Amber Warning Lights – Proceed with Caution

- Cautionary message that the school bus will be coming to a stop and once stopped, will activate the red warning lights to perform a loading or unloading procedure.
- Yellow means pass with care.



## Student Red Warning Lights – STOP!!

- Warning message that the school bus is stopped and performing a loading or unloading procedure. Motorists must stop.



# Communication

## Warning Triangles

Used to warn other traffic of a vehicle in the roadway or on the shoulder that is inoperable or is stopped for some other reason which creates a hazard.

Three triangles are placed at appropriate distances from the front and/or back of the vehicle according to the situation.



# Communication

## Back up Lights and Audible Alarm

Warn other vehicles or pedestrians of the intention to backup or that the vehicle is already in motion - in reverse.

## Clearance Lights

Can be on vehicles that are 80" or more in width.

Used primarily at night but may be used during daylight to show the height and side of the vehicle.



# Communication

## Horn

Audible warning to alert others to danger

Should be used sparingly as others can be startled and react

## Head Lights

Used to communicate your presence at nighttime or when visibility is reduced by other factors



## Communication

### Strobe Light

The vehicle must be stopped or travelling 25mph or less.

Used when the vehicle presents a hazard to other motorists or to enhance the visibility of the vehicle when barriers obscure it



## Communication

### Eye Contact

Establishing eye contact increases the likelihood that other drivers or pedestrians see you but do not rely on this as being safe.



## Communication

### Things to Avoid

Do not use hand signals to motion, or give direction to other drivers or pedestrians

Do not flash high beams to tell other drivers that their high beams are on

Do not flash high beams to warn of the presence of a police officer

# Distracted Driving

# Distracted Driving



# Distracted Driving

- Improper Cell Phone Use
- Texting
- Use of In-Cab Technology
- Visual Attention (keeping eyes on the road)
- Manual Control (keeping hands on the wheel)
- Cognitive Awareness (keeping mind on the task and safe operation of the CMV)

## Distracted Driving Statistics

Approximately 5,500 people are killed each year on U.S. roadways and an estimated 448,000 are injured in motor vehicle crashes involving distracted driving (NHTSA Traffic Safety Facts: Distracted Driving).

Research indicates that the burden of talking on a cell phone - even if it's hands-free - saps the brain of 39% of the energy it would ordinarily devote to safe driving. Drivers who use a hand-held device are more likely to get into a crash serious enough to cause injury. (NHTSA distracted driving website, [www.distraction.gov](http://www.distraction.gov))

## Distracted Driving Statistics

Effects of distracted driving include **slowed perception**, which may cause you to be delayed in perceiving or completely failing to perceive an important traffic event; **delayed decision-making** and **improper action**, which can cause you to be delayed in taking the proper action or make incorrect inputs to the steering, accelerator or brakes.

## Improper Cell Phone Use

Federal Motor Carrier Safety Regulations restricts the use of hand-held mobile telephones by drivers of commercial motor vehicles.

The use of hand-held mobile telephones means, **“using at least one hand to hold a mobile telephone to conduct a voice communication”; “dialing a mobile telephone by pressing more than a single button”; or “moving from a seated driving position while restrained by a seat belt to reach for a mobile telephone”**. If you choose to use a mobile phone while operating a CMV, you may only use a hands-free mobile phone that is located close to you and that can be operated in compliance with the rule to conduct a voice communication.

## Violations/Disqualifications

Your CDL will be disqualified after two or more convictions of any state law on hand-held mobile telephone use while operating a CMV. Disqualification is 60 days for the second offense within 3 years and 120 days for three or more offenses within 3 years. In addition, the first and each subsequent violation of such a prohibition are subject to civil penalties imposed on such drivers, in an amount up to \$2,750.

Motor carriers must not allow nor require drivers to use a hand-held mobile telephone while driving.

There is an emergency exception that allows you to use your hand-held mobile telephones, if necessary, to communicate with law enforcement officials or other emergency services.

# Texting

Federal Motor Carrier Safety Regulations prohibits texting by commercial motor vehicle (CMV) drivers while operating in interstate commerce.

**Texting means manually entering text into, or reading text from, an electronic device.** This includes, but is not limited to, short message service, e-mailing, instant messaging, a command or request to access a World Wide Web page, or engaging in any other form of electronic text retrieval or entry, for present or future communication.

Electronic device includes, but is not limited to, a cellular telephone; personal digital assistant; pager; computer; or any other device used to enter, write, send, receive, or read text.

## Violations/Disqualifications: Texting

Evidence suggests that text messaging is even riskier than talking on a cell phone because it requires you to look at a small screen and manipulate the keypad with one's hands.

Texting is the most alarming distraction because it involves both physical and mental distraction simultaneously.

Research shows that the odds of being involved in a safety-critical event (e.g., crash, near-crash, unintentional lane deviation) is 23.2 times greater for CMV drivers who engage in texting while driving than for those who do not.

# Texting and Driving PSA

<https://youtu.be/I7ljxDjwDjU>

## Use of In-Cab Technology

**Turn off all communication devices.** If you must use a mobile phone, make sure it is within close proximity; that it is operable while you are restrained; use an earpiece or the speaker-phone function; use voice-activated dialing; or use the hands-free feature. Drivers are not in compliance if they unsafely reach for a mobile phone, even if they intend to use the hands-free function. Do not type or read a text message on a mobile device while driving.

Familiarize yourself with your vehicle's features and equipment **before** you get behind the wheel.

Adjust all vehicle controls and mirrors to your preferences **prior** to driving.

## Use of In-Cab Technology

**Pre-program** radio stations **and pre-load** your favorite CDs.

**Clear the vehicle of any unnecessary objects and secure cargo.**

**Review maps, program the GPS** and plan your route before you begin driving.

**Don't attempt to read or write** while you drive.

**Avoid smoking, eating and drinking** while you drive. Leave early to allow yourself time to stop to eat.

**Don't engage in complex or emotionally intense conversations** with other occupants.

## Visual Attention

Activities inside of the vehicle 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; talking on a cell phone or CB radio; reading or sending text messages; using any type of telematics or electronic devices (such as navigation systems, pagers, personal digital assistant, computers, etc.); daydreaming or being occupied with other mental distractions; and many others.

Possible distractions that could occur outside a moving vehicle: outside traffic, vehicles or pedestrians; outside events such as police pulling someone over or a crash scene; sunlight/sunset; objects in roadway; road construction; reading billboards or other road advertisements; and many others.

## Manual Control

Physical Distraction that causes you to take your hands off the wheel or eyes off the road, such as reaching for an object.

# Cognitive Awareness

A driver distraction is anything that takes your attention away from driving. Whenever you are driving a vehicle and your full attention is not on the driving task, you are putting yourself, your passengers, other vehicles, and pedestrians in danger. Distracted driving can cause collisions, resulting in injury, death or property damage.

# Speed Management

# Speed Management

Various Roads

Weather Conditions

Traffic Conditions

Calibrating Safe Following Distances

CMV Weight

CMV Length

## State Speed Limits

Mississippi law establishes speed limits for roads and highways within the state. The Mississippi Department of Transportation (MDOT) and local authorities may change the speed limit for any road under their respective jurisdictions if the department or local authority determines that the speed limit established by law is greater or less than what is reasonable or safe for road or traffic conditions

Neither MDOT nor any local authority, however, may increase the speed limit above 70 miles per hour (mph) on any highway.



## Speed Limits for School Bus in Mississippi

The max speed limit for a school bus on a bus route is 45 mph unless the posted speed limit is less.

The max speed limit for a school bus on a two-lane highway on an activity trip is 50 mph.

The max speed limit for a school bus on the Interstate Highway is 65 mph.

## State Speed Limits

If hazardous conditions exist on a roadway, Mississippi drivers must slow to a reasonable and prudent speed, although this may require driving at a speed below the posted limit.

Mississippi law also grants cities and towns in the state authority to adopt maximum speed limits for their jurisdictions. MDOT and local authorities may also set minimum speeds.

Mississippi law prohibits motor vehicle operators from driving at such a slow speed that they impede the normal and reasonable forward movement of traffic, unless their slow speed is necessary for the safe operation of the vehicle. In these situations, the driver must drive in the right-hand lane if there is one available on the roadway or pull off the roadway when possible, to allow any impeded traffic to pass.

## Speed Limits

Type of Road or Highway	Speed Limit
Any business district	20-30 mph
Any residential district	20-30 mph
Natchez-Trace Parkway (Commercial Vehicles Restricted)	50 mph
Open highways that are not a part of the interstate system and are not four-lane	55 mph
Surfaced, four-lane highways that are a part of the state highway and divided	65 mph
Maximum lawful speed limit on interstate roadways in the state	70 mph

# Speed Management

Minimum speeds are required so that drivers are going fast enough so they are not impeding or blocking the "normal and reasonable" flow of traffic. Mississippi also has a "move over" law, saying that on a divided highway with a 65 mph or higher speed limit, the left lane can only be used for passing Mississippi traffic is light enough.

Commercial vehicles in must follow the same speed restrictions

Federal Interstates

70

Four-Lane State Highways  
Divided

65

2-lane state  
highways

55

# Speed Management

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## 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  $\frac{3}{4}$  second to 1 second. At 55 mph this accounts for 61 feet traveled.

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## 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  $1\frac{3}{4}$  seconds. At 55 mph this accounts for 142 feet traveled.

# Speed Management

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## 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 3/4 second to 1 second. At 55 mph this accounts for 61 feet traveled.

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## 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.

## State Speed Laws

How far can you go over the speed limit?

Convincing a Judge it was reasonable and prudent to go 38 mph in a 35-mph zone may not be too hard. (Which helps explain why police officers rarely write tickets for speeding less than 5 mph over the speed limit.) But proving that it was safe to go 65 mph in a 35-mph zone will be close to impossible.

Can you get a speeding ticket for driving too slowly?

Those caught driving below the minimum speed limit can be charged with a moving violation for blocking or obstructing traffic.

# Speed Management

**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.**

## **Speed Management**

**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.**

# Speed Management

Slippery Surfaces

Shaded Areas

Bridges

Melting Ice

Black Ice

Vehicle Icing

Just After Rain Begins

Hydroplaning

Speed on Downgrades

Total weight of the vehicle and cargo

Length of the grade

Steepness of the grade

Road Conditions

Weather

Speed and Traffic Flow

Speed and Distance Ahead

# Speed Management

## Roadway Work Zones

Speeding traffic is the number one cause of injury and death in roadway work zones. Always observe the posted speed limits when approaching and driving through a work zone. Watch your speedometer, and don't 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.

## Speed Management

**Speed up very gradually when traction is poor, as in rain or snow. If you use too much power, the drive wheels may spin. You could lose control. If the drive wheels begin to spin, take your foot off the accelerator.**

**Speed up smoothly and gradually so the vehicle does not jerk. Rough acceleration can cause mechanical damage. When pulling a trailer, rough acceleration can damage the coupling.**

**Before Starting Down a Hill. Slow down and shift down to a speed that you can control without using the brakes hard. Otherwise, the brakes can overheat and lose their braking power.**

## Speed Management

Before entering a curve slow down to a safe speed, and downshift to the right gear before entering the curve. This lets you use some power through the curve to help the vehicle be more stable while turning. It also allows you to speed up as soon as you are out of the curve.

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.

# Stopping Distance

MPH	Total Stopping Distance		
	Perception Distance	Reaction Distance	Braking Distance
25	47'	65'	28'
	140' Total Stopping Distance		
35	92'	91'	39'
	222' Total Stopping Distance		
45	114'	50'	152'
	319' Total Stopping Distance		
55	142'	61'	216'
	419' Total Stopping Distance		

# Sight, Speed and Space Management

<https://youtu.be/7u4n2vTHzoo>

# Space Management

# Space Management

The importance of managing the space surrounding the vehicle under various traffic and road conditions.

- To be a safe driver, you need space all around your vehicle. When things go wrong, space gives you time to think and to take action.
- To have space available when something goes wrong, you need to manage space. While this is true for all drivers, it is very important for large vehicles. They take up more space and they require more space for stopping and turning.

# Space Management

## Space Ahead

- Of all the space around your vehicle, it is the area ahead of the vehicle – the space you are driving into – that is most important.
- Why?
  - Stop suddenly (buses most often run into a vehicle in front of them)
  - Following too closely
- How Much Space?
  - One second for each 10 feet of vehicle length – below 40 mph
  - Greater speeds add one second for safety

# Space Management

## Space Behind

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

1. Stay to the Right (going up hill, heavy load)
2. Dealing with Tailgaters Safely
  - Avoid quick changes
  - Increase your following distance
  - Don't speed up
  - Avoid tricks

Sometimes, it is hard to see if you are being tailgated (following too closely) either due to bad weather or drivers that are trapped behind you.

# Space Management

## Space to the Sides

- Staying Centered in a Lane
- Strong Winds
- Traveling next to Others
  - Another driver may change lanes suddenly and turn into you
  - You may be trapped when you need to change lanes

# Space Management

## Space Overhead

- Don't assume heights posted at bridges and overpasses are correct (re-paving, snow)
- Weight changes height
- Go slow – Not sure? Take another route
- Tire – drive closer to the center of the road
- Backing ( G.O.A.L.)



# Space for Turn

## Left Turns

- From center of the intersection
- Watch off-tracking
- Two turning lanes? Take the right turn lane.

## Right Turns

- Slowly
- Keep rear of vehicle close to the curb
- Turn wide as you complete the turn not when you start the turn
- Don't back up
- Two turning lanes? Take the left turn lane.



# Space Management

## Space needed to Cross or Enter Traffic

- Size
- Weight
- Slow acceleration – may need larger gap
- Load can vary acceleration
- Make sure you can get ALL the way across before traffic reaches you.

# Night Operation

## Night Operation

Changes in Vision  
Communications  
Speed  
Space Management  
Proper use of Lights  
Procedures



# Changes in Vision

## Night Blindness

- This is a physical condition. It is not a reflection of a driver's ability.
- This is how well your eyes adapt to the dark and everyone reacts differently. After you have been in the dark for a while your eyes adjust, and you are able to see better. Some will adapt immediately, and others can take up to as much as 15 minutes.
- Physical signs of Night Blindness
  - Inability to identify objects within the night environment.
  - Unable to drive at safe speeds for the night driving conditions.
  - Unable to clearly recognize the lane you are driving in.

Night-blindness (middle) vs. normal sight (left and right)



Normal Vision on the left/Night Vision on the right



Night Communication



## Night Speed

Reduce your speed so that you don't drive beyond your headlights.



## Night Speed

What you can see at night is limited to what your headlights allow you to see. So, your ability to judge distances is severely diminished.

It is difficult to gauge the rate of deceleration of other vehicles. Keep a safe following distance.

To improve your reaction time, reduce your speed and use safe night driving techniques.



## Space Management at Night

Rear-end collisions are often caused by following another vehicle too closely.

Driving at night the distance between your vehicle and the vehicle in front of you should be greater than during daytime driving. There should be 4-5 seconds between you and the vehicle in front of you. In adverse weather increase it to 8-10 seconds.



# Night Driving Procedures

## Vehicle 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 Vehicle inspection of your vehicle. Pay attention to checking all lights and reflectors, and cleaning those you can reach.

# Night Driving Procedures

## Avoid Blinding Others

Glare from your headlights can cause problems for drivers coming toward you. They can also bother drivers going in the same direction you are, when your lights shine in their rearview mirrors. Dim your lights before they cause glare for other drivers. Dim your lights within 500 feet of an oncoming vehicle and when following another vehicle within 500 feet.

# Night Driving Procedures

## Avoid Glare from Oncoming Vehicles

Do not look directly at lights of oncoming vehicles. Look slightly to the right at a right lane or edge marking, if available. If other drivers don't put their low beams on, don't try to "get back at them" by putting your own high beams on. This increases glare for oncoming drivers and increases the chance of a crash.

## Night Driving Procedures

### Use High Beams When You Can

**Some drivers make the mistake of always using low beams. This seriously cuts down on their ability to see ahead. Use high beams when it is safe and legal to do so. Use them when you are not within 500 feet of an approaching vehicle. Also, don't let the inside of your cab get too bright. This makes it harder to see outside. Keep the interior light off and adjust your instrument lights as low as you can to still be able to read the gauges.**

## **Night Driving Procedures**

**If You Get Sleepy, Stop at the Nearest Safe Place.**

**People often don't realize how close they are to falling asleep even when their eyelids are falling shut. If you can safely do so, look at yourself in a mirror. If you look sleepy, or you just feel sleepy, stop driving! You are in a very dangerous condition. The only safe cure is to sleep.**

# Extreme Driving Conditions

# **Extreme Driving Conditions**

**Cold Weather**

**Avalanches**

**Hot Weather**

**Inclement Weather**

**Steep Grades**

**Sharp Curves**

**Proper Tire Chaining Procedures**

## Icy Conditions

Check for ice, especially bridges and overpasses. Check mirrors and wiper blades for ice. If they have ice, roads probably will too.

Lack of spray back? Maybe road is in the process of icing.

Tire tread – Must have 4/32 tread depth in every major groove on front tires and at least 2/32 inch on other tires.



# Avalanche

An avalanche is a mass of snow moving down a slope. Over the 10-year period from 2009 to 2019, an average of 27 people died in avalanches each winter in the United States. Most of these accidents involved recreationalists in the backcountry. When there is a high risk of avalanche danger, highways are closed.

Obey road closures

Keep additional food, water, warm clothes and blankets in your bus

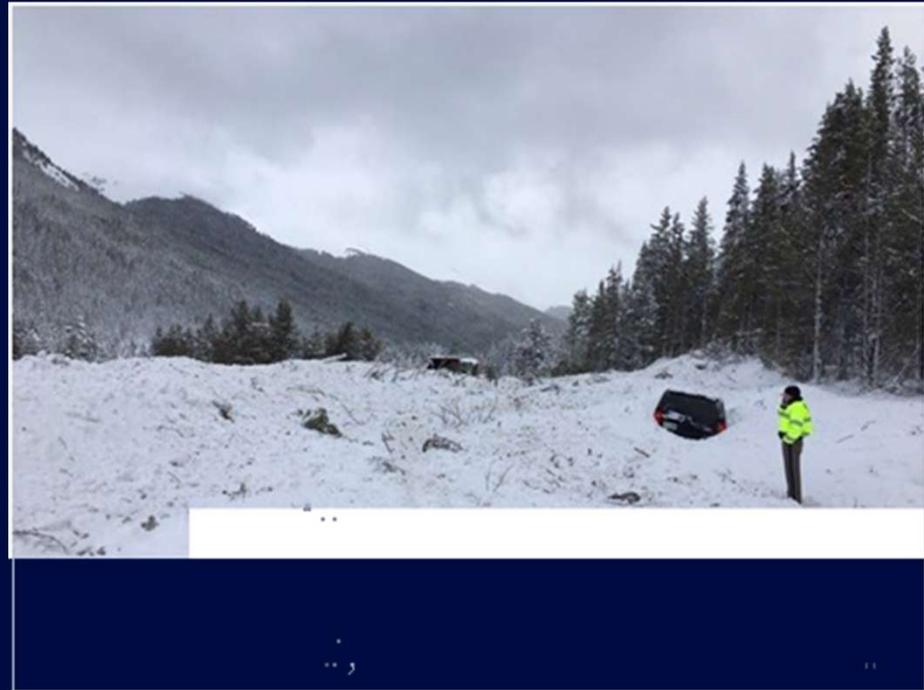
# Avalanche

If you come upon avalanche debris already on the road:

**Stop** – Do not try to drive through the debris. It is very easy to get stuck, and you'll be stuck at the bottom of an avalanche path.

**Find a safe place to wait** – Do not park in the avalanche path (open slope or break in the trees) and be prepared for more traffic if you can't get off the road.

**Call 911 for help** – If you have cell phone reception, notify local law enforcement that avalanche debris is blocking the roadway.



## Avalanche

If your bus is hit by an avalanche:

**Stay in your bus with the windows up.** Do not get out of your vehicle.

**Turn off the engine** to prevent carbon monoxide from filling the bus.

**Call 911 for help**

**Stay calm** and use your first aid training to attend to any injuries.



## Cold Weather

Check Coolant Level and Antifreeze. Make sure the defrosters work!! Make sure heaters work!!

Make sure windshield wiper blades are in good condition. Make sure windshield washer works and you have washer fluid



## **Cold Weather**

**Lights and Reflectors**

**Windows and Mirrors (before starting)**

**Hand Holds, Steps**

**Radiator Shutters (Winter front not closed too tight)**

**Exhaust System (leaks, loose connections)**

# Cold Weather - Driving

## Slippery Surfaces

Start Gently and Slowly

Check for Ice

Adjust turning and braking to conditions

Adjust speed to conditions

Adjust space to conditions (anticipate stops)

## Wet Brakes

Weak

Uneven

Wheel lockups

Pulling

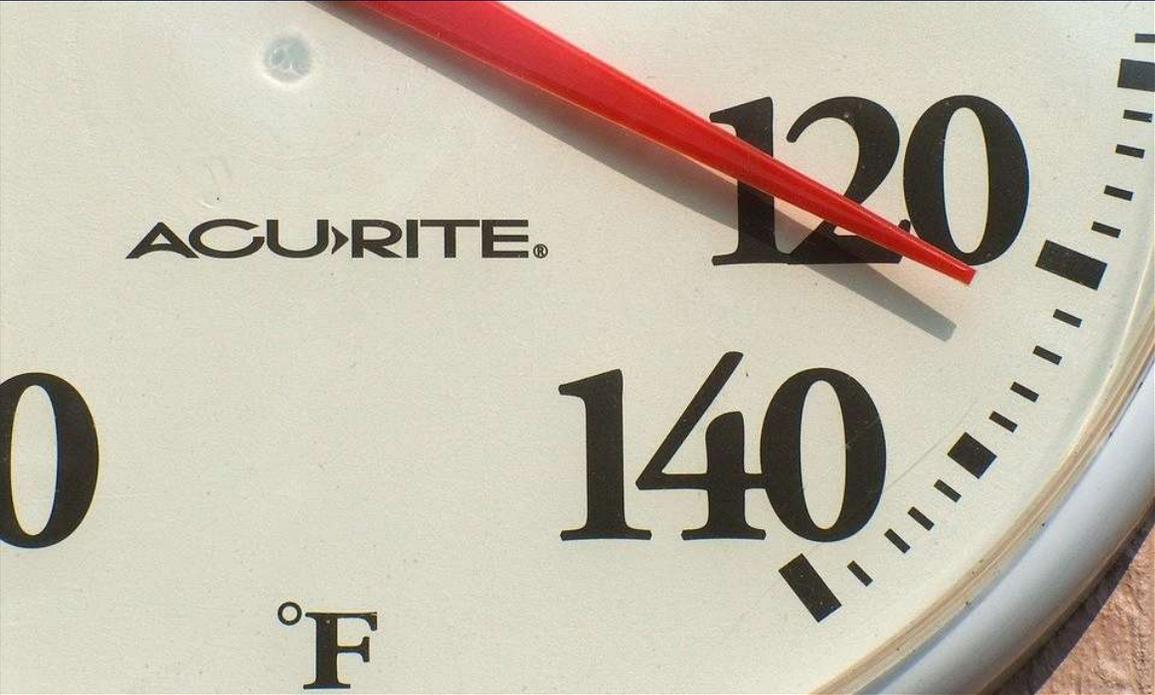
## Cold Weather

### Tire Chains

- Carry the right number of chains
- Extra cross-links
- Make sure they fit your drive tires
- Check for broken hooks, worn or broken cross-links
- Check for bent or broken side chains
- Learn how to put them on **BEFORE** you need to.



# Hot Weather



# Hot Weather

Do normal vehicle inspections but pay special attention to the following items:

Tires – Check mounting and air pressure. Inspect every two hours or 100 miles when driving in very hot weather. Air pressure increases with temperature. If tire is too hot to touch – let it cool off or it could blow or catch fire.

Engine Oil – Enough and the proper temperature range

Engine Coolant – Check BEFORE you start out (enough water and antifreeze). Make sure it stays in normal temperature range. If not, stop driving. **NEVER** remove the radiator cap until the system has cooled.

Engine Belts – Loose? Could result in overheating

Hoses – Broken hose could lead to fire or engine failure.

Bleeding Tar – Can be very slippery.

Inclement Weather



Tornado – Evacuate?  
Overpass or bridge?



Water on Roadways  
– **Never** attempt to  
drive in flowing  
water. Dangers may  
not be visible.



Wind – harder to steer  
and stay in lane.  
Blowing debris can hit  
bus.

Lightning – Avoid  
touching metal  
objects. Safest  
Place?



## Driving in Fog

**Fog can occur at any time. Fog on highways can be extremely dangerous. Fog is often unexpected, and visibility can deteriorate rapidly. You should watch for foggy conditions and be ready to reduce your speed. Do not assume that the fog will thin out after you enter it.**

**The best advice for driving in fog is don't. It is preferable that you pull off the road into a rest area or truck stop until visibility is better. If you must drive, be sure to consider the following:**

## **Driving In Fog**

**Obey all fog-related warning signs.**

**Slow down before you enter fog.**

**Use low-beam headlights and fog lights for best visibility even in daytime and be alert for other drivers who may have forgotten to turn on their lights.**

**Turn on your 4-way flashers. This will give vehicles approaching you from behind a quicker opportunity to notice your vehicle.**

## Driving in Fog

**Watch for vehicles on the side of the roadway. Seeing taillights or headlights in front of you may not be a true indication of where the road is ahead of you. The vehicle may not be on the road at all.**

**Use roadside highway reflectors as guides to determine how the road may curve ahead of you.**

**Listen for traffic you cannot see.**

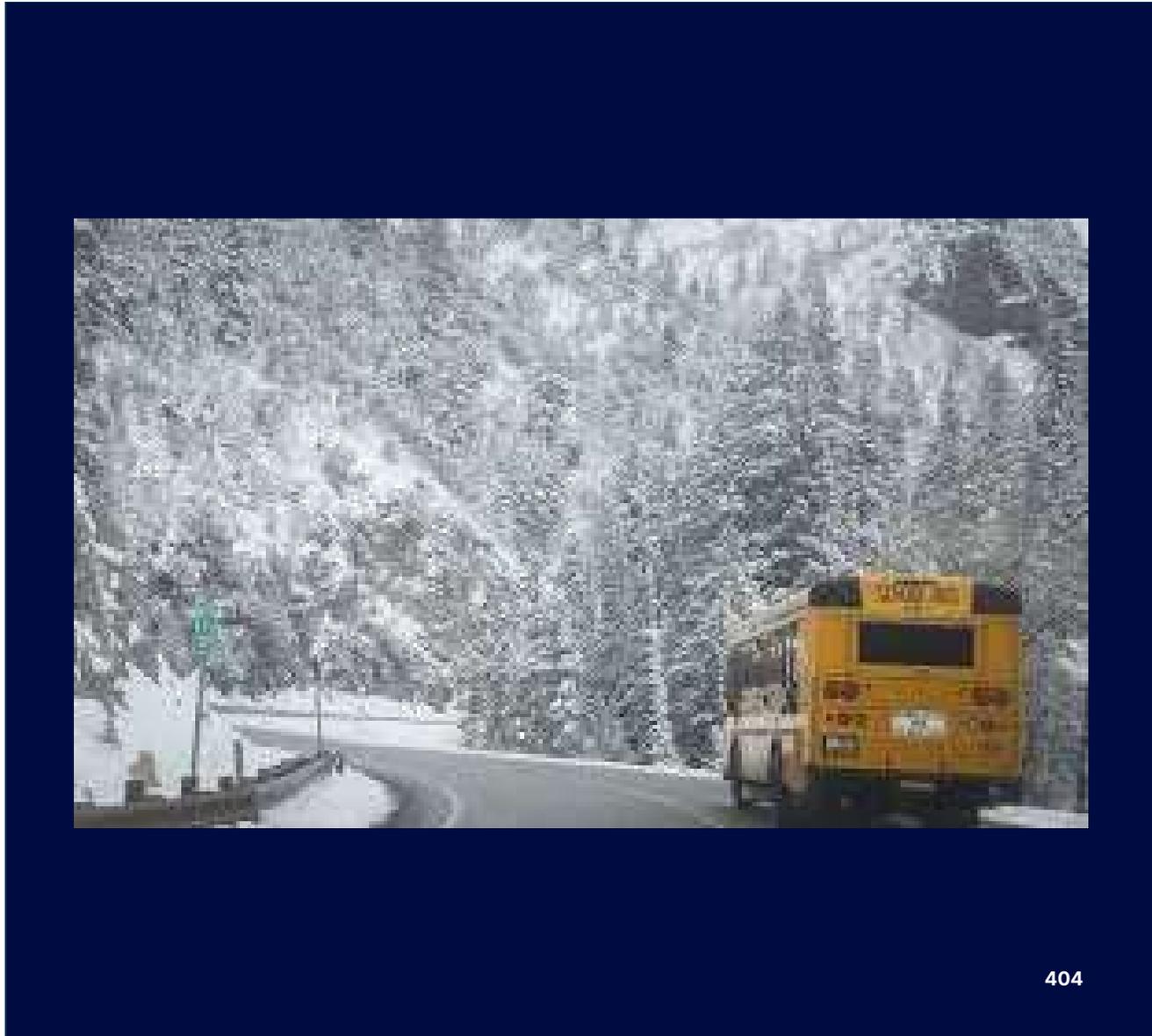
**Avoid passing other vehicles.**

**Don't stop along the side of the road, unless absolutely necessary.**

**USE STROBE LIGHT AT ALL TIMES ON A SCHOOL BUS!!!!**

## Steep Grades

**Gravity plays a major role!!!** On an upgrade it will slow you down, on a downgrade it will increase your speed. Use a low gear and proper braking techniques. You must go slow enough that your brakes can hold you back without getting too hot. Hot brakes may start to “fade”. This means you apply the brakes harder and harder to get the same stopping power. Brakes can keep fading until you cannot slow down or stop at all.



## Steep Grade

You must use the braking effect of the engine as the principal way of controlling your speed on downgrades. Determine the speed based on length of grade, steepness of grade, road conditions, weather, total weight of vehicle.



<https://www.youtube.com/watch?v=CTySDzqPIKU>

## Sharp Curves

If you take a curve too fast the tires can lose their traction and continue straight ahead so you skid off the road, or they may keep their traction and the vehicle rolls over. Slow to a safe speed **BEFORE** you enter the curve. Braking in a curve can be dangerous because it is easier to lock the wheels and cause a skid.



## Sharp Curves

Did you know that every banked curve has a safe "design speed"? The posted speed is safe for cars, but it may be too high for many buses.



## Road Conditions

Before any you should familiarize yourself with Road Conditions:

Be aware of Construction Zones and Road Closures

Prepare for detours or longer travel time

Never drive too fast for road conditions

Keep adequate space between motorist and you

Be cautious of road conditions that may damage your vehicle



## Weather Conditions

Are the weather conditions going to affect your travel?

Watch weather forecast during travel time

Be prepared for changing weather conditions

Allow extra time for travel

Have an emergency plan



## Traffic Conditions

Before any trip you know the Traffic Conditions

Consider time of travel especially during rush hour

Be aware of accidents on your route

Communicate any detours necessary to your supervisor

Keep adequate space between the motorist and you



# Safe Operating Procedures Test

## Safe Operating Procedures Test – True or False

1. Before any trip you should familiarize yourself with road conditions, weather conditions and traffic conditions.
2. A few things that may help you identify distracted drivers are; vehicle that may drift over the lane divider lines or within their own lane and vehicles traveling at inconsistent speeds.
3. If your vehicles are kept inside or in a fenced-in area, there is no need for your to be concerned if you see something/someone out of the ordinary in the area around your vehicles.
4. School bus drivers do not have any means of communicating to other vehicles or pedestrians while they are in motion.

## Safe Operating Procedures Test

5. Drivers who use a hand-held device are not as likely to get into a crash serious enough to cause injury.
6. Evidence suggests that text messaging is even riskier than talking on a cell phone because it requires you to look at a small screen and manipulate the keypad with one's hands.
7. Mississippi has a "move over" law, saying that on a divided highway, the left lane can only be used for passing when traffic is light enough.
8. If hazardous conditions exist on a roadway, Mississippi drivers must slow to a reasonable and prudent speed, although this may require driving at a speed below the posted limit.

## Safe Operating Procedures Test

9. Speeding traffic is the number one cause of injury and death in roadway work zones.
10. Your ability to judge distances at night is not diminished as long as you use your high beams.

# Advanced Operating Practices – B1.3

## **Advanced Operating Procedures**

# **Hazard Perception Skid Control/Recovery, Jackknifing, and Other Emergencies Railroad-Highway Grade Crossings**

# Hazards

A hazard is any road condition or other road user (driver, bicyclist, pedestrian) that is a possible danger.

## Recognizing Potential Hazards

**You will have more time to act if you see hazards before they become emergencies. Being prepared reduces the danger.**

**There are often clues that will help you see hazards. The more you drive, the better you can learn to see hazards**

S.I.P.D.E

**Scan**  
**Identify**  
**Predict**  
**Decide**  
**Execute**

## Scan

**Search aggressively for potential hazards. Scanning provides you with the information you need to make your decisions in enough time to take action.**

# Identify

**Locate hazards and potential conflicts. The hazards you encounter can be divided into three groups based on how critical their effect on you may be.**

**Cars, trucks and other vehicles - They share the road with you, they move quickly, and your reactions to them must be quick and accurate.**

**Pedestrians and animals - They are characterized by unpredictability and short quick moves.**

**Stationary objects - Chuckholes, guard rails, bridges, roadway signs, hedges, or rows of trees won't move into your path, but may create or complicate your driving strategy.**

## Identify - Continued

The greatest potential for a conflict between you and other traffic is at intersections. An intersection can be in the middle of an urban area or at a driveway on a residential street-anywhere other traffic may cross your path of travel. Most automobile collisions occur at intersections. And most of these collisions are caused by an on-coming vehicle turning left into the path of the vehicle. Your use of SIPDE at intersections is critical.

Before you enter an intersection, search for:

Oncoming traffic that may turn left in front of you.

Traffic from the left.

Traffic from the right.

Traffic approaching from behind.

Be especially alert at intersections with limited visibility. Be aware of visually "busy" surroundings that could camouflage you and your motorcycle.

## Predict

**Anticipate how the hazard may affect you. The moving direction of a potential hazard is important. Clearly, a vehicle moving away from you is not as critical as a vehicle moving in your path.**

**Determine the effect of the hazard - i.e., where a collision might occur. How critical is the hazard? How probable is a collision? This is the "What if..?" phase of SIPDE that depends on your knowledge and experience. Now estimate the consequences of the hazard. How might the hazard-or your effort to avoid it-affect you and others**

# Decide

Determine how to reduce the hazard. There are only three things you can do:

**Communicate your presence.** Communication is the most passive action you can take since it depends on the response of someone else. Use your lights and horn, but don't rely on the actions of others.

**Adjust your speed.** Adjustments of speed can be acceleration, slowing or stopping.

**Adjust your position.** Adjustments of position can be changing lane position or completely changing direction.

In both cases, the degree of adjustment depends on how critical the hazard is and how much time and space you have. The more time and space you have to carry out your decision, the less amount of risk you'll encounter.

In areas of high potential risk, such as intersections, give yourself more time and space by reducing the time you need to react. Cover the brakes and be ready with possible escape routes.

## **Execute**

**Carry out your decision. This is when your driving skills come into play, and this is where they must be second nature. The best decision will be meaningless without the skills to carry it out. Know your limits and ride within them.**

# Be Prepared and Plan Ahead

# Move Over Laws

## MISSISSIPPI

State law requires drivers approaching stationary emergency vehicles that are displaying flashing lights, including recovery vehicles (tow trucks), traveling in the same direction, to move over one lane, if safe and possible to do so, or to reduce to a speed safe for weather, road, and traffic conditions. Also included in the law are highway maintenance vehicles.

# Identifying Road Conditions

## Work Zones

There may be narrower lanes, sharp turns, or uneven surfaces.

Drive slowly and carefully near work zones. Use your four-way flashers or brake lights to warn drivers behind you.

## Drop Off

Sometimes the pavement drops off sharply near the edge of the road.



## Identifying Road Conditions

### Foreign Objects

It is important to remain alert for objects of all sorts, so you can see them early enough to avoid them without making sudden, unsafe moves.

### Off Ramps/On Ramps

Make sure you are going slowly enough before you get on the curved part of an off ramp or on ramp.



## Identifying other road users that are potential threats

**In order to protect yourself and others, you must know when other drivers may do something hazardous.**

**Blocked Vision** People who can't see others are a very dangerous hazard. (Vans, rental trucks, etc.)

**Vehicles may be partly hidden by blind intersections or alleys.** If you only can see the rear or front end of a vehicle but not the driver, then he or she can't see you.

## Identifying other road users that are potential threats

**Delivery Trucks Can Present a Hazard.** Packages or vehicle doors often block the driver's vision. (postal vehicles, delivery trucks, etc.)

**Parked Vehicles Can Be Hazards, especially when people start to get out of them.** Or, they may suddenly start up and drive into your way.



## Identifying other road users that are potential threats

**Pedestrians and Bicyclists Can Also Be Hazards.** Walkers, joggers, and bicyclists may be on the road with their back to the traffic, so they can't see you.

**Distractions** People who are distracted are hazards. Watch for where they are looking. If they are looking elsewhere, they can't see you.

**Children**

**Talkers**

**Workers**

**Ice Cream Trucks**

**Disabled Vehicles**



## Identifying other road users that are potential threats

### Slow Drivers

### Accidents

Accidents are particularly hazardous. People involved in the accident may not look for traffic

### Shoppers

### Confused Drivers

Confused drivers often change direction suddenly or stop without warning.



## Identifying other road users that are potential threats

**Drivers Signaling a Turn May Be a Hazard.** Drivers signaling a turn may slow more than expected or stop.

**Drivers in a Hurry**

**Impaired Drivers**

**Driver Body Movement as a Clue  
Conflicts**

**You should always be looking for hazards!**



## Safety Procedures in construction/work zones

<https://www.fmcsa.dot.gov/ourroads/work-zones-safety-tips>

# Skid Control/Recovery

# Skid Control/Recovery/Jackknifing

**A skid happens whenever the tires lose their grip on the road. This is caused by one of four ways:**

**Over-braking** – braking too hard and locking up the wheels. Skids also can occur when using the speed retarder when the road is slippery.

**Over-steering** – Turning the wheels more sharply than the vehicle can turn.

**Over-acceleration** – Supplying too much power to the drive wheels, causing them to spin.

**Driving too fast** – Most serious skids result from driving too fast for road conditions. Drivers who adjust their driving to conditions do not over-accelerate and do not have to over-brake or over-steer from too much speed.

# Skid Control/Recovery/Jackknifing

Avoiding/Recovering

Maintaining Directional Control

Bringing CMV to a Stop on a Slippery Surface

Evasive Steering

Emergency Braking

Off-Road Recovery

Brake Failures

Tire Blowouts

Hydroplaning

Rollovers

Unsafe Acts that Worsen the Situation



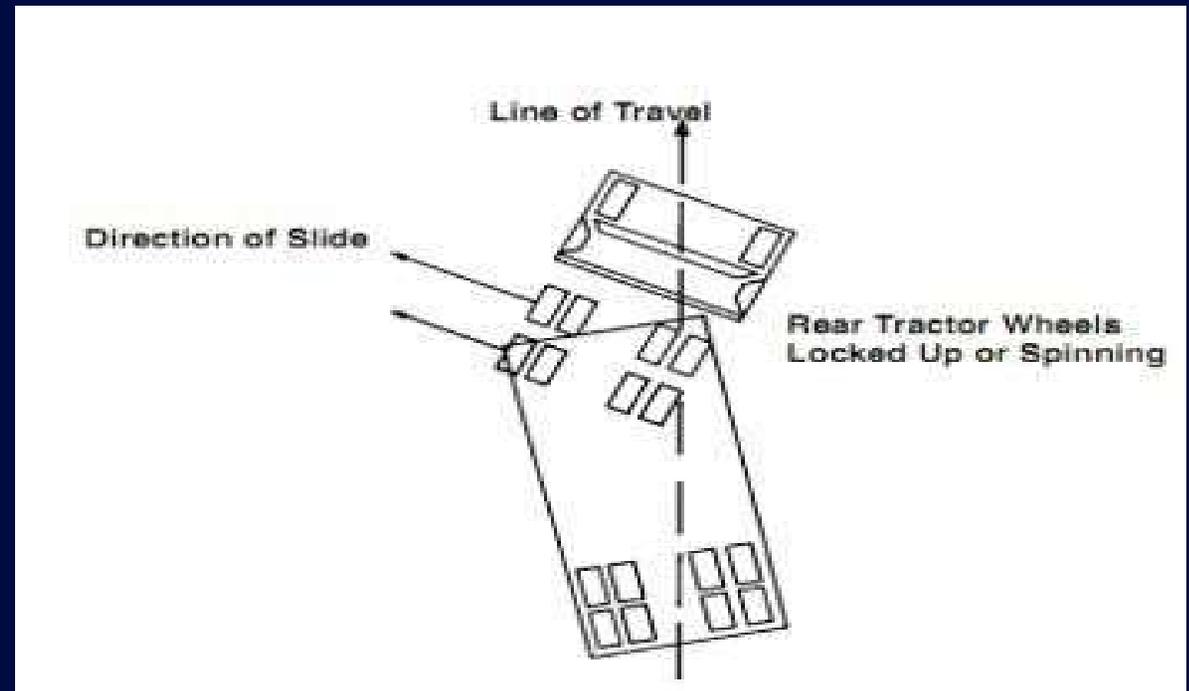
## Skid Control/Recovery/Jackknifing

By far the most common skid is one in which the rear wheels lose traction through excessive braking or acceleration.

Skids caused by acceleration usually happen on ice or snow. They can easily be stopped by taking your foot off the accelerator (if it is very slippery, push the clutch in if you have one. Otherwise, the engine can keep the wheels from rolling freely and regaining traction).

## Skid Control/Recovery/Jackknifing and Other Emergencies

Rear-wheel braking skids occur when the rear-drive wheels lock. Because locked wheels have less traction than rolling wheels, the rear wheels usually slide sideways in an attempt to “catch up” with the front wheels. In a bus or straight truck, the vehicle will slide sideways in a “spin out.” With vehicles towing trailers, a drive-wheel skid can let the trailer push the towing vehicle sideways, causing a sudden jackknife



<https://www.youtube.com/watch?v=QnKsmquHBqI>

## **Skid Control/Recovery/Jackknifing**

**Stop braking - This will let the rear wheels roll again and keep the rear wheels from sliding any further. If on ice, push in the clutch to let the wheels turn freely.**

**Turn quickly - When a vehicle begins to slide sideways, quickly steer in the direction you want the vehicle to go down the road. You must turn the wheel quickly.**

**Counter-steer - As a vehicle turns back on course, it has a tendency to keep right on turning. Unless you turn the steering wheel quickly the other way, you may find yourself skidding in the opposite direction.**

**Learning to stay off the brake, turn the steering wheel quickly, push in the clutch and counter-steer in a skid takes a lot of practice. The best place to get this practice is on a large driving range or "skid pad."**

## Skid Control/Recovery/Jackknifing

Most front-wheel skids are caused by driving too fast for conditions. Other causes are lack of tread on the front tires, and cargo loaded so not enough weight is on the front axle. In a front-wheel skid, the front end tends to go in a straight line regardless of how much you turn the steering wheel. On a very slippery surface, you may not be able to steer around a curve or turn.

When a front-wheel skid occurs, the only way to stop the skid is to let the vehicle slow down. Stop turning and/or braking so hard. Slow down as quickly as possible without skidding.

# Evasive Steering

## Is stopping always the safest thing to do in an emergency?

No. When you don't have enough room to stop, you may have to steer away from what's ahead. You can almost always turn to miss an obstacle more quickly than you can stop.

Both hands on the steering wheel

Do not apply the brake while you are turning.

Do not turn any more than needed to clear whatever is in your way

Be prepared to "counter-steer"

Where do I steer?

## Evasive Steering/Off Road Recovery

**In some emergencies you may have to drive off the road which may be better than having a collision with another vehicle. If you do have to leave the road:**

Avoid braking until you have dropped to about 20 mph.

Keep one set of wheels on the pavement to help maintain control.

Stay on the shoulder if possible.

If you are forced to return to the road before you can stop don't try to edge gradually back on the road. Your tires might grab unexpectedly, and you could lose control

# Emergency Braking

**Emergency Braking may become necessary and you want to keep your vehicle in a straight line if possible. Emergency braking does not mean pushing down on the brake pedal as hard as you can. That will only keep the wheels locked up and cause a skid.**

**Controlled Braking** – apply hard as you can without locking the wheels. Keep steering wheel movements very small while doing this. If the wheels lock, release the brakes. Re-apply the brakes as soon as you can.

**Stab Braking** – Apply brakes all the way and release brakes when the wheels lock up. As soon as the wheels start rolling, apply the brakes fully again.

Does your vehicle have anti-lock brakes? How do they work?

## **Antilock Brakes**

**ABS is a computerized system that keeps your wheels from locking up during hard brake applications.**

**ABS is an addition to your normal brakes. It does not decrease or increase your normal braking capability.**

**ABS only activates when wheels are about to lock up.**

**ABS does not necessarily shorten your stopping distance, but it does help you keep the vehicle under control during hard braking.**

**ABS works far faster than the driver can respond to potential wheel lockup.**

# Brake Failure

Hydraulic brake failures normally occur due to:

- Loss of Hydraulic pressure – system won't build up pressure and the brake pedal will feel spongy or go to the floor

  - Downshift

  - Pump the Brakes

  - Use the Parking Brake (press release so you don't lock up wheels)

  - Find an Escape Route

- Brake fade on long hills

  - Look for something outside your vehicle to stop it

  - Escape Ramp

  - Open field – side road that goes uphill

  - The longer you wait, the faster the vehicle will go, and the harder it will be to stop

## Tire Failure

How do you know if you have a flat tire?

- Sound
- Vibration
- Feel

How should I respond to a tire failure?

- Hold the steering wheel firmly especially if it is a front tire
- Stay off the brake. Wait until you slow down then pull off the road and stop.
- Check the tires



## Hydroplaning

Tires lose their contact with the road and have little or no traction.

Release the accelerator

Push in the clutch

DO NOT use the brakes to slow down



# Railroad-Highway Grade Crossings

# Railroad-Highway Grade Crossing

Potential Dangers

Safety Procedures

Federal/State RR Regulations

Crossing Environments

Obstructed View Conditions

Clearance Around the Tracks

Rail Signs and Signals

Railroad Personnel Availability

<https://oli.org/>

<https://oli.org/video/view/2014-operation-lifesaver-leadership-conference-video-see-tracks-think-train>



## Operation Rules – Railroad Crossing

School transportation vehicle operators of School Buses, Multifunction Buses and Motor Coach Buses, whether transporting students or not, shall apply the following procedures during the process of approaching, stopping and crossing railroad tracks:

- (a) Activate the four-way hazard lamps not less than 200 feet from the railroad crossing to alert other motorists of the pending stop for the crossing.
- (b) Stop the bus within 50 feet but not less than 15 feet from the nearest rail.
- (c) When stopped, the bus should be as far to the right of the roadway as possible and should not form two lanes of traffic unless the highway is marked for four or more lanes of traffic.

## Operation Rules – Railroad Crossing

(d) Use a prearranged signal to alert students to the need for quiet aboard the bus when approaching railroad tracks. Turn off all noise making equipment (fans, heater, radio, etc.) May use noise suppression switch if installed.

(e) After quietness aboard the stopped bus has been achieved, bus operators shall shift the bus to neutral and open the service door and operator window. The bus operator shall listen and look in both directions along the track(s) for any approaching train(s) and for signals indicating the approach of a train.

(1) If the tracks are clear, the bus operator shall close the service door and may then proceed in a gear low enough to permit crossing the tracks without having to manually shift gears. The bus operator shall cancel the four-way hazard lamps after the bus has cleared the tracks.

## Operation Rules – Railroad Crossing

(2) When two or more tracks are to be crossed, the bus operator shall not stop a second time unless the bus is completely clear of the first crossing and has at least 15 feet clearance in front and at least 15 feet clearance to the rear.

(3) Before crossing the tracks, the bus operator shall verify that there is enough space after the tracks for the bus plus 15 feet if it is necessary to stop after crossing the tracks.

# Operation Rules – Railroad Crossing

63-3-1011 (1) The driver of any motor vehicle carrying passengers for hire or of any vehicle carrying explosive substances or flammable liquids as a cargo or part of a cargo, before crossing at grade any track or tracks of a railroad, shall stop the vehicle within fifty (50) feet but not less than fifteen (15) feet from the nearest rail of the railroad. While stopped, the driver shall listen and look in both directions along the track for:

- (a) Any approaching train or any other vehicle operated upon the rails for the purpose of maintenance of railroads, including, but not limited to, all hi-rail vehicles and on-track maintenance machines; and
- (b) Signals indicating the approach of a train or any other vehicle or machine operated upon the rails. The driver shall not proceed until he can do so safely.

(2) No stop need be made at any crossing where a police officer or a traffic control signal directs traffic to proceed.

(3) The driver of every school transportation vehicle used to transport pupils, upon approaching any railroad crossing, shall comply with the provisions of Section 37-41-55.

(2) The driver of every school transportation vehicle used to transport pupils, on approaching any highway intersection, shall bring the vehicle to a complete stop and shall not proceed until the driver has determined that it is safe to proceed.

(3) Any driver who fails to bring his vehicle to a complete stop and follow the procedures as herein required is guilty of a misdemeanor and, upon conviction thereof, shall be fined not less than One Hundred Dollars (\$ 100.00) nor more than Two Hundred Fifty Dollars (\$ 250.00) for each offense

## Operation Rules – Railroad Crossing

§ 37-41-55. Duties of driver of school transportation vehicle used to transport pupils upon approaching railroad crossing or highway intersection (Special Vehicles)

(1) The driver of every school transportation vehicle used to transport pupils, on approaching any railroad crossing, shall bring the vehicle to a complete stop within fifty (50) feet but not less than fifteen (15) feet from the nearest rail of the railroad. While stopped, the driver shall open the service door and driver's window, and look and listen for:

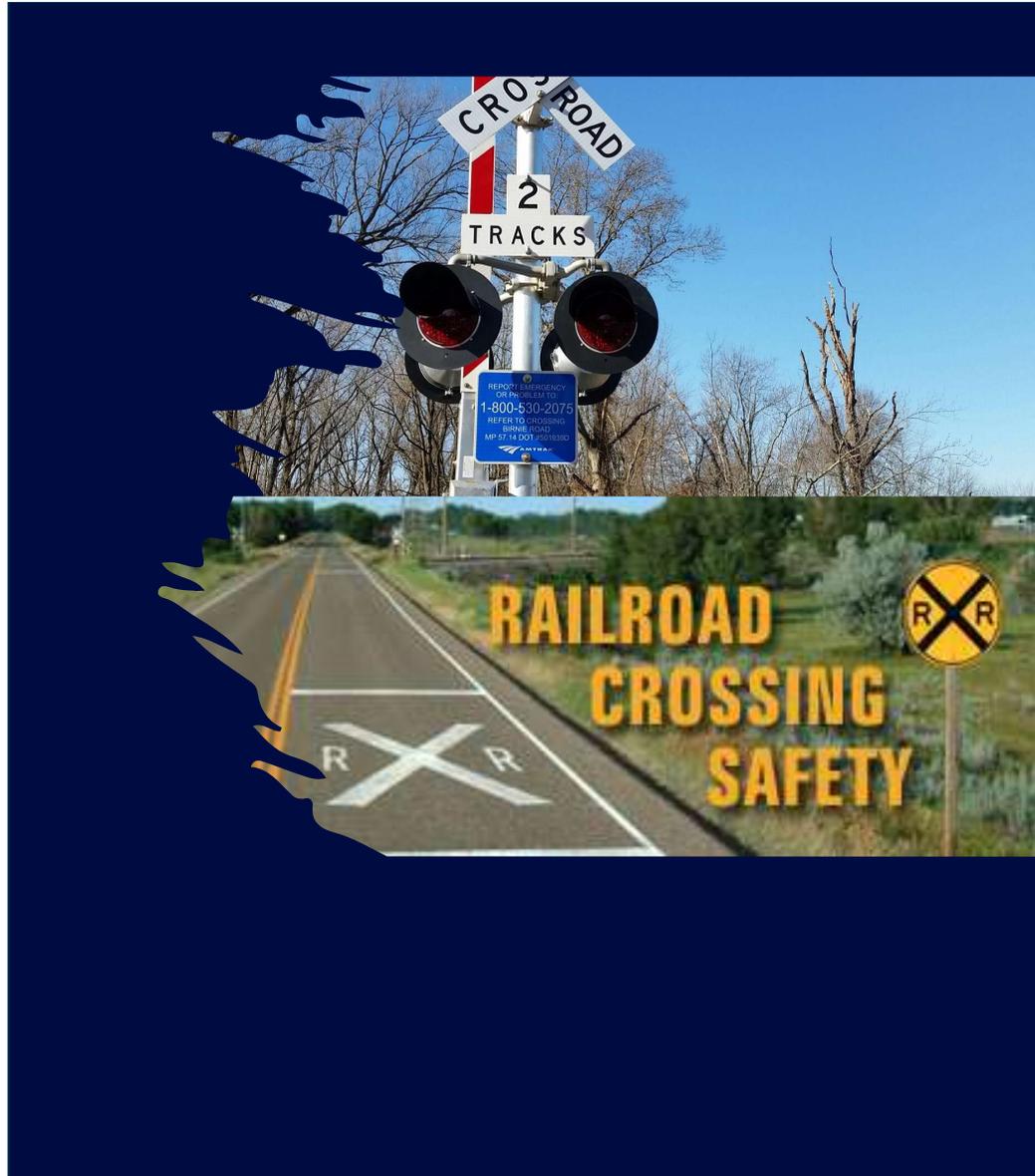
- (a) Approaching trains or any other vehicle operated upon the rails for the purpose of maintenance of railroads, including, but not limited to, all hi-rail vehicles and on-track maintenance machines; and
- (b) Signals indicating the approach of a train or other vehicle, or machine operated upon the rails.

The driver shall not proceed until the driver has determined that it is safe to proceed.

## Railroad Crossings

If the crossing has ANY of the following, the school bus MUST stop.

1. Gates
2. Cross buck signs
3. Railroad Signage
4. Red flashing railroad lights



## Railroad Crossings

**Q: What does it mean for a railroad crossing to be exempt?  
Does it mean a school bus does not have to stop?**

A: Yes, the bus is not required to stop, however, this is a big misunderstanding. Per the law, a train always has the right of way and vehicles must yield to the train. The exempt sign is placed on the cross bucks or light post only when the train is not running or very little train traffic is taking place at the crossing and the train no longer has the right of way, and must yield to vehicles on the roadway.

## RR grade Crossing Environments/Obstructed View Conditions

- Freight trains don't travel at fixed times, and schedules for passenger trains often change. Always expect a train at each highway-rail intersection at any time.
- All train tracks are private property. Never walk on tracks; it's illegal trespass and highly dangerous. It takes the average freight train traveling at 55 mph more than a mile—the length of 18 football fields—to stop. Trains cannot stop quickly enough to avoid a collision.
- The average locomotive weighs about 400,000 pounds or 200 tons; it can weigh up to 6,000 tons. This makes the weight ratio of a car to a train proportional to that of a soda can to a car. We all know what happens to a soda can hit by a car.
- Trains have the right of way 100% of the time over emergency vehicles, cars, the police and pedestrians

## Track Safety Basics – Clearance Around the Tracks

- A train can extend three feet or more beyond the steel rail, putting the safety zone for pedestrians well beyond the three-foot mark. If there are rails on the railroad ties, always assume the track is in use, even if there are weeds or the track looks unused.
- Trains can move in either direction at any time. Sometimes its cars are pushed by locomotives instead of being pulled, which is especially true in commuter and light rail passenger service.
- Today's trains are quieter than ever, producing no telltale "clackety-clack." Any approaching train is always closer, moving faster, than you think
- Remember to cross train tracks ONLY at designated pedestrian or roadway crossings and obey all warning signs and signals posted there.
- Stay alert around railroad tracks. Refrain from texting, headphones or other distractions that would prevent you from hearing an approaching train; never mix rails and recreation.

# Rail Signs and Signals

## Signs Before the Crossing

<https://oli.org/safety-near-trains/track-safety-basics/rail-signs-and-signals/signs-crossing>

## Markings on the Road

<https://oli.org/safety-near-trains/track-safety-basics/rail-signs-and-signals/markings-road>

## Signs at the Crossing

<https://oli.org/safety-near-trains/track-safety-basics/rail-signs-and-signals/signs-crossing-0>

## Devices at the Crossing

<https://oli.org/safety-near-trains/track-safety-basics/rail-signs-and-signals/devices-crossing>

## Signs along Railroad Property

<https://oli.org/safety-near-trains/track-safety-basics/rail-signs-and-signals/signs-along-railroad-property>

# Emergency Notification System

[https://youtu.be/e\\_aoLar4GIA](https://youtu.be/e_aoLar4GIA)

# Advanced Operating Practices Test

## Advanced Operating Practices Test – True or False

1. A hazard is any road condition or other road user (driver, bicyclist, pedestrian) that is a possible danger.
2. When approaching an authorized emergency vehicle stopped on the roadside or a work zone, you should proceed with caution by slowing and yielding the right-of-way by making a lane change into a lane not next to that of the authorized emergency vehicle or work zone if safety and traffic conditions permit.
3. The most common skid is when the front tires lose their traction through excessive braking.
4. ABS only activates when wheels are about to lock up.
5. When responding to a tire failure you should immediately brake hard and pull off the roadway.

# Advance Operating Practices Test

6. If a railroad crossing has an exempt sign posted, school buses are not required to stop.
7. A school bus driver is only required to open the service door when stopped at railroad crossings to look and listen for trains.
8. School buses can stop at railroad crossings when they are in the left lane of a two or more-lane road when traffic is heavy, and they have to make a left-hand turn within a short distance.
9. Before crossing the tracks, the bus operator shall verify that there is enough space after the tracks for the bus plus 15 feet ahead and behind the bus if it is necessary to stop after crossing the tracks.
10. The proper procedure to use when hydroplaning is
  1. Release the accelerator
  2. Push in the clutch
  3. DO NOT use the brakes to slow down

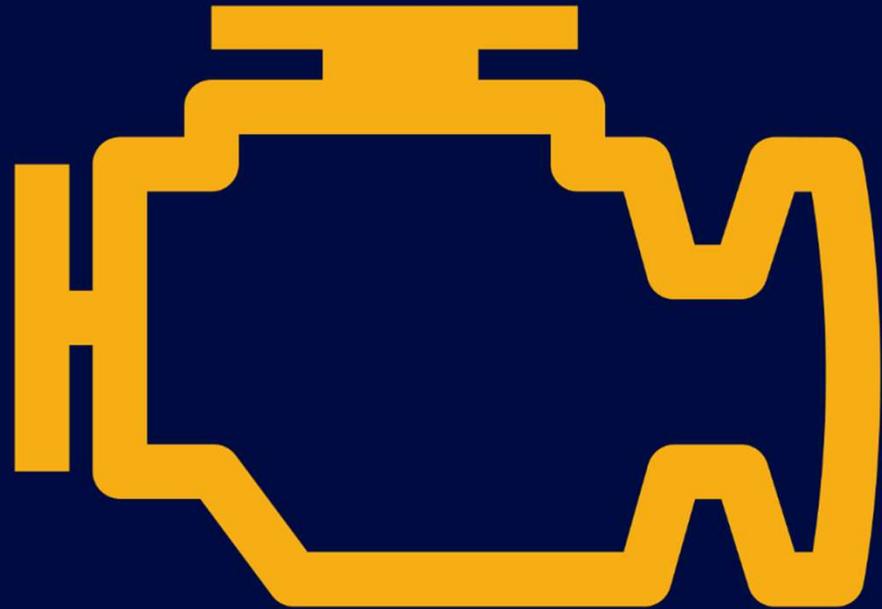
# Vehicle Systems and Reporting Malfunctions – B1.4

# Vehicle Systems and Reporting Malfunctions

Identification and Diagnosis of Malfunctions

Roadside Inspections

Maintenance



# Identification and Diagnosis of Malfunctions

## **Identification and Diagnosis of Malfunctions**

**School districts and service providers must ensure all school transportation vehicles are systematically inspected, maintained and repaired to ensure that school transportation vehicles are in safe and proper operating condition.**

**School districts and service providers shall have a system to document preventative maintenance, reported defects and repairs made to school transportation vehicles.**

**School districts and service providers shall maintain separate files for each school transportation vehicle with documentation of all annual inspections, all preventative maintenance and all reported damage, defects or deficiencies and the corresponding repair and maintenance performed.**

## Identification and Diagnosis of Malfunctions

**Any identified damage, defect or deficiency of a school transportation vehicle must be reported to the school district, charter school, or service provider which:**

- (a) Could affect the safety of operation of the school transportation vehicle, or**
- (b) Could result in a mechanical breakdown of the school transportation vehicle, or**
- (c) Results in noncompliance with Mississippi Minimum Standards Governing School Transportation Vehicles and/or manufacturer's specifications.**

## Identification and Diagnosis of Malfunctions

Documentation for reported defects must include all of the following:

- (a) The name of the school district, charter school or service provider.
- (b) Date and time the report was submitted.
- (c) All damage, defects or deficiencies of the school transportation vehicle.
- (d) The name of the individual who prepared the report.

## **Identification and Diagnosis of Malfunctions**

**Following a reported damage, defect or deficiency of a school transportation vehicle, school districts and service providers or a representative agent must repair the reported damage, defects or deficiencies, or document that no repair is necessary, ensuring that the vehicle is in safe and proper operating condition prior to transporting students.**

## Identification and Diagnosis of Malfunctions

School districts and service providers shall not transport students in a school transportation vehicle which is not in safe and proper operating condition. A school transportation vehicle shall be designated as "out-of-service" by a school district or service provider, or the MDE Division of Pupil Transportation.

**(a) Exemption - Any school transportation vehicle discovered to be in an unsafe condition while being operated on the highway, roadway or private road may be continued in operation only to the nearest place where repairs can safely be affected. Such operation shall be conducted only if it is less hazardous to the public than to permit the vehicle to remain on the highway, roadway or private road.**

## Why perform inspections?

**Safety is the most important reason you inspect your vehicle, safety for yourself, your passengers, and for other road users.**

**A vehicle defect found during an inspection could save you problems later. You could have a breakdown on the road that will cost time and dollars, or even worse, a crash caused by the defect. Federal and state laws require that drivers inspect their vehicles. Federal and state inspectors also may inspect your vehicles. If they judge the vehicle to be unsafe, they will put it "out of service" until it is fixed.**

# Inspections

## Pre-trip Inspection

A vehicle inspection will help you find problems that could cause a crash or breakdown.

During a trip for safety you should:

Watch gauges for signs of trouble.

Use your senses to check for problems (look, listen, smell, feel).

Check critical items when you stop:

Tires, wheels and rims

Brakes

Lights and reflectors

Trailer coupling devices

Cargo securement devices

Brake and electrical connections to trailer

# Inspections

## Post-trip Inspection and Report

You should do an after-trip inspection at the end of the trip, day, or tour of duty on each vehicle you operated. It may include filling out a vehicle condition report listing any problems you find. The inspection report helps a motor carrier know when the vehicle needs repairs.

**POST TRIPS SHALL BE DONE ON SCHOOL BUSES TO CHECK FOR SLEEPING STUDENTS!!! NO EXCEPTIONS!!**

## What to look for

Tire Problems

Wheel and Rim Problems

Bad brake drums or shoes

Steering system defects

Suspension system defects

Exhaust system defects

Emergency equipment

Defects

# Identification and Diagnosis of Malfunctions

## Major Vehicle Systems

Engine – the component that provides power for the vehicle

Engine Exhaust – collects the exhaust gases from the cylinders, removes harmful substances, reduces the level of noise and discharges the purified exhaust gases at a suitable point of the vehicle away from its occupants. Auxiliary Systems – after treatment

Brakes – a device for slowing or stopping a moving vehicle

Drive Train – connects the transmission to the drive axles

## Identification and Diagnosis of Malfunctions

**Suspension** – the system of springs and shock absorbers by which a vehicle is cushioned from road conditions.

**Coupling Systems**- the primary connection component in a towing system that attaches a trailer to your tow vehicle.

**Fifth Wheel Hitch** – (the part that lives in the bed of the pickup truck or on the top of the frame of a semi-truck that is a large, flat plate that has a shape similar to a horseshoe.

**Pintle Hitch** – a type of tow hitch that uses a ring-to-hook for a more secure mount that's ideal for rougher terrain.

**Ball Coupling** – a type of tow hitch that uses a ball coupling as a mount

# Roadside Inspections

## Roadside Inspections

Do I or Don't I

What to Expect

Out of Service Violations

Appendix G

Ramifications and Penalties

Company

Individual/Operator



## Do I or Don't I

**School Buses are not required to participate in roadside inspections or weigh stations.**

# What to expect at a roadside inspection

**You will be greeted by the inspector/officer**

**They will ask you to shut the truck off. You may even be asked to remove your keys from the ignition**

**Your wheels will be chocked.**

**They will ask you to release your brakes.**

**You will be asked for your logbook/log device and credentials, and they will ask basic questions.**

**The inspection (a level 1) will start, and you will be given more instructions.**

**It's important that you follow instructions. If you can't hear the inspector/officer just ask for them to repeat what they want. Failure to follow instructions can get someone injured and will cause the inspection to go poorly for you.**

**Be organized to speed things up**

## What to expect at a roadside inspection

Inspections have procedures that must be followed and there's no way to make that process shorter. But you can make it go smoother (and therefore faster) if you get yourself organized.

Here's a basic list:

Do you know your dashboard? Know how to work the many systems of your vehicle. It's amazing how many don't know where all of the controls are.

Make sure you know where your logbook is or have a plan for the inspector to look at your electronic log. Know how to access your e-logs and how to email them to the inspector.

Organize your permits. Recommend to drivers to go through they're permit book at least once a quarter and know what's in there. Rifling through permits alone adds 5 to 10 minutes (or more) alone onto the inspection time

# Common Violations

## Drivers:

Log is not current to your last change of duty status

14-hour rule violation

False logbook

Form and manner violations. This has to do with any of the required information or formatting of the log, whether its hand done or an elog.

## Vehicles:

Brakes out of adjustment and other brake problems

Tires

Load securement

Lighting; from brake lights to turn signals

Leaking oil

Damaged/obstructed windshield

No proof of annual inspection

## Violations and Penalties

Violation	Existing Penalty Value	New Penalty
Subpoena	\$1,125	\$1,195
Subpoena	\$11,256	\$11,956
OOS Order – Operating of CMV by driver	\$1,951	\$2,072
OOS Order – Requiring or permitting operation of CMV by driver	\$19,505	\$20,719
OOS – Operation by driver of CMV or intermodal equipment	\$1,951	\$2,072
OOS – Requiring or permitting operation of CMV or intermodal equipment	\$19,505	\$20,719
OOS Order – failure to return written certification of correction	\$975	\$1,036

## Violations and Penalties

Violation	Existing Penalty Value	New Penalty
OOS Order – failure to cease operations as ordered	\$975	\$1,036
OOS Order – Operating in violation of order	\$24,730	\$26,269
OOS Order – conduction operations during suspensions or revocation for failure to pay penalties	\$15,876	\$16,864
Recordkeeping – maximum penalty per day	\$1,307	\$1,388
Knowing falsification of records	\$13,072	\$13,885
Recordkeeping – max total penalty	\$13,072	\$13,885
Non-recordkeeping violations	\$15,876	\$16,864

## Results

**If you have received an out of service violation, be prepared to receive a ticket for that violation regardless of whether you own the truck or are a company driver.**

**If you receive a violation that you don't agree with, ask the inspector to explain it. If you still don't agree, get with a supervisor or company official and then contact the agency and speak with a supervisor.**

**No matter what, you should have a plan in place to deal with being parked. Make sure you understand your company's policy and have a list of phone numbers that you can call for a service truck.**

## **A few tips**

**Do your pre trip inspection.**

**Be organized.**

**Listen and follow instructions.**

**Be Polite!**

# Maintenance

# Maintenance

Preventive Maintenance

Draining Air Tanks

Lubrication (Greasing)

Simple Emergency Repairs

Flat Tire

Overheating

Fluid Leaks

Running out of fuel

Dead Battery

Tire Pressure/Wear/Damage

Topping off fluids

Power steering

Transmission

Engine Oil

Windshield Fluids

Coolant

# Tire Pressure/Wear/Damage

**Per the Mississippi Commercial Driver License Manual**

**Make sure your tires are properly inflated.**

**You must examine each tire on a motor vehicle at the beginning of each trip and each time the vehicle is parked.**

**The only acceptable way to check tire pressure is to use a tire pressure gauge.**

**Do not drive with a tire that is leaking or flat except to the nearest safe place to fix it. Remove any overheated tire.**

**Place it a safe distance from your vehicle. Don't drive until you correct the cause of the overheating. Remember to follow the rules about parking and attending placarded vehicles. They apply even when checking, repairing, or replacing tires.**

## **Topping off fluids**

**Power steering - Checks the dipstick and sees where the fluid level is relative to the refill mark or checks sight glass. Level must be above refill mark.**

**Transmission – May require that the engine be running. Let the mechanics check and fill as needed.**

**Engine Oil - Check oil level when engine is off.**

**Indicate where dipstick is located.**

**Check that the oil level is within safe operating range. Level must be above refill mark.**

## Topping off fluids

Windshield Fluids – Look at reservoir and fill to the indicated fill line.

Coolant - Looks at sight glass on radiator or coolant reservoir; adequate level will show in sight glass. If no sight glass is available, you must describe what s/he would look for after removing radiator cap.

## Preventive Maintenance – Performed by Mechanics/Technicians

**Draining Air Tanks** - Compressed air usually has some water and some compressor oil in it, which is bad for the air brake system. For example, the water can freeze in cold weather and cause brake failure. The water and oil tend to collect in the bottom of the air tank. Be sure that you drain the air tanks completely. Each air tank is equipped with a drain valve in the bottom.

There are two types:

Manually - operated by turning a quarter turn or by pulling a cable. You must drain the tanks yourself at the end of each day of driving.

Automatic-the water and oil are automatically expelled.

**Lubrication (Greasing)** – Seek out your local mechanic.

## Simple Emergency Repairs

**Flat Tire** – Note the location of the flat tire and contact your mechanic for instructions. Depending on the location of the flat tire, you may be able to continue driving the vehicle for a short distance. Contact your mechanic.

**Overheating** – Leave the engine running and turn on all heaters until the temperature gauge is within normal range.

**Fluid Leaks** – Note the color and location of where the fluids are leaking from and contact your mechanic for instructions.

## Simple Emergency Repairs

**Running out of fuel** – Note the type of fuel that is being used and contact your mechanic for instructions.

**Dead Battery** - Depending on the reason your battery is dead; you may just need a “jump”, or you may need to have the vehicle towed. Contact your mechanic.

# Vehicle Systems and Reporting Malfunctions Test

## **Vehicle Systems and Reporting Malfunctions Test – True or False**

- 1. School districts and service providers are not required to have a system to document preventative maintenance, reported defects and repairs made to school transportation vehicles.**
- 2. Any identified damage, defect or deficiency of a school transportation vehicle must be reported to the school district, charter school, or service provider.**
- 3. Documentation for reported defects do not have to include the date and time the report was submitted.**
- 4. School districts, charter schools, and service providers shall not transport students in a school transportation vehicle which is not in safe and proper operating condition.**
- 5. Federal and state laws require that drivers inspect their vehicles.**

## **Vehicle Systems and Reporting Malfunctions Test – True or False**

- 6. Safety is the most important reason you inspect your vehicle, safety for yourself and for other road users.**
- 7. The drivetrain connects the transmission to the drive axles.**
- 8. School buses are required to stop at weigh stations.**
- 9. The number one violation found on vehicles during roadside inspections is brakes out of adjustment and other brake problems.**
- 10. During a roadside inspection it's important that you follow instructions. If you can't hear the inspector/officer, just ask for them to repeat what they want. Failure to follow instructions can get someone injured and will cause the inspection to go poorly for you.**

# Non-Driving Activities

## B1.5

# Non-Driving Activities

Handling and Documenting Cargo

Environmental Compliance Issues

Hours of Service Requirements

Fatigue and Wellness Awareness

Post-Crash Procedures

External Communications

Whistleblower/Coercion

Trip Planning

Drugs/Alcohol

Medical Requirements

# Handling and Documenting Cargo

## Handling and Documenting Cargo

**Whether or not you load and secure the cargo yourself, you are responsible for:**

Inspecting your cargo.

Recognizing overloads and poorly balanced weight.

Knowing your cargo is properly secured and does not obscure your view ahead or to the sides.

Knowing your cargo does not restrict your access to emergency equipment.

## Handling and Documenting Cargo

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.

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.

## Handling and Documenting Cargo - Cargo Securement

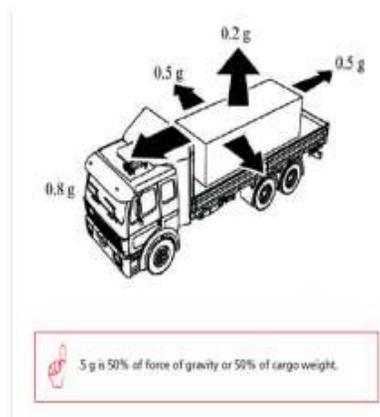
What is Cargo Securement?

FMCSA <https://www.fmcsa.dot.gov/regulations/cargo-securement/cargo-securement-rules>

North American Cargo Securement Standard –  
Commercial vehicles (including a combination of  
vehicles) that are operated on a highway and have a  
gross vehicle rating over 4,500 kg (10,000 lbs.)

## Handling and Documenting Cargo - Cargo Securement

### Cargo Securement



- Each cargo securement system must be able to withstand a minimum amount of force in each direction.
  - **Forward Force** = 80% of cargo weight when braking while driving straight ahead.
  - **Rearward Force** = 50% of cargo weight when accelerating, shifting gears while climbing a hill, or braking in reverse.
  - **Sideways Force** = 50% of cargo weight when turning, changing lanes, or braking while turning.
  - **Upward Force** = 20% of cargo weight when traveling over bumps in the road or cresting a hill.
- This requirement is satisfied when the cargo is "Fully Contained."

## Handling and Documenting Cargo - Cargo Securement

### Cargo Securement

- 3 Ways to Transport Cargo
  - Cargo is FULLY CONTAINED
  - Cargo is IMMOBILIZED by structures adequate strength or a combination of structure, blocking, and bracing to prevent shifting or tipping.
  - Cargo is SECURED by tie downs



# Handling and Documenting Cargo - Cargo Covering

There are two basic reasons for covering cargo:

- To protect people from spilled cargo.
  - Spill protection is a safety requirement in many states. Be familiar with the laws in the states you drive in.
- To protect the cargo from weather.

## Techniques for Safe and Efficient Loading/Unloading

If you load cargo wrong or do not secure it, it can be a danger to others and yourself. Loose cargo that falls off a vehicle can cause traffic problems and others could be hurt or killed. Loose cargo could hurt or kill you during a quick stop or crash. Your vehicle could be damaged by an overload. Steering could be affected by how a vehicle is loaded, making it more difficult to control the vehicle.



## Your Cargo

Whether or not you load and secure the cargo yourself, you are responsible for:

Inspecting your cargo.

Recognizing overloads and poorly balanced weight.

Knowing your cargo is properly secured and does not obscure your view ahead or to the sides.

Knowing your cargo does not restrict your access to emergency equipment.

If you intend to carry hazardous material that requires placards on your vehicle, you will also need to have a hazardous materials endorsement.



## Inspecting Cargo

After starting

Weight and Balance

Legal Weight Limits

Don't be top-heavy

Balance the Weight

[https://drive.google.com/file/d/15ORLuIKW9NRmbX731P6rQuc3y5A\\_Z9lh/view](https://drive.google.com/file/d/15ORLuIKW9NRmbX731P6rQuc3y5A_Z9lh/view)



## Seven ways to prevent cargo theft

Don't let your cargo's destination be known

Do an internal audit at the distribution center

Use trailer door padlocks

Watch the hot spots and hot times

Get rid of dishonest employees

Create partnerships and alliances

Park safely – Don't be an easy target



# **Cargo Documentation**

## **Bill of Lading**

**What is on a Bill of Lading?**

**Weight/Scale Tickets**

**Commodity Inspection Reports**

**Driver/Vehicle Pre-trip and mid-trip inspection Reports**

**Safety Inspection. Drivers of CMVs that are transporting cargo must inspect the cargo within the first 50 miles of a trip and every 150 miles or every three hours (whichever comes first) to ensure it is secured.**

# Environmental Compliance Issues

# Environmental Compliance Issues

Recognizing Environmental Hazards

City Requirements

State Requirements

Federal Requirements

## Environmental Hazards

Class	Class Name	Example
1	Explosives	Ammunition, Dynamite, Fireworks
2	Gases	Propane, Oxygen, Helium
3	Flammable	Gasoline, Acetone
4	Flammable Solids	Matches, Fuses
5	Oxidizers	Ammonium Nitrate, Hydrogen Peroxide
6	Poisons	Pesticides, Arsenic
7	Radioactive	Uranium, Plutonium
8	Corrosives	Hydrochloric Acid, Battery Fluid
9	Miscellaneous Hazardous Material	Materials Formaldehyde, Asbestos
10	ORM-D (Other Regulated Material-Domestic)	Hair Spray or Charcoal
11	Combustible Liquids	Fuel Oils, Lighter Fluid

## **Responses to Specific Hazards**

### **Class 1 (Explosives)**

**If your vehicle has a breakdown or accident while carrying explosives, warn others of the danger. Keep bystanders away.**

**Do not allow smoking or open fire near the vehicle. If there is a fire, warn every one of the danger of explosion.**

**Remove all explosives before separating vehicles involved in a collision. Place the explosives at least 200 feet from the vehicles and occupied buildings. Stay a safe distance away**

## Responses to Specific Hazards

### Class 2 (Compressed Gases)

If compressed gas is leaking from your vehicle, warn others of the danger. Only permit those involved in removing the hazard or wreckage to get close. You must notify the shipper if compressed gas is involved in any accident.

Unless you are fueling machinery used in road construction or maintenance, do not transfer a flammable compressed gas from one tank to another on any public roadway.

## **Responses to Specific Hazards**

### **Class 3 (Flammable Liquids)**

**If you are transporting a flammable liquid and have an accident or your vehicle breaks down, prevent bystanders from gathering. Warn people of the danger. Keep them from smoking.**

**Never transport a leaking cargo tank farther than needed to reach a safe place. Get off the roadway if you can do so safely.**

**Don't transfer flammable liquid from one vehicle to another on a public roadway except in an emergency.**

## Responses to Specific Hazards

### **Class 4 (Flammable Solids) and Class 5 (Oxidizing Materials)**

If a flammable solid or oxidizing material spills, warn others of the fire hazard.

Do not open smoldering packages of flammable solids. Remove them from the vehicle if you can safely do so. Also, remove unbroken packages if it will decrease the fire hazard.

# Responses to Specific Hazards

## **Class 6 (Poisonous Materials and Infectious Substances)**

**It is your job to protect yourself, other people, and property from harm. Remember that many products classed as poison are also flammable. If you think a Division 2.3 (Poison Gases) or Division 6.1 (Poison Materials) might be flammable, take the added precautions needed for flammable liquids or gases. Do not allow smoking, open flame, or welding. Warn others of the hazards of fire, of inhaling vapors, or coming in contact with the poison.**

**A vehicle involved in a leak of Division 2.3 (Poison Gases) or Division 6.1 (Poisons) must be checked for stray poison before being used again.**

**If a Division 6.2 (Infectious Substances) package is damaged in handling or transportation, you should immediately contact your supervisor. Packages that appear to be damaged or show signs of leakage should not be accepted**

## **Responses to Specific Hazards**

### **Class 7 (Radioactive Materials)**

**If radioactive material is involved in a leak or broken package, tell your dispatcher or supervisor as soon as possible. If there is a spill, or if an internal container might be damaged, do not touch or inhale the material.**

**Do not use the vehicle until it is cleaned and checked with a survey meter.**

# Responses to Specific Hazards

## Class 8 (Corrosive Materials)

**If corrosives spill or leak during transportation, be careful to avoid further damage or injury when handling the containers. Parts of the vehicle exposed to a corrosive liquid must be thoroughly washed with water. After unloading, wash out the interior as soon as possible before reloading.**

**If continuing to transport a leaking tank would be unsafe, get off the road. If safe to do so, contain any liquid leaking from the vehicle. Keep bystanders away from the liquid and its fumes. Do everything possible to prevent injury to bystanders.**

# National Response Center

**CHEMTREC (800) 424-9300**

**The Chemical Transportation Emergency Center (CHEMTREC) in Washington also has a 24-hour toll-free line.**

**CHEMTREC was created to provide emergency personnel with technical information about the physical properties of hazardous materials. The National Response Center and CHEMTREC are in close communication. If you call either one, they will tell the other about the problem when appropriate.**

**Do not leave radioactive yellow - II or yellow - III labeled packages near people, animals, or film.**

# National Response Center

**You or your employer must phone CHEMTREC when any of the following occur as a direct result of a hazardous materials incident:**

A person is killed

An injured person requires hospitalization. Estimated property damage exceeds \$50K.

The general public is evacuated for more than one hour

One or more major transportation arteries or facilities are closed for one hour or more.

Fire, breakage, spillage, or suspected radioactive contamination occurs.

Fire, breakage, spillage, or suspected radioactive contamination occurs involving shipment of infectious substances

The release of a marine pollutant in a quantity greater than 119 gallons or a liquid or 882 pounds for a solid.

# Hours of Service

## **(FMCSR) – Part 395 – Hours of Service and Applicable State and Local Laws**

### **395.5 Maximum driving time for passenger-carrying vehicles**

Subject to the exceptions and exemptions in §395.1:

(a) No motor carrier shall permit or require any driver used by it to drive a passenger-carrying commercial motor vehicle, nor shall any such driver drive a passenger-carrying commercial motor vehicle:

- (1) More than 10 hours following 8 consecutive hours off duty; or
- (2) For any period after having been on duty 15 hours following 8 consecutive hours off duty.

(b) No motor carrier shall permit or require a driver of a passenger-carrying commercial motor vehicle to drive, nor shall any driver drive a passenger-carrying commercial motor vehicle, regardless of the number of motor carriers using the driver's services, for any period after—

- (1) Having been on duty 60 hours in any 7 consecutive days if the employing motor carrier does not operate commercial motor vehicles every day of the week; or
- (2) Having been on duty 70 hours in any period of 8 consecutive days if the employing motor carrier operates commercial motor vehicles every day of the week.

**(FMCSR) – Part 395 – Hours of Service and Applicable State and Local Laws**

**[https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.395#se49.5.395\\_15](https://www.ecfr.gov/cgi-bin/retrieveECFR?gp=1&ty=HTML&h=L&mc=true&=PART&n=pt49.5.395#se49.5.395_15)**

# Hours of Service Requirements

## 10-Hour Driving Limit

May drive a maximum of 10 hours after 8 consecutive hours off duty.

## 15 – Hour Limit

May not drive after having been on duty for 15 hours, following 8 consecutive hours off duty. Off-duty time is not included in the 15-hour period.

# Hours of Service Requirements

## 60 – Hour Limit

May not drive having been on duty 60 hours in 7 consecutive days if the employing motor carrier does not operate commercial motor vehicles every day of the week.

## 70 – Hour Limit

May not drive having been on duty 70 hours in 8 consecutive days if the employing motor carrier operates commercial motor vehicles every day of the week

## Sleeper Berth Provision

Drivers using a sleeper berth must take at least 8 hours in the sleeper berth and may split the sleeper berth time into two periods provided neither is less than 2 hours. All sleeper berth pairings **MUST** add up to at least 8 hours.

# Driving Conditions

## Adverse Driving Conditions

Drivers are allowed to extend the 10-hour maximum driving time and 15-hour on-duty limit by up to 2 hours when adverse driving conditions are encountered

## Emergency Conditions

In case of an emergency, a driver may complete his/her run without being in violation of the provisions of the regulations in this part, if such run reasonable could have been completed absent the emergency.

## Short-Haul Exception

There are exceptions to the Record of Duty Status regulations for drivers that drive short distances:

150 air-mile radius driver exemption (see 49 CFR 395.1(e)(1))

150 air-mile radius driver exemption, for drivers of property-carrying CMVS who do not require a CDL and operate within a 150 air-mile radius of their normal work reporting location (see 49 CFR 395.1(e)(1)(ii))

Drivers must meet all of the qualifications specified in the regulations to use an exemption. If even one of the qualifications is not met, then all the stand hours of service rules apply.

## Record of Duty Status

Every driver needs to prepare a record of duty status for each 24-hour period.

Failure to record, complete, or retain the log, or knowingly falsifying logs or other reports, makes the driver and/or carrier liable to prosecution.

Logs must be kept current by showing each change in duty status.

The time zone used on a driver's daily log should be the time standard of that driver's home terminal.

See 49 CFR 395.8 for more information.

## Duty Status

Off duty or OFF

Sleeper berth or "SB" (only if a sleeper berth used).

Driving or "D"

On-duty not driving" or "ON"

For each change of duty status (e.g., the place of reporting for work, starting to drive, on-duty not driving and where released from work), the name of the city, town, or village, with State abbreviation, shall be recorded.

## Duty Status

If a change of duty status occurs at a location other than a city, town, or village, show one of the following:

- The highway number and nearest milepost followed by the name of the nearest city, town, or village and State abbreviation
- The highway number and the name of the service plaza followed by the name of the nearest city, town, or village and State abbreviation
- The highway numbers of the nearest two intersecting roadways followed by the name of the nearest city, town, or village and State abbreviation.

## Electronic Logging Devices (395 Subpart B)

When requested by an authorized safety official, a motor carrier must produce ELD records in an electronic format either at the time of the request or, if the motor carrier has multiple offices or terminals, within the time permitted under 49 CFR 390.29. Requirements for ELDs can be found here. <https://www.ecfr.gov/current/title-49/subtitle-B/chapter-III/subchapter-B/part-395/subpart-B>

A motor carrier must retain for 6 months, a back-up copy of the ELD records on a device separate from that on which the original data are stored.

## Electronic Logging Devices

Motor carriers and drivers exempt from the ELD rule may use alternate recording methods, including automatic onboard recording devices (AOBRDs), to record their hours-of-service data. Requirements of AOBRDs can be found in

<https://www.ecfr.gov/current/title-49/subtitle-B/chapter-III/subchapter-B/part-395/subpart-A/section-395.15>

## Paper Logs

A driver who is not subject to the ELD rule may still be subject to HOS regulation. In this case, the driver must submit the original paper log sheet to the employing carrier within 13 days after trip completion. The driver shall retain a copy of each ROD status for the previous seven consecutive days, which shall be in his/her possession and available for inspection while on duty. All hard copies of the driver's record of duty status must be signed by the driver.

When a motor carrier sues a driver initially or intermittently, the carrier must obtain from its driver a signed statement giving the total time on duty during the immediately preceding seven days, and the time at which the driver was last relieved of duty. Records of duty status must be maintained, with all supporting documents, for a minimum of 6 months.

<https://www.ecfr.gov/current/title-49/subtitle-B/chapter-III/subchapter-B/part-395/subpart-A/section-395.8>

## Drivers Declared Out-of-Service

A driver is not permitted to drive after being on duty in excess of the maximum periods permitted as detailed in 49 CFR 395.13. Motor carriers cannot require or permit a driver who has been declared out-of-service to operate a CMV until the driver may lawfully do so.

## Common Violations

False RODS

ELD – No record of duty status (ELD required)

Form and manner issues, such as: log does not include miles traveled/log does not include locations

ELD cannot transfer ELD records electronically

Driver failed to maintain supply of blank drivers records of duty status graph-grids

Driver's record of duty status not current

## Common Violations

Driver failed to manually add shipping document number

Driver failing to maintain ELD instruction sheet

Portable ELD not mounted in a fixed position and visible to driver

Driver failed to certify the accuracy of the information gathered by the ELD

## How to complete a Logbook Video

<https://www.youtube.com/watch?v=z75OXuhz-z4>

# Fatigue and Wellness

## Fatigue and Wellness Awareness

Fatigue is the result of physical or mental exertion that impairs performance

Driver fatigue may be due to a lack of adequate sleep, extended work hours, strenuous work or non-work activities, or a combination of other factors

The Large Truck Crash Causation Study (LTCCS) reported that 13 percent of commercial motor vehicle (CMV) drivers were considered to have been fatigued at the time of their crash.

## **Fatigue and Wellness Awareness – Driver Fatigue Tip #1**

**Get enough sleep before getting behind the wheel**

**Your body is naturally drowsy between the hours of 12 a.m.- 6 a.m. and 2 p.m. to 4 p.m.**

**Driver drowsiness impair a driver's response time to potential hazards, increasing the chances of being in a crash.**

**Pull over to a safe place and rest if you become drowsy**

# Fatigue and Wellness Awareness – Driver Fatigue

## Tip #2

### Maintain a Healthy Diet

**Skipping meals or eating at irregular times may lead to fatigue and/or food cravings**

**Going to bed with an empty stomach or immediately after a heavy meal can interfere with sleep**

**A light snack before bed may help you achieve more restful sleep**

**If you are not well-rested, induced fatigue may cause slow reaction time, reduced attention, memory lapses, lack of awareness, mood changes, and reduced judgment ability.**

A recent study conducted on the sleeping and driving habits of CMV drivers concluded that an unhealthy lifestyle, long working hours, and sleeping problems were the main causes of drivers falling asleep while driving.

# Fatigue and Wellness Awareness – Driver Fatigue

## Tip #3

### Take a nap

If possible, you should take a nap when feeling drowsy or less alert

Naps should last a minimum of 10 minutes, but ideally a nap should last up to 45 minutes

Allow at least 15 minutes after waking to fully recover before starting to drive.

Short naps are more effective at restoring energy levels than coffee.

Naps aimed at preventing drowsiness are generally more effective in maintaining a driver's performance than naps taken when a person is already drowsy.

# Fatigue and Wellness Awareness – Driver Fatigue

## Tip #4

### **Avoid Medication That May Induce Drowsiness**

Most drowsiness-inducing medications include a warning label indicating that you should not operate vehicles or machinery during use

Some of the most common medicines that may make you drowsy are: tranquilizers, sleeping pills, allergy medicines and cold medicines

In a recent study, 17 percent of CMV drivers were reported as having “over-the-counter drug use” at the time of a crash

Cold pills are one of the most common medicines that may make you drowsy

If you must drive with a cold, it is safer to suffer from the cold than drive under the effects of the medicine

# Fatigue and Wellness Awareness – Driver Fatigue

## Tip #5

### Recognize the Signals and Dangers of Drowsiness

Indicators of drowsiness include: frequent yawning, heavy eyes, and blurred vision

Research has indicated that being awake for 18 hours is comparable to having a blood alcohol concentration (BAC) of 0.08 percent, which is legally intoxicated and leaves you at equal risk for a crash

A 2005 study suggests that three out of every four CMV drivers report having experienced at least one type of driving error as a result of drowsiness

## **Fatigue and Wellness Awareness – Driver Fatigue Tip #5 continued**

On October 16, 2005 at 2 a.m., a 23-year-old CMV driver fell asleep behind the wheel, causing him to enter a ditch and eventually roll his truck over on both west-bound lanes of Interstate 94. Minutes later, a charter bus carrying a school band crashed into the truck killing 5 and injuring 29 others. As a result of the crash, the CMV driver was charged with 5 counts of homicide by negligent operation of a vehicle and 29 counts of reckless driving that caused great bodily harm. If convicted he could have faced nearly 90 years in prison.

# Fatigue and Wellness Awareness – Driver Fatigue

## Tip #6

### Do Not Rely on "Alertness Tricks" to Keep You Awake

Behaviors such as smoking, turning up the radio, drinking coffee, opening the window, and other "alertness tricks" are not real cures for drowsiness and may give you a false sense of security.

Excessive intake of caffeine can cause insomnia, headaches, irritability, and nervousness

It takes several minutes for caffeine to get into your system and deliver the energy boost you need, so if you are already tired when you first drink a caffeinated drink, it may not take effect as quickly as you might expect. In addition, if you are a regular caffeine user, the effect may be much smaller

Rolling the window down or turning the radio up may help you feel more alert for an instant, but these are not effective ways to maintain an acceptable level of alertness

# Post-Crash Procedures

# Post-Crash Procedures

## Don't Assume You're Okay

**Give yourself a once over and you may not see any noticeable cuts, breaks, or bruises. In fact, you feel perfectly fine. Don't assume you are out of the woods. The stress of the crash can produce endorphins and adrenaline that can mask pain in your body. It's possible to start to feel pain hours or even days after the accident.**

## Get Checked Out

**No matter if your injuries are mild or severe, it is best to get a medical examination as soon as you can after an accident. It is possible to feel that you are unharmed after a crash. However, your injuries may not develop for a few days.**

## **Notifying Authorities**

**If you are able, use your radio to notify dispatch that you have been involved in an accident. Important information to give them is:**

**Location**

**Quick description of incident (single vehicle, multiple vehicle, etc.)**

**If you believe there are injuries**

**How many students are on your bus**

**If you are evacuating the vehicle**

## Post-Crash Procedures

By-standers are going to stop and want to assist you. However, it is very important that you do not permit them to move any student that could potentially be injured. Do not permit any student to leave the bus until they have received medical attention.

Depending on the circumstances, you must determine if you can safely exit and/or if others can safely enter the bus (power lines down, etc.)

If there are pedestrians smoking, ask hem to leave the immediate area.

Do not permit anyone to move anything at the scene until law enforcement arrives.

## Emergency Medical Assistance

- **If you are able, do a quick assessment of the injuries on your bus. Do not move any students that appear to be injured. Also, remember often times the students that are silent are the ones that could be suffering from more severe injuries.**
- **Only permit official medical personnel to treat passengers.**
- **Update dispatch if you have confirmed injuries, and how many – do not give specific names over the radio.**

## **Avoiding Subsequent Crashes/Triangles Flashers, etc.**

**The best way you can prevent subsequent crashes is to make your accident scene visible to other vehicle operators.**

# How to use a fire extinguisher

<https://youtu.be/IUojO1HvC8c>

# Post-Crash Procedures

## Post-Accident Drug and Alcohol Testing

Type of Accident	Citation issued to the CMV Driver	Test must be performed by Employer
Human fatality	Yes	Yes
	No	Yes
Bodily injury with immediate medical treatment away from the scene.	Yes	Yes
	No	No
Disabling damage to any motor vehicle requiring tow away	Yes	Yes
	No	No

## **Post-Crash Procedures**

**Valid Driver license – with proper endorsements**

**Proof of current DOT physical**

**Pre-Trip Inspection documentation**

**Hours of Service**

**ELD (if applicable)**

**Registration**

**Proof of Insurance**

# External Communications

# External Communications

## Interpersonal communication with enforcement officials

When you're talking with law enforcement, it can be helpful to know what to expect and to understand their process.

- When you discuss what happened to you with law enforcement, it should happen in quiet area away from others. If you feel that the situation is too public, ask to be relocated to a more private space.
- When you first report, the process may take a few hours. This is normal. Additional interviews with law enforcement may last a while as well, and they may occur over an extended period of time.
- Use whatever terms or phrases make you most comfortable. It can help to remember that law enforcement officers are professionals, just like doctors and teachers, and are prepared to listen to what happened.

## External Communications

- Law enforcement may ask the same questions several times or several different ways. It's not because they don't trust you—after a trauma it can be difficult to describe the details. Repeating a question or asking in a different way may prompt you to remember something you forgot the first time.
- It can be helpful and comforting to have support when communicating with law enforcement.
- If you want a family member, friend, or partner to be present, you can have that too. Be aware that family or friends who are present when you speak with law enforcement may be called as witnesses if the case goes to trial. If the officer asks to speak with you privately, understand it's likely to help you feel comfortable disclosing information that may feel private or sensitive.

**Violating Federal and State regulation on enforcement official records**

**Mississippi Code 97-9-79 False Information to Law Enforcement**

**Mississippi Code 97-7-10 Fraudulent Statements and Representations**

**Mississippi Code 37-41-23 Reports and records required**

**Mississippi Code 31-41-25 False reports, lists or records, misdemeanor, criminal and civil penalties**

# Whistleblower/Coercion

## Whistleblower/Coercion

File a Whistleblower Complaint with the Occupational Safety and Health Administration (OSHA)

Drivers have the right to question the safety practices of their employer without the risk of losing their job or being subject to retaliation for stating a safety concern. The Occupational Safety and Health Administration's whistleblower statutes protect drivers from retaliation.

<https://www.whistleblowers.gov/>

# Whistleblower/Coercion

## Coercion

**Coercion occurs when a motor carrier, shipper, receiver, or transportation intermediary threatens to withhold work from, take employment action against, or punish a driver for refusing to operate in violation of certain provisions of the Federal Motor Carrier Safety Regulations (FMCSRs), Hazardous Materials Regulations (HMRs) and the Federal Motor Carrier Commercial Regulations (FMCCRs). Coercion may be found to have taken place even if a violation has not occurred. An example of coercion is when a motor carrier terminates a driver for refusing to accept a load that would require the driver to violate the hours-of-service requirements.**

# Coercion

The following must have occurred for coercion to have existed:

**A motor carrier, shipper, receiver, or transportation intermediary request a driver to perform a task that would result in the driver violating certain provisions of the FMCSRs, HMRs, or the FMCCRs;**

**The driver informs the motor carrier, shipper, receiver, or transportation intermediary of the violation that would occur if the task is performed, such as driving over the hours of service limits or creating unsafe driving conditions; and**

**The motor carrier shipper, receiver, or transportation intermediary make a threat or take action against the driver's employment or work opportunities to get the driver to take the load despite the regulatory violation that would occur.**

## Coercion

Coercion complaints must be filed within 90 days of the alleged coercion action.

When filing your complaint, please include as much supporting information as you have, such as:

Text messages or email exchanges between parties showing coercion attempts by a motor carrier, shipper, receiver, or transportation intermediary, as well as your responses; and

Names of anyone who may have witnessed the coercion attempt.

All coercion complaints must be in writing and can be mailed to the Division Office located in the state where the complainant is employed or filed with the National Consumer Complaint Database.

# Trip Planning

# **Trip Planning**

## **Safest Route**

**Rest Stops Heavy traffic areas**

**Railroad-highway grades safe clearance and ground clearance**

**Need for permits**

**Vehicle size and weight limitations**

**Restricted routes**

**Pros and Cons of GPS**

**Fuel Efficient Routes**

## Safest Route

- The State of Mississippi has many diverse geographical challenges, from the plains to hills, rapidly changing weather conditions, wildlife, etc. Therefore, it is absolutely critical that the school transportation vehicle operator be prepared for anything that could potentially take place. Make sure you consult with your supervisor to ensure that you have all the details of the trip and to ask questions.
- Technology today can give you excellent directions and maps.
- Determine the route you plan to take, considering road conditions, tolls (who is expected to pay for the toll), traffic congestion, weather, hazards, tunnels, etc. Have an alternate route in mind just in case you need to use it.

## Rest Stops and Heavy Traffic Areas

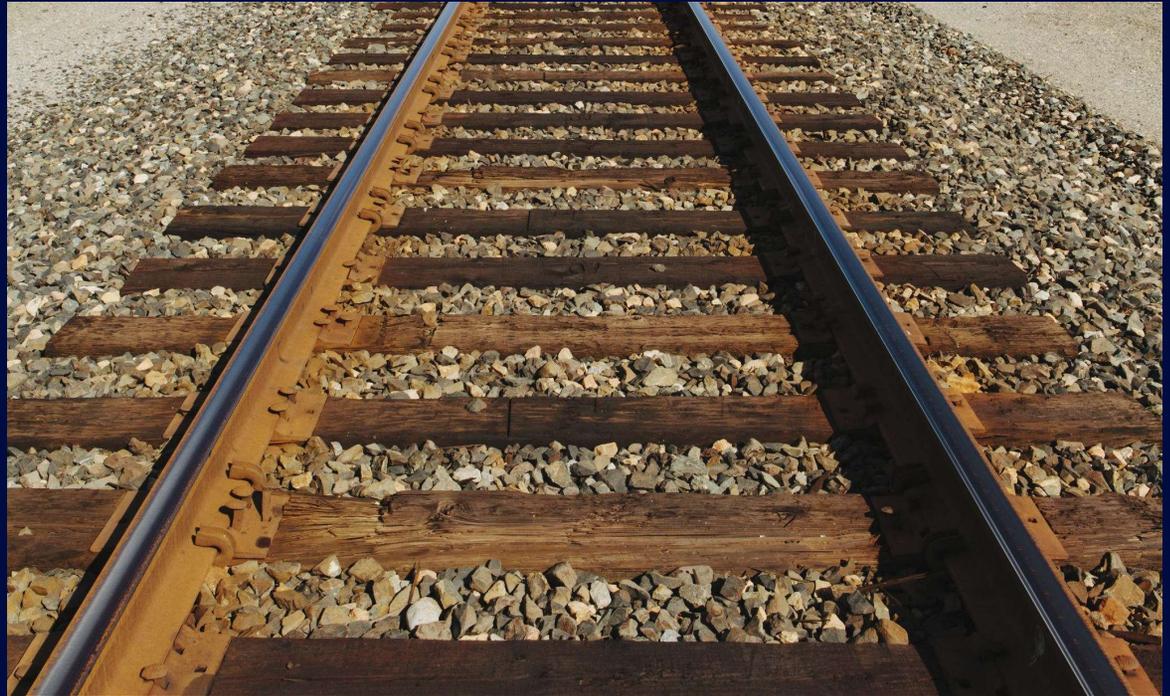
- For your comfort and the comfort of your passengers, it is suggested that there should be no more than 90 minutes between stops.
- If you have multiple passengers, you will want to plan your rest stops carefully. Stop in a location where there are multiple restrooms available. Stopping at a store that only offers two restrooms will take significant time and cause several other difficulties with passengers in the store, shopping and bringing objects back into the vehicle, keeping track of all passengers, etc.
- Heavy traffic areas should be avoided when transporting passengers. Always try to unload passengers on a sidewalk or area where they do not have to cross any other vehicle traffic.

## **Railroad-highway grades safe clearance and ground clearance**

FMCSA and PHMSA amend the Federal Motor Carrier Safety Regulations (FMCSRs) and Hazardous Materials Regulations (HMRs), respectively, to prohibit a driver of a commercial motor vehicle or of a motor vehicle transporting certain hazardous materials or certain agents or toxins (hereafter collectively referenced as "regulated motor vehicle") from entering onto a highway-rail grade crossing unless there is sufficient space to drive completely through the grade crossing without stopping. This action is in response to section 112 of the Hazardous Materials Transportation Authorization Act of 1994, as amended by section 32509 of the Moving Ahead for Progress in the 21st Century Act (MAP-21). The intent of this rulemaking is to reduce highway-rail grade crossing crashes.

## Railroad-highway grades safe clearance and ground clearance

- If you are operating a vehicle with a long wheelbase, a low ground clearance, or that requires a special weights and dimensions permit, it is especially important that you and your motor carrier take special precautions to ensure that your rig and its cargo can safely traverse highway-rail grade crossings.
- The Specialized Carriers and Rigging Association, a transportation industry group, worked in cooperation with the Federal Highway Administration and the Commercial Vehicle Safety Alliance to develop a handbook for safe transportation of over dimension loads (also available in printable PDF format).



## Need for permits/vehicle size and weight limitations

[https://mdot.ms.gov/portal/over-dimensional\\_permits](https://mdot.ms.gov/portal/over-dimensional_permits)

## Disadvantages and Advantages of GPS

Disadvantages	Advantages
Inaccuracy	Available anywhere
Lack of Local Knowledge	No cost
Driving Distraction	Can be guided vocally and/or visually
Signal or Battery Failure	Maintained and upgraded by US Department of Defense
Privacy Issues and Crime	

## Fuel Efficient Routes

- Intelligent Vehicle Technologies provide fuel consumption reductions by taking advantage of knowledge of the vehicle's location, terrain in the vicinity of the vehicle, congestion, location of leading vehicles, historical traffic data, and so forth, and altering the speed of the vehicle, the route the vehicle travels.
- Less stop and go situations reduce fuel consumption.
- Less idling.

# Drugs and Alcohol

# Drugs and Alcohol

Controlled Substances

Prescription Drugs

Alcohol testing



# Controlled Substances

- Marijuana (THC)
- Cocaine
- Amphetamines
  - Amphetamine
  - Methamphetamine
  - MDMA - Methylenedioxyamphetamine, commonly known as ecstasy, E, or molly
  - MDA - -Methylenedioxyamphetamine, commonly known as sass)
  - MDEA - Methylenedioxy-N-ethylamphetamine is an empathogenic psychoactive drug. MDEA is a substituted amphetamine and a substituted methylenedioxyphenethylamine.
- Opiates
  - Codeine
  - Morphine
  - 6-AM (heroin)
  - Phencyclidine (PCP)

- It is important for all employers and safety-sensitive employees to know:
- The Department of Transportation requires testing for marijuana and not CBD.
- **The labeling of many CBD products may be misleading because the products could contain higher levels of THC than what the product label states.** The Food and Drug Administration (FDA) does not currently certify the levels of THC in CBD products, so there is no Federal oversight to ensure that the labels are accurate. The FDA has cautioned the public that: “Consumers should beware purchasing and using any [CBD] products.” The FDA has stated: “It is currently illegal to market CBD by adding it to a food or labeling it as a dietary supplement.”\* Also, the FDA has issued several warning letters to companies because their products contained more CBD than indicated on the product label. \*\*[i]
- The Department of Transportation’s Drug and Alcohol Testing Regulation, Part 40, does not authorize the use of Schedule I drugs, including marijuana, for any reason. **Furthermore, CBD use is not a legitimate medical explanation for a laboratory-confirmed marijuana positive result.** Therefore, Medical Review Officers will verify a drug test confirmed at the appropriate cutoffs as positive, even if an employee claims they only used a CBD product.

## **CBD Products**

**It remains unacceptable for any safety-sensitive employee subject to the Department of Transportation's drug testing regulations to use marijuana. Since the use of CBD products could lead to a positive drug test result, Department of Transportation-regulated safety-sensitive employees should exercise caution when considering whether to use CBD products.**

# Medical Marijuana

## Per FMCSA

**We want to make it perfectly clear that the DOJ guidelines will have no bearing on the Department of Transportation’s regulated drug testing program. We will not change our regulated drug testing program based upon these guidelines to Federal prosecutors.**

**The Department of Transportation’s Drug and Alcohol Testing Regulation – 49 CFR Part 40, at 40.151(e) – does not authorize “medical marijuana” under a state law to be a valid medical explanation for a transportation employee’s positive drug test result.**

# Prescription Drugs

- **What medications disqualify a CMV driver?**
- **A driver cannot take a controlled substance or prescription medication without a prescription from a licensed practitioner.**
- **If a driver uses a drug identified in 21 CFR 1308.11 (391.42(b)(12)) or any other substance such as amphetamine, a narcotic, or any other habit-forming drug, The driver is medically unqualified.**
- **There is an exception: the prescribing doctor can write that the driver is safe to be a commercial driver while taking the medication. In this case, the Medical Examiner may, but does not have to certify the driver.**
- **Any anti-seizure medication used for the prevention of seizures is disqualifying.**

## **Prescription Drugs**

**The Medical Examiner has two ways to determine if any medication a driver uses will adversely affect safe operation of a CMV:**

- 1. Review each medication - prescription, non-prescription and supplement**
- 2. Request a letter from the prescribing doctor**

## Alcohol Testing

**The DOT has established 0.02% BAC (Blood Alcohol Level) as the level which is positive for covered employees. Covered employees who engage in prohibited alcohol use must be immediately removed from safety-sensitive functions. A CDL-qualified driver who tests at 0.02% BAC or higher must be removed from service for 24 hours.**

# Medical Requirements

**Medical Certification  
Responsibilities  
General Qualifications  
Disqualifications  
49 CFR 391, Subpart B and E**

## Medical Certification

A Department of Transportation (DOT) physical examination must be conducted by a licensed "medical examiner" listed on the Federal Motor Carrier Safety Administration (FMCSA) National Registry. The term includes, but is not limited to, doctors of medicine (MD), doctors of osteopathy (DO), physician assistants (PA), advanced practice nurses (APN), and doctors of chiropractic (DC).

A DOT physical exam is valid for up to 24 months. The medical examiner may also issue a medical examiner's certificate for less than 24 months when it is desirable to monitor a condition, such as high blood pressure.

### Recordkeeping

If the medical examiner finds that the person he/she examined is physically qualified to drive a commercial motor vehicle (CMV), the medical examiner will furnish one copy of the results to the person who was examined and complete a Medical Examiner's Certificate.

<https://www.fmcsa.dot.gov/sites/fmcsa.dot.gov/files/2021-08/MCSA-5875%202-27-21%20508.pdf>

# Responsibilities

## Mississippi CDL Requirements

- All Mississippi CDL holders are required to be medically qualified to drive a CMV by the means of a valid DOT medical certificate or medical waiver.
- The regulations require that your motor vehicle status be "Medically Certified" to drive a CMV. This status will be controlled by the expiration date of your DOT Medical Certificate that you submit to the DMV. If your DOT Medical Certificate is expired, then you will have a Medically Certified status of "Not Certified" and you cannot legally drive a CMV.
- On the first day of your DOT Medical Certificate expiring, you are no longer qualified to operate a CDL type CMV.
- On the 10th day of the DMV not receiving an updated DOT Medical Certificate, the DMV will change your medical certification status to "Not Certified" and the DMV will also mail out a letter to you explaining that you cannot operate a CDL type CMV and what you need to do to comply.
- On the 30th day of the DMV not receiving an updated DOT Medical Certificate, the DMV will cancel your entire license and at this point you have no driving privileges.

## Disqualifications

An individual may apply for an exemption from the seizure, vision, and/or hearing standard, section 391.41(b)(8), 391.41(b)(11), or 391.41(b)(10) of the regulation, by utilizing these programs. If you do not currently meet the seizure, vision, and/or hearing standard and are unable to obtain a non-restricted medical card, you may be an eligible candidate.

Please note that all exemption programs are for drivers who intend to operate commercial motor vehicles (CMVs) in interstate commerce. FMCSA does not have statutory authority to grant waivers/exemptions to drivers from states' intrastate requirements. Therefore, the FMCSA waivers/exemptions do not permit regulatory relief for drivers who plan to limit their operations to intrastate commerce.

# Mississippi Waivers

## Refer to Rule 31-1-10.5-Diabetic and Eye Waivers for CDL Drivers

Anyone coming in to renew or obtain a first time commercial license are to be asked if they have missing/false limbs or joints and if they are a diabetic. Every applicant must sign a CDL Certification form. The following procedures are to be adhered to:

If renewing and they are a diabetic, they must be given the Certification of Diabetic Form (DE-16A). They will not be able to renew until this form is filled out by their physician.

a. If they are Injection (shot) dependent:

- i. They must have held a valid commercial license for a period of three (3) years to apply for an over the road waiver through the Diabetes Exemption Program at 400 7 Street, SW Washington, DC 20590, 202-366-2987. They will have to drop down to a regular license until this waiver is approved; or
- ii. The applicant can apply for an Intra State Insulin Dependent Commercial License through the Mississippi Department of Public Safety. They can do so by contacting the CDL Help Desk to have an application mailed to them. The applicant cannot be self-employed or un-employed to qualify.

# Mississippi Waivers

b. If they are Oral (pill) dependent:

You must put a "D" in the medical field on their license and send the Certification of Diabetic Form in with your paperwork to the CDL Department to have it microfilmed.

If they are obtaining a first-time commercial license, they will have to have the Certification of Diabetic Form (DE-16A) filled out before testing begins:

**a.** If they are Injection (shot) dependent:

**i.** They can apply for an Intra State Insulin Dependent Commercial License. They will not be eligible for a waiver through the Diabetes Exemption Program.

**b.** If they are Oral (pill) dependent:

**i.** You will follow the same procedures outlined in section 1

## Mississippi Waivers

If a person is renewing and missing limbs/joints or has false limbs, they will not be able to renew their license. They will need to contact the Atlanta, GA office at 404-562-3620 to apply for a medical waiver. They will have to drop down to a regular or class D license.

If a person renewing or applying for first time commercial license cannot meet the eye requirements, they must contact the Eye Waiver Exemption Program in Washington, DC at 202-366-2987 to apply for an eye waiver. They will also have to keep a regular or class D license until the waiver is approved

# 49 CFR 391, Subpart B

## **General qualifications of drivers**

<https://www.law.cornell.edu/cfr/text/49/391.11>

## **Responsibilities of drivers**

<https://www.law.cornell.edu/cfr/text/49/391.13>

## **Disqualification of drivers**

<https://www.law.cornell.edu/cfr/text/49/391.15>

# Non-Driving Activities Test

## Non-Driving Activities Test – Ture of False

1. Poor weight balance will not have any effect on how your vehicle handles.
2. The three ways to transport cargo are Fully Contained, Immobilized, and Fully Secured.
3. Passenger-carrying drivers may drive a maximum of 10 hours after 8 consecutive hours off duty.
4. On-duty time includes all time worked for any and all employers, including all driving and non-driving duties.
5. Poisonous Materials and Infectious Substances are not one of the eight classes of environmental hazards.

## Non-Driving Activities Test – True or False

6. Theft prevention means not making the equipment and cargo easy targets.
7. An example of coercion is when a motor carrier terminates a driver for refusing to accept a load that would require the driver to violate the hours-of-service requirements.
8. Drivers of CMV's that are transporting cargo must inspect the cargo within the first 50 miles of a trip and every 150 miles or every three hours (whichever comes first) to ensure it is secured.
9. You should not report suspicious activities to authorities and alert drivers in the area.
10. Drivers have the right to question the safety practices of their employer without the risk of losing their job or being subject to retaliation for stating a safety concern.

# CDL Class "B" Theory

