

Saskatchewan Professional Driver's Handbook – 2022



A guide for the professional driver

You can view this handbook online at www.sgi.sk.ca/pro-driver. There, you can use the Tools function to have the handbook translated* into a language of your choice.

This handbook is accurate as of May 2022. Please consult the online version for the most up-to-date information. This handbook is a study guide for both beginner and experienced drivers. It contains information about driver's licence qualifications, how to be a safe driver and many other important subjects that will assist you in passing your tests. If you have been driving for many years, it will remind you of your responsibilities as a professional driver and provide you with new laws and changes to previous legislation.

References are made to portions of Saskatchewan's motor vehicle laws, but it is not a complete digest of the various acts and regulations, and may not be used as the basis for any legal claim or action. Remember that laws, policies and procedures change from time to time. It is your responsibility to keep up to date with these changes.

The professional driver should consult the official statutes for the interpretation and applications of the law.

Copies of various acts and regulations can, for a fee, be obtained from:

Publications Saskatchewan
Walter Scott Building
B19-3085 Albert St.
Regina, SK
S4S 0B1
Phone: 306-787-6894

They are also available on the Publications Saskatchewan website at www.publications.gov.sk.ca/freelaw.

Please remember that if you're thinking of becoming a truck driver, you must now pre-qualify in order to obtain commercial driving privileges. For more information, please see page 14.

* Google Translate is a third-party tool, and is not owned or administered by SGI. SGI is not responsible for any errors or omissions as a result of the translation. In case of a difference in interpretation between the translated version and the laws and regulations governing Saskatchewan drivers and vehicles, the laws and regulations prevail.

Before heading out on the road – read this!

Potential drivers should be aware that specific circumstances such as your personal driving record or a medical condition may prevent you from securing employment in the transportation industry even if you meet all requirements.

In extreme cases, you may be denied insurance or your employer will have to pay substantial surcharges to employ you.

Before incurring the expense of medical, written and road tests as well as possible training, you should take the following self check.

Self check

- Yes or No Do you have more than three moving traffic violations/at-fault collisions combined in the three years preceding the date of hire?

- Yes or No Do you have a Criminal Code conviction in the three years preceding the date of hire?

If you answered “yes” to one or both questions, SGI recommends that you check with your potential employer and/or insurance broker about how your record will affect your ability to gain employment.

- Yes or No Has your medical report been completed and approved by SGI?

- Yes or No Are you at least 18 years old and not a Novice driver in the Graduated Driver Licensing (GDL) program?

If you answered “no” to either of these questions, you will be unable to start testing for a higher class of licence.

Note: If you have a Criminal Code conviction or certain medical condition(s), you may not be able to operate a commercial vehicle in the United States, making it that much more difficult to secure employment.

Table of contents

1. Saskatchewan's classified driver's licence program	1
Classified licence system	2
Licence Class 1 – minimum age: 18.	2
Mandatory Entry-Level Training	2
Licence Class 2 – minimum age: 18.	3
Licence Class 3 – minimum age: 18.	3
Licence Class 4 – minimum age: 18.	4
Criminal Record Check.	4
Licence Class 5 – minimum age: 16.	5
Licence Class 7 – minimum age: 16.	6
Farm-plated vehicles	7
Endorsements.	7
Air brakes "A"	7
G Endorsement – Heavy trailer	8
School bus "S".	9
Learners "1", "2", "3", "4"	9
Examinations.	10
Knowledge exams	11
Vision test	11
Road tests.	12
Restrictions.	13
Trip Inspections	13
Class 1-4 medical standards	14
Canada/United States medical reciprocity agreement	14
Operating Class 5 vehicles in the United States.	15
2. Good driving habits	16
Attitude towards driving.	16
Emotional attitude.	16
Driver condition.	16
Drinking, drugs and driving	19
Night vision	20
Speed	20
Following distance	21
The tailgater.	23
Intersections	24
Railway crossings.	24
Danger zones	25

Braking	27
Antilock brake system (ABS)	29
Passing and being passed	31
Alleys, lanes and side roads	33
Curves and jackknifing	33
Sharing the road	34
Getting started	35
Visibility and safety	36
Parking	37
Backing	38
Tires	43
Carbon monoxide poisoning	44
Fire	45
A growing priority: fuel efficiency	47
3. Vehicle weights and dimensions	51
Interpretation and application of regulations	51
Vehicle dimensions	58
Farm equipment	61
Weight	61
4. Vehicle condition	63
Periodic Motor Vehicle Inspection (PMVI) Program	63
Other types of inspections	63
Trip inspection standards	64
Driver's responsibility	66
5. A systematic trip inspection for vehicle roadworthiness	67
Class 1 – Tractor/trailer combination unit trip inspection	68
Class 2 – Bus trip inspection	74
Class 3 – Truck single unit trip inspection	78
Class 4 – Bus, ambulance, taxi trip inspection	83
G Endorsement – Heavy trailer trip inspection	88
S Endorsement – School bus trip inspection	94
En route Inspections	99
Post-trip inspections	99
Lighting requirements	100
6. Information for Class 1 and Class 3 power units, semi trailers and trucks	101
Steering forward	101
Steering backward	108

U-turn	108
Highway “turn-about” (three-point turn)	108
Highway “turn-about” (two-point turn)	109
About loads and loading	111
Securing loads	114
Load projections	115
Special cargos	115
Prohibited shipments	116
Bills of lading	116
Coupling a tractor-trailer with air ride suspension	117
Uncoupling a tractor-trailer with air ride suspension	119
“Train” or “pup-train”	120
Connecting vehicles	121
7. Information for Class 2 and Class 4 – passenger carrying vehicles	122
Emergency vehicles	127
Recovery vehicles (tow trucks)	128
Taxis	129
8. School buses	131
Becoming a school bus driver	131
School bus inspections and maintenance	131
School bus driver regulations	132
Railway crossings	134
Driver to notify employer of certain matters	134
Driving techniques	135
9. Winter driving	141
Essential items to inspect	141
The six primary hazards of winter driving	142
Winter driving tips for the professional driver	145
10. Transporting dangerous goods	147
Safe transport of goods	147
Classifying dangerous goods	148
Safety marks	149
Dangerous goods routes	149
Documentation	149
11. Appendix A	151
Sample Trip Inspection Report	151

1. Saskatchewan's classified driver's licence program

The classified driver's licence program establishes minimum standards of skill, knowledge, physical and mental fitness for the operation of each class of vehicle. You must be licensed according to the class of vehicle you will be operating.

When you apply for a Saskatchewan driver's licence, you must complete the prescribed examinations if:

- You have never been licensed as a driver; or
- You have not held a Saskatchewan driver's licence of the class for which you are applying within five years of the date of application; or
- You hold a current licence from any state or country which is not honoured in Saskatchewan; or
- You wish to change to a higher class of licence or to obtain an endorsement; or
- Your licence is not current and valid.

You will be considered a novice driver if you hold a:

- Class 7 driver's licence; or
- Class 5 driver's licence with a Novice 1 or Novice 2 restriction noted on the driver's licence; or
- Licence issued by another jurisdiction that is equivalent to a driver's licence described in either clause above.

Novice drivers may not obtain a Class 1, 2, 3, 4 or school bus endorsement or a heavy trailer endorsement.

Note: Not being paid to drive or not owning the vehicle you are driving **does not exempt** you from holding the appropriate class of driver's licence for the class of vehicle you will be operating.

Classified licence system

Licence Class 1 – minimum age: 18

Permits the licence holder to operate

- Class 1 vehicles – that is, power units and semi trailers, and trucks which have a trailer(s) or vehicle(s) in tow where the gross weight of the towed unit(s) exceeds 4,600 kg.
- Motor vehicles in classes 2, 3, 4 and 5.



Does not permit the licence holder to operate

- Vehicles with air brakes, motorcycles or school buses without an appropriate endorsement(s).

Requirements

Minimum age	18 years and not a novice driver
Medically fit	See page 14
Vision test	See page 11
Knowledge tests	Class 1 knowledge tests include: Class 1, 2, 3, 4, Basic and Sign
Training	Mandatory Entry-Level Training (MELT)
Trip inspection	Must demonstrate a trip inspection on a Class 1 vehicle
Road test	Must take a road test in a Class 1 vehicle

Mandatory Entry-Level Training

All drivers seeking a Class 1 commercial licence in Saskatchewan to drive semi trucks are required to complete a minimum of 121.5 hours of training prior to taking the road test. The training program consists of instruction in the classroom or online (47 hours), in the yard (17.5 hours) and behind the wheel (57 hours). There are 11 modules included and the student must pass each one to complete the training course. Effective March 1, 2021, if you are a visitor or temporary foreign worker, you may no longer use your existing licence to drive Class 1 vehicles (semis) – if you want to drive a semi, you will need to take mandatory entry-level training and get a Saskatchewan Class 1 driver's licence.

You can find a list of certified driving instructors at www.sgi.sk.ca/drivereducator#class1.

Licence Class 2 – minimum age: 18

Permits the licence holder to operate

- Class 2 vehicles – that is, buses having a seating capacity in excess of 24 passengers, while carrying a passenger or passengers.
- Motor vehicles in classes 3, 4 and 5.
- Class 1 vehicles as a learner with appropriate endorsement.



Does not permit the licence holder to operate

- Vehicles with air brakes, motorcycles or school buses without an appropriate endorsement(s).

Requirements

Minimum age	18 years and not a novice driver
Medically fit	See page 14
Vision test	See page 11
Knowledge tests	Class 2 knowledge tests include: Class 2, 3, 4, Basic and Sign
Trip inspection	Must demonstrate a trip inspection on a Class 2 vehicle
Road test	Must take a road test in a Class 2 vehicle

Licence Class 3 – minimum age: 18

Permits the licence holder to operate

- Class 3 vehicles – that is, trucks with more than two axles, except trucks registered in Class F, and trucks with more than two axles which have a trailer(s) or vehicle(s) in tow, except trucks registered in Class F, where the gross weight of the towed unit(s) does not exceed 4,600 kg.
- Motor vehicles in classes 4 and 5
- Power units with more than two axles, when not towing a semi trailer.
- Class 1 or 2 vehicles as a learner with appropriate endorsement



Does not permit the licence holder to operate

- Vehicles with air brakes¹, motorcycles or school buses without an appropriate endorsement(s).

Requirements

Minimum age	18 years and not a novice driver
Medically fit	See page 14
Vision test	See page 11
Knowledge tests	Class 3 knowledge tests include: Class 3, Class 4, Basic and Sign
Trip inspection	Must demonstrate a trip inspection on a Class 3 vehicle
Road test	Must take a road test in a Class 3 vehicle

¹ – Persons with Class 3 or 5 vehicles (registered farm only) with air brakes are not required to have the air brake endorsement

Licence Class 4 – minimum age: 18

Permits the licence holder to operate

- Class 4 vehicles – that is,
 - buses that have a seating capacity of not more than 24 passengers, when transporting passengers
 - vehicles registered in Class PT and Class LV (rideshare) when transporting not more than 9 passengers
 - vehicles registered in Class PB or PC
 - when transporting not more than 24 passengers for hire; and
 - when not used exclusively to transport passengers with a disability and any attendants to those passengers
 - ambulances when being used for hire
 - motor vehicles in Class 5



Does not permit the licence holder to operate

- Vehicles with air brakes, motorcycles or school buses without an appropriate endorsement(s).

Requirements

Minimum age	18 years and not a novice driver
Medically fit	See page 14
Vision test	See page 11
Knowledge tests	Class 4 knowledge tests include: Class 4, Basic and Sign
Trip inspection	Must demonstrate a trip inspection on a Class 4 vehicle
Road test	Must take a road test in a Class 4 or 5 vehicle

Criminal Record Check

If you operate taxi, limousine or rideshare vehicles, you must file a satisfactory criminal record check with the company you drive for on an annual basis. An unsatisfactory criminal record check may result in a T restriction being placed on your driver's licence. A T restriction means: No passengers for hire.

Licence Class 5 – minimum age: 16

Permits the licence holder to operate

- Class 5 vehicles – that is, cars, vans², two-axle trucks, two-axle vehicles having a trailer(s) or vehicle(s) in tow where the gross weight of the towed unit(s) does not exceed 4,600 kg, buses when not transporting passengers, three-axle motorhomes, and taxis and ambulances when not used for hire.
- School buses when not carrying more than 15 students.
- A taxi, limousine, vehicle used for vehicle-for-hire services, or Class PB vehicle* , if the driver:
 1. is an experienced driver, not in the Graduated Driver Licensing (GDL) program;
 2. has at least two years post-GDL driving experience in Canada or a reciprocal jurisdiction; and
 3. has a satisfactory driver history (meaning less than 12 points under the Driver Improvement Program in the last two years, and no impaired driving-related suspensions in the last 10 years).



* With seating capacity of 10 or less.

- Law enforcement vehicles when being used for law enforcement purposes.
- Two-axle farm trucks towing vehicles which have a gross weight that exceeds 4,600 kg.
- Farm trucks with more than two axles.
- Vehicles registered in Class PB or PC when used exclusively to transport, for hire, not more than 24 passengers with a disability and any attendants to these passengers.
- Class 1, 2, 3 or 4 vehicles as a learner with appropriate Endorsement 1, 2, 3 or 4 (minimum age 18 and not a novice driver).
- Three-wheeled vehicles (e.g., has a steering wheel, automotive seating and floor controls – not a three-wheeled motorcycle).

Does not permit the licence holder to operate

- Vehicles with air brakes³, motorcycles without an appropriate endorsement(s).

Requirements

Vision test	See page 11
Knowledge tests	Class 5 knowledge tests include: Basic and Sign
Training	Class 5 training or the high school driver education program
Road test	Must hold a Class 7 licence for nine months Must take a road test in a Class 5 vehicle

You can find a list of certified driving instructors at www.sgi.sk.ca/drivereducator.

Licence Class 5 and 7:

Note: Persons under age 18 require parental consent to obtain driving privileges. Once consent has been granted it cannot be withdrawn.

- 2 – Vans with a seating capacity of 15 or less while carrying passengers. If transporting more than 12 passengers, the driver must be at least 18 years of age and not a novice driver
- 3 – Persons with Class 3 or 5 vehicles (registered farm only) with air brakes are not required to have the air brake endorsement

Licence Class 7 – minimum age: 16 15 with High School Driver Education

Permits the licence holder to operate

- Class 5 vehicles as a learner

Note: Does not permit the licence holder to obtain a motorcycle endorsement or operate three-wheeled vehicles as a learner.



Requirements

Identification	You are required to show your full name and date of birth by a birth certificate, passport or immigration documents. You will also be required to provide a signature from a Saskatchewan Health card, passport or a driver's licence from a Canadian jurisdiction or any document acceptable to SGI. Any first-time driver between the ages of 15 and 18 is required to provide a completed Parent/Guardian signature form/Guarantor form available from SGI Driver Development, motor licence issuers or SGI certified driver educators. If your name has changed due to marriage or for other reasons, please bring documentation to support the name change. Be sure to take several pieces of original identification with you (photocopies are not acceptable).
Vision test	See page 11
Knowledge tests	Class 7 knowledge tests include: Basic and Sign

The holder of a Class 7 licence must be supervised. The driving supervisor must:

- At all times, be capable of assuming operation of the vehicle;
- Hold the equivalent of a Class 5 or greater driver's licence issued by a Canadian or U.S. jurisdiction;
- Have held a valid licence for a minimum of 365 days in the preceding three years (but is not a novice driver); and
- Occupy the seat nearest to the driver and the vehicle controls.

Note: The holder of a Class 1 to 5 driver's licence is permitted to operate a snowmobile or ATV. All snowmobile operators born after Jan. 1, 1989, must have taken an approved safety course in addition to holding a Class 1 to 5 driver's licence. The holder of a Class 7 driver's licence is permitted to operate an ATV or snowmobile provided they are accompanied by someone who holds a Class 1 to 5 driver's licence or supervised (within 5 m of and in view of) by someone on another machine that holds a Class 1 to 5 driver's licence.

The holder of a Class 7 or greater licence is permitted to operate a golf cart on a public roadway if the municipality has passed an SGI-approved bylaw permitting its use.

For more information regarding snowmobiles, ATVs and golf carts call SGI's Customer Service Centre at 1-844-TLK-2SGI (1-844-855-2744).

Farm-plated vehicles

Below is a chart listing the driver's licence requirements for various vehicles and combination units that are registered as farm vehicles.

Farm (F plated) vehicle	Driver's licence required
2-axle truck	Class 5
3-axle truck	Class 5
2-or 3-axle truck equipped with air brakes	Class 5 (air brake endorsement not required)
2-axle truck (not a power unit) towing a trailer of any weight	Class 5
2-axle truck (not a power unit) equipped with air brakes, towing a trailer of any weight	Class 5
2-axle power unit with NO trailer, with or without air brakes	Class 5
2-axle power unit towing any trailer	Class 1
3-axle truck towing a trailer under 4,600 kg	Class 5
3-axle power unit not towing a trailer	Class 3
3-axle power unit equipped with air brakes, not towing a trailer	Class 3A
3-axle truck towing a trailer greater than 4,600 kg	Class 1
3-axle truck equipped with air brakes, towing a trailer greater than 4,600 kg	Class 1A
Power unit and semi trailers	Class 1
Power unit equipped with air brakes and semi trailer	Class 1A

Note: Where Class 5 licence is indicated, this not only applies to the farmer who owns the truck, but any Class 5 driver.

Endorsements

Air brakes "A"

If you operate a vehicle equipped with an air brake system, you must have the air brake Endorsement A specified on your licence. An air brake endorsement is not required when operating a Class 3 or 5 vehicle licensed as a farm truck.

Operation of trucks with air over hydraulic (hydraulic brakes with an assist) does not require an Endorsement A.

Requirements for A Endorsement:

- Must pass a written air brake test. Consult the SGI *Air Brake Manual* for more information. It is available online at www.sgi.sk.ca/airbrake.
- Must demonstrate how to adjust a manual slack adjuster on a brake model and tell the examiner the right way to adjust an automatic slack adjuster.
- Must complete a practical demonstration on air brake equipment that you provide.

If your licence does not bear the Endorsement A, you may operate a motor vehicle equipped with air brakes as a learner while accompanied by a person whose licence has the Endorsement A, provided your licence permits you to operate that type of vehicle under normal conditions.

G Endorsement – Heavy trailer

Some travel and utility trailers have increased in size to a point where they qualify as Class 1 units. To pull a heavy trailer (utility and recreation) weighing more than 4,600 kg (10,141 lb.), including the load, you need a Class 1 licence or a heavy trailer G endorsement on a Class 2, 3, 4 or 5 licence. The heavy trailer G endorsement allows you to drive two-axle trucks towing heavy trailers (but not power units).

The 4,600 kg weight point is determined by weighing the trailer and its contents, and not the tow vehicle. For example, if a driver is pulling two trailers, a camper and a boat, the combined weight of both together will determine the class of licence required.

Requirements for G Endorsement – Heavy trailer:

- Must be at least 18 years of age and not a novice driver.
- Must meet approved medical standards (see page 14).
- Must meet approved vision standards.
- Must pass written heavy trailer tests. Study materials include the *Saskatchewan Driver's Handbook* (available at www.sgi.sk.ca/handbook) and this handbook (chapters 2, 3, 4, 5, 6 and 9).
- Must complete a trip inspection (see page 66).
- Must pass a road test in a truck towing a trailer weighing 4,600 kg (10,141 lb.).

Drivers who wish to drive only when accompanied by a driver with a Class 1 licence or a heavy trailer G Endorsement may obtain heavy trailer learner's privileges by completing only the medical and written portions of the testing. If you want to obtain learner's privileges for all Class 1 vehicles, you would need to pass all seven written tests and not just the ones for heavy trailer.

Note: There are other G Endorsements that indicate additional driving privileges, which will be shown on a detail authority card.

School bus "S"

If you hold a valid Class 1, 2, 3, 4 or 5 licence, upon application you may have your licence endorsed to operate a school bus.

Requirements for S Endorsement:

- Must be at least 18 years of age and not a novice driver.
- Must meet approved medical standards (see page 14).
- Must pass written school bus tests. Study materials include the *Saskatchewan Driver's Handbook* (available at www.sgi.sk.ca/handbook) and this handbook (chapters 2, 4, 7 and 8).
- Must meet approved vision standards.
- Must complete a trip inspection (see page 66).
- Must pass a road test in the appropriate size of school bus; unrestricted, at least 36 student passengers or restricted, fewer than 36 student passengers. Buses with six rows of seats will be considered as 36 passenger even if the rear seats are smaller.

If you take a road test in a school bus equipped with an automatic transmission, you may be restricted to driving school buses with automatic transmissions. You must provide the appropriate size of bus for the test.

Note: "Student passengers" – means three passengers to a seat on a school bus.

Learners "1", "2", "3", "4"

A Class 2, 3, 4 or 5 licence may be endorsed to allow you to learn to operate any higher class of vehicle.

Requirements for 1, 2, 3, and 4 Endorsement:

- Must be at least 18 years of age and not a novice driver.
- Must pass appropriate written tests. Study materials include the *Saskatchewan Driver's Handbook* (available at www.sgi.sk.ca/handbook) and this handbook.
- Must meet approved vision standards.
- Must meet approved medical standards (see page 14).
- Must be accompanied by a driver who holds and has held a valid licence for that class of vehicle for 365 days within the last three years.

Examinations

Driver examinations for a Class 1, 2, 3 or 4 driver's licence and school bus or heavy trailer endorsement include:

- knowledge exams
- vision test
- road test
- trip inspection
- coupling and uncoupling (Class 1)

The examination of drivers for an air brake endorsement includes:

- knowledge exam
- a practical demonstration on an air brake equipped vehicle that you provide

Note: If a medical examination is required, the medical must be submitted to SGI and approved before any tests may be started.

Knowledge exams

The knowledge exams are based on the information contained in this manual, the *Saskatchewan Driver's Handbook* (available at www.sgi.sk.ca/handbook) and the *Air Brake Manual* (available at www.sgi.sk.ca/airbrake), along with other practical questions. See the chart below to find out which test papers you will need to pass for the desired class or endorsement. Knowledge exams can only be attempted once per day.

Exam Papers Required	Driver Class or Endorsement						
	Class 1	Class 2	Class 3	Class 4	School Bus	Heavy Trailer	Air Brake
Sign Test – 30 questions	▪	▪	▪	▪	▪	▪	
Basic Class 5 – 20 questions	▪	▪	▪	▪	▪	▪	
Class 1 Test – 20 questions	▪						
Class 2 Test – 15 questions	▪	▪					
Class 3 Test – 10 questions	▪	▪	▪				
Class 4 Test – 10 questions	▪	▪	▪	▪			
Air Brake Test – 18 questions							▪
Heavy Trailer Test – 20 questions						▪	
School Bus Test – 15 questions					▪		

Scheduling:

- book and pre-pay online at MySGI, or
- call or visit a motor licence issuer
- tests are held at our driver exam offices
- walk-ins are accepted in Regina and Saskatoon Central offices from 8 a.m. to 4 p.m. Monday to Saturday (tests are not available on Saturdays of long weekends) but elsewhere you need to make an appointment

Vision test

The vision test is included as part of your knowledge exam appointment.

Scheduling: included with your knowledge exams and held at a driver exam office.

Road tests

During the road test, you will be required to drive the vehicle in traffic. You will be judged on your ability to handle the vehicle safely and perform all normal driving tasks correctly, including manoeuvres such as a highway “turn-about” (three-point turn).

For a Class 1 licence, you will also be required to demonstrate other backing manoeuvres, such as offset backing and alley dock backing.

If you take a road test for a Class 1, 2 or 3 driver's licence or S Endorsement (bus with a seating capacity over 24 adult passengers) in a vehicle equipped with a standard transmission you must, at one point during the test, demonstrate proper use of the clutch while shifting up and down through all the gears. On 13 or 18-speed transmissions you must split the top range.

You are required to provide the proper class of vehicle for the test. For a Class 1 road test, you must bring a three-axle power unit and a minimum 48 ft. trailer. You must be accompanied to the testing site by a driver licensed to drive the class of vehicle being used. Completion of Class 1 Mandatory Entry-Level Training (MELT) is required before scheduling your Class 1 road test. The training school you completed your training with will update your SGI customer file for you.

Scheduling:

- Pay for your test at a motor licence issuer and call 1-844-TLK-2SGI (1-844-855-2744) to book, or
- Call 1-844-TLK-2SGI (1-844-855-2744) to book and pay by credit card.

Note: If you do not cancel your appointment and fail to show up, you will be required to pay for your re-scheduled appointment.

Road tests will be refused if:

- The vehicle is displaying a dangerous goods placard.
- You do not possess an appropriate driver's licence.
- The vehicle is unsafe or not equipped in accordance with legislation – for example: operational signals, horn, speedometer and brake lights; or defective braking system (including air), muffler or windshield wipers (when raining).
- The unit doesn't have a safety inspection decal as required by regulations.

- The vehicle's passenger compartment is unclean or does not have a standard manufacturer's seat for the examiner.
- The vehicle is not of the applicable class.
- Your vision or medical fitness does not meet required standards.
- The weight of the unit(s) towed behind a truck is under 4,600 kg (10,141 lb.) (heavy trailer tests).
- The applicable inspection schedule is not present, and the trip inspection report is not completed as per the regulations.

Restrictions

A driver's licence may be restricted when road tests are taken in certain vehicles.

For example: Drivers who are tested for a Class 1, 2 or 3 licence or S Endorsement in a vehicle equipped with an automatic or electronic shift transmission may be restricted to automatic or electronic shift transmission vehicles in those classes.

Other restrictions may apply.

Trip Inspections

You have to do a trip inspection to show your vehicle safety knowledge and check the equipment's operation and condition. For Classes 2, 3 and 4, you're responsible to point out and name the item or equipment inspected without any help (see page 66.) For the Class 1 trip inspection, you'll be asked to check the proper operation and condition of a randomized block of components, list the defects and describe what action you'd take. Both this and the road test are done in a vehicle that you provide (someone licensed to drive that vehicle class can drive it there for you or you can come with a supervising driver).

Scheduling: included with your scheduled road test and held at a driver exam office.

Note: a video series on how to perform a Class 4 trip inspection is available on the SGI website at www.sgi.sk.ca/upgrade-to-commercial-licence.

Class 1-4 medical standards

Medical standards

You will be required to submit a Commercial Driver's Licence Medical Report. The form is available at www.sgi.sk.ca/commercial-drivers-licence-medical. Some of the conditions which may prohibit the issuing of a Class 1, 2, 3, 4 or school bus or heavy trailer endorsement are:

- seizure disorders
- certain heart or insulin dependent diabetic conditions
- physical disabilities (paralysis, disability, arthritis, amputation)
- blackouts, dizziness or fainting spells
- head injuries
- vision problems or hearing loss

The medical can be completed by a physician, nurse practitioner or an occupational health and safety nurse.

Medical reports must be submitted *and approved* prior to the start of any testing.

Subsequent medical reports will be requested every:

- five years for drivers 18-45 years of age
- three years for drivers 46-65 years of age
- year for drivers 66 years of age or older

An unsatisfactory medical may result in a L restriction being placed on your driver's licence. An L restriction means: May not operate Class 2, 4 or TNC (rideshare) vehicle.

Canada/United States medical reciprocity agreement

Canada and the United States have established a federal agreement dealing with the medical fitness requirements for operators of commercial motor vehicles.

Canadian drivers need only produce a valid Saskatchewan Class 1, 2 or 3 driver's licence as proof of medical fitness. Drivers with a Class 4 licence who drive buses with a seating capacity of more than 10 while operating in the United States are also covered by the agreement.

The following Class 1, 2, 3 or 4 drivers are not able to operate commercial motor vehicles while transporting goods or passengers for hire into the United States:

- drivers with an established medical history or clinical diagnosis of epilepsy
- drivers who do not meet the minimum hearing requirements to transport dangerous goods
- drivers currently operating under a medical waiver

Drivers with current medical waivers, or restricted privileges, can continue to operate commercially in Canada but will have a “W” restriction added to their licence prohibiting them from operating commercially in the United States.

Operating Class 5 vehicles in the United States

In Canada, a Class 5 driver's licence does not require a medical exam and is not considered a commercial driver's licence. However, the driver of a Class 5 vehicle, operating in the United States for a commercial purpose, must have a commercial medical if the vehicle or vehicle combination weighs or has a rated capacity (Gross Vehicle Weight Rating) over 4,536 kg.

The U.S. commercial medical requirements also apply to farm-use vehicles registered in Class F, but do not apply to private-use vehicles (e.g., when vacationing in the United States towing a recreational vehicle).

To ensure compliance with the United States FMCSA medical standards when driving a Class 5 vehicle or combination of vehicles that has a GVW, GVWR or Gross Combined Weight Rating (GCWR) of 4,536 kg or more (whichever is greater), make sure you hold one of the following driver's licenses:

- A valid Saskatchewan Class 5 driver's licence combined with a Medical Confirmation Letter issued by the SGI Medical Review Unit notifying enforcement that you have submitted a satisfactory medical to SGI.
To request a Medical Confirmation Letter, you must submit a satisfactory Commercial Driver's Licence Medical Report form to the Medical Review Unit. Medical Confirmation Letters must be renewed every five years from the date the last medical was completed for drivers 18 to 45 years of age, three years for drivers 46 to 65 years of age and annually for drivers 66 years of age or older.
- A valid Class 5 licence with an Endorsement 1, 2, 3 or 4 learner's licence issued by Saskatchewan (includes a commercial medical).
- A valid Saskatchewan Class 5 driver's licence with a G01 Heavy Trailer Endorsement (includes a commercial medical) permitting you to drive two-axle trucks (not including two-axle power units) towing trailers more than 4,600 kg.
- A valid Class 1, 2, 3 or 4 driver's licence issued by a Canadian province or territory.
- The appropriate class of U.S. driver's licence combined with a valid medical certificate (or exemption), if not a Canadian resident.
- A valid Class 5 (or equivalent) driver's licence issued by a Canadian province or territory combined with a current U.S. medical examiner's certificate completed within the last two years.

For more information, please contact the SGI Medical Review Unit at 1-844-TLK-2SGI (1-844-855-2744).

2. Good driving habits

Attitude towards driving

Improving and maintaining a good attitude towards driving is a key component to enhancing the safety of our roads.

To qualify as a safe motor vehicle driver, you must not only respect the law, but also understand the need for traffic regulations. All drivers must observe the laws and regulations, realizing that there may be other drivers who do not know or always obey these laws.

As a professional driver, you must practise defensive driving techniques by being willing, at all times, to yield to other drivers and pedestrians.

Emotional attitude

Certain conditions such as worry, anger or anxiety can upset you and distract you from driving. Safe driving demands your full attention at all times.

Arguments at home, annoyance with other drivers and illness or financial problems are some of the things which can distract you from the important job of driving.

Safety demands your complete and constant attention to changing driving situations. You can't control your vehicle if you're not in control of yourself.

Driver condition

Driver condition refers to your physical, mental and emotional fitness to drive. It is the most important of the six conditions, because a driver in top physical, mental and emotional shape can adjust to all the other conditions and to the errors of other drivers as well. Distracted driving, fatigue, stress and illness can all affect the condition of a driver, making them unfit to drive.

Distracted driving

The greatest number of traffic collisions are caused by drivers not paying attention. Any driver is a potential fatal hazard. Careful observation and visual scanning of the entire traffic scene ahead, behind and to either side must be part of your driving. Your eyes look at countless things you do not really see at all. Your mind concentrates on only a few details and excludes others. You see only the things your mind selects.

Normally, your eyes shift automatically about every two seconds as you drive – provided your attention is on the road. When you are preoccupied, however, this automatic eye shift does not occur. Only by conscious practice to force your eyes to move every two seconds, until it becomes a habit, can you avoid the serious danger of a blank stare in traffic when your mind is not on your driving. Most collisions occur near home and on familiar roads or highways that the driver fails to concentrate on seeing. A moment's lack of attention behind the wheel – whether from poor scanning habits or common distractions such as cellphones, worry, daydreaming, impatience, tuning the radio, talking to a passenger or casually gazing at billboards and storefronts – can bring about a collision and possibly death.

Holding, viewing or manipulating a hand-held cellphone or mobile device is prohibited in Saskatchewan. Experienced drivers, who are no longer in the Graduated Driver Licensing (GDL) program, can use hands-free cellphones if they're activated with voice commands or one-touch, and are dashboard, visor or cradle mounted.

Fatigue

Driving while fatigued can make you a road hazard. Drowsy driving is as dangerous as impaired driving because it slows a driver's reaction time, decreases awareness and can impair judgment. Lack of sleep is the most common cause of drowsy driving. Other contributing factors include driving alone, driving long distances without rest breaks and driving through the night, or at times when the driver normally sleeps. Taking medication that increases sleepiness or drinking alcohol also contributes to driver fatigue.

It is important that you learn to recognize when any or all these conditions are adversely affecting your driving behaviour or ability. This means not driving until after the condition has improved.

Warning signs of driver fatigue:

- yawning
- inability to keep eyes focused and head up
- having wandering, disconnected thoughts
- driving the past few kilometres without remembering them
- difficulty maintaining speed
- drifting between lanes, tailgating or missing traffic signs
- noticing a vehicle that seemed to appear out of nowhere

Most fatigue-related collisions happen between 1 - 4 p.m. and early in the morning between 2 - 6 a.m. Typically, fatigue-related collisions occur at higher speeds and can result in drivers running off the road or vehicles colliding head-on with other vehicles or stationary objects.

In Canada, a driver can drive a commercial vehicle under the National Safety Code up to 13 hours a day, but it is recommended the driver not drive more than two hours without stopping for a rest.

Turning up the radio, opening a window, drinking coffee, chewing gum or eating will help reduce driver fatigue temporarily but the following actions will help prevent driver fatigue:

- Don't travel at times when you'd usually be sleeping.
- Get plenty of sleep before a long trip.
- Avoid working all day and then driving all night. Stay overnight rather than driving straight through.
- Take regular breaks - at least every two hours. Stretch or take a walk to get some fresh air.
- Take a mid-afternoon break. Have a 20-40-minute nap.
- Travel with an awake and alert passenger. Having someone to chat with will keep the driver awake and the passenger can also let the driver know if he/she is showing any signs of fatigue.

Stress

You drive not only with your head, hands and feet, but with your personality as well. Don't drive when you're so angry or upset that you can't concentrate on driving.

Illness

Being sick can put added stress on you when you are driving. Even a mild cold can cause enough discomfort on a long trip to make you tired and distracted.

Drinking, drugs and driving

In Canada, it is a Criminal Code offence to drive while under the influence of alcohol or drugs.

2017 facts about drinking/drugged driving in Saskatchewan:

- A drinking/drugged driver is involved in 3.6 out of every 10 fatal collisions.
- There is a drinking/drugged driver in 1 out of 16 collisions where someone is injured.
- Out of the 39 people killed, 29 were drivers, 9 were passengers and 1 was a pedestrian.
- Of the 39 people killed, 29 were killed on provincial highways, 5 on rural roads, 3 on urban streets and 2 on First Nations roads.
- Those aged 25-34 are involved in the most impaired driving-related collisions.

Alcohol and drugs affect everyone differently. Contributing factors for impairment include age, gender, physical condition, amount of food consumed, medication and other factors.

The brain functions first affected by alcohol or drug consumption are not only important to our ability to drive safely, but are the same ones required to make rational decisions about not driving after drinking. For this reason, you must make the decision to separate drinking and drug use from driving. Make the necessary alternate transportation plans before your activities begin.

Prescription, over-the-counter, and illegal drugs affect your brain function. Some will directly affect your driving. Brain and body activity may be slowed, directly impacting a driver's reaction time; vision may be blurred, or doubled, or there may be inaccurate depth perception. Some drugs cause hallucinations, paranoia, disorientation, anxiety or over-confidence which may result with aggressive behaviours.

Many people think that driver impairment is caused exclusively by ingestion of alcohol. However, if that person already has another drug in their system, the impairing effect on the functioning of the central nervous system (brain) is far greater than the impairing effect of the alcohol and the impairing effect of the other drugs combined; it is not a simple adding together of impairment, but rather a multiplier effect!

Do not drive while under the influence of any amount of alcohol or drugs.

Impaired driving legislation is applicable to impairment by alcohol, as well as impairment by any other drug. In Saskatchewan, there is zero tolerance for drug-impaired driving.

For additional information on drinking, drugs and driving, please visit www.sgi.sk.ca.

Night vision

Some drivers seem reluctant to do two things that are really important to safe driving at night: reduce speed and increase following distance. If you drive so fast that you can't stop within the area illuminated by your vehicle's headlights, also referred to as overdriving your headlights, you're moving too fast. And if you don't increase following distance, the difficulty in judging how fast the vehicle ahead of you is moving creates a very hazardous situation.

Not everyone sees with the same degree of perception and accuracy. At night, our ability to see diminishes and so does our ability to sort out different objects. Depth perception and judgment of distance are also affected.

A major problem faced in night driving is glare blindness caused by approaching lights. If you have been driving in the dark for a while, you will need up to five seconds to recover from the glare of oncoming lights. This glare recovery time tends to increase with age to the point where it sometimes takes up to 25 seconds to recover. When you're faced with glare, slow down and avoid staring directly into approaching lights. If you suspect you have a glare recovery problem, check with an ophthalmologist or optometrist, and if there is a problem inform SGI's Medical Review Unit.

Speed

Regulatory signs advise drivers of the maximum speed when all conditions are ideal. You must assess the conditions and adjust your speed based on the six basic driving conditions:

1. Driver condition (fatigue, stress, illness, distraction)
2. Vehicle condition (tires, brakes, lights, wipers, weight, length, height, type)
3. Light condition (overcast, sunny, dark, glare)
4. Weather condition (snowing, blizzard, raining, windy, fog)
5. Road condition (gravel, potholes, icy, wet, curves)
6. Traffic condition (vehicles, pedestrians, cyclists, density)

Traffic tempo: You must set your speed according to the existing conditions but, at the same time, match your vehicle's speed to the traffic tempo. If you drive faster than the traffic flow, you are increasing your chances of having a collision. You are continually reducing your safe following distance, thus losing stopping space in front. You make more lane changes to thread your way past the vehicles ahead, increasing your chances for a collision. Driving decisions are increased because you are creating more driving problems, thus increasing the likelihood of a wrong decision. Faster driving will result in faster mental fatigue. Reading the traffic pattern requires you to scan the full picture ahead and to the sides by moving your eyes. The faster you push through traffic, the more rapid the scanning process, building tension and fatigue.

If you travel appreciably slower than the tempo of the traffic, you increase your collision chances from behind and from the sides. Vehicles following too closely behind you create hazards. Vehicles overtaking and cutting in are continually occupying your stopping space and decreasing your following distance.

If your stops are gradual, you give the driver following you adequate notice of your speed reduction.

Following distance

You should be constantly on the defensive to prevent a rear-end collision with other vehicles. This applies not only to the vehicle you are following, but also to the vehicles following you.

The collision from behind may not always be avoidable, but the professional driver can reduce the probability. The first step in prevention is assuring that your own stops are smooth and gradual. To do this, practise these simple but effective driving habits:

- Look well ahead at the traffic to pick out the clues that indicate speed changes and stops developing in the traffic pattern.
- Look ahead for traffic control devices to anticipate light changes before reaching the intersection. Traffic lights that have been green for some time before you reach the intersection are probably stale and could change at any time. Streets with synchronized lights permit you to adjust your speed to the traffic lights.
- Maintain an adequate following distance from the vehicles ahead so that a smooth, gradual stop may be completed, even if the vehicle ahead has made a panic stop.

The law prohibits the practice of driving in a caravan. Drivers of semi trailer units, trucks and buses will sometimes drive in caravans so the first truck breaks the wind resistance for those following closely behind. This leaves insufficient stopping distance and prevents faster traffic from passing one truck at a time.

Using time to estimate your following distance

If you drive a taxi, ambulance, police vehicle or van, you should maintain a three-second interval between your vehicle and the vehicle ahead. What does this mean? It's really quite simple if you follow these steps:

1. Pick something that is on or near the road and is not moving (for example, a sign, pavement patch, shadow or overpass).
2. When the rear bumper of the vehicle you are following is even with the object you have chosen, start counting - "Thou - sand and one, Thou - sand and two, Thou - sand and three," etc.
3. When your front bumper is beside the chosen object, stop counting. This will give you the number of seconds between you and the vehicle you are following.
4. If you are closer than three seconds, drop back and check again until you have achieved a minimum of a three-second following distance. Any following distance longer than that is safe.

If you drive a power unit, semi trailer, bus, truck or truck and trailer, round out the length of the vehicle to the nearest metre and divide by three to determine your count.

Example: If your truck and trailer is 14.6 m, round to 15 m, then divide by three.

$$\frac{15}{3} = 5\text{-second count}$$

When road conditions change because of rain, snow or ice, lengthen the count to suit the changing conditions.

Space must be allowed for other vehicles to pull in between you and the vehicle ahead.

A short observation of the driving technique of the driver ahead will tip off the professional driver as to what might be expected. If the vehicle ahead is a tailgater, you can expect to have frequent "panic stops." The driver ahead who maintains

a safe following distance usually has a longer, lighter brake application for stops, giving you adequate notice by their brake lights that they are slowing down.

The tailgater

A driver of commercial vehicles such as buses, trucks and power units and semi trailers must rely on outside mirrors for rear vision.

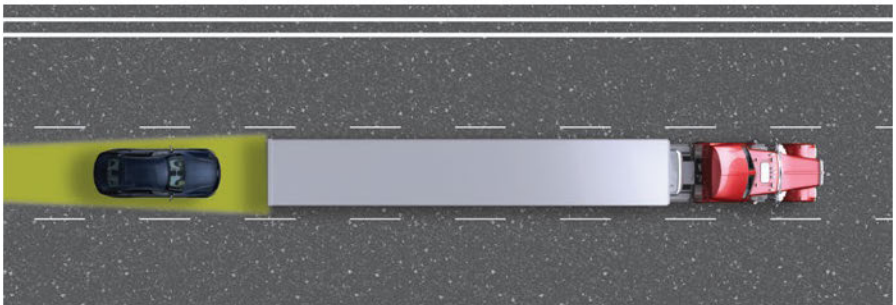
A tailgater often drives directly behind the commercial vehicles and may not be visible.

It may not always be possible for you to prevent a rear-end collision by an irresponsible driver. There is a bonus factor, however. If your stop is gradual, the speed of impact will be considerably less than if you stopped suddenly.

The tailgater is usually a person who lacks patience and foresight. This lack of patience could be caused by your vehicle's speed and the way you drive. By watching the rear mirrors, you can often protect yourself from a tailgater by helping the tailgater pass your vehicle. The tailgater is easier to deal with ahead of you than behind you. Don't let the tailgater put an incident on your record!

Upon approaching an upgrade where there is a passing lane, the driver of a vehicle travelling slower than the normal traffic flow must use the right lane. Where such lanes are not provided, the driver of a slower vehicle should allow the traffic that has built up to pass at the earliest safe opportunity.

Experienced drivers adjust their pace according to conditions and traffic tempo, maintain a safe stopping distance ahead and behind, and maintain a driving space all around their vehicle. They have time to read the traffic pattern and continuously plan an escape route should their danger zone become occupied.



Intersections

The basic right-of-way rules are explained in the *Saskatchewan Driver's Handbook* and apply to drivers of all vehicles.

Most hazards occur at intersections. As a result, knowledge of the right-of-way rules is essential for all drivers. As a defensive driver, you should not depend on other drivers to always obey these rules. Expect the unexpected – be prepared to yield. To avoid intersection collisions, it is suggested that you follow these common-sense practices:

- Never enter a limited view intersection at a speed at which you cannot stop safely. You should have your right foot off the accelerator and poised over the brake pedal in case of an emergency stop. This will save on reaction time.
- Do not assume you have the right of way, even when it is reinforced by traffic lights or traffic signs. Look left and right before entering any intersection. Look for and expect the violator to run the sign or lights.
- When approaching an intersection, be alert and anticipate a change of a green light to avoid running through an amber or red light. When getting the green light, check left, right and ahead for the late runners, before proceeding.
- Do not depend on other drivers to signal or execute their turns correctly.
- Never pass another vehicle in or approaching an intersection.

Do not use the size of your vehicle to bluff for the right of way. Give the right of way rather than taking it. As well, you should pay attention to each and every intersection, laneway or driveway.

Railway crossings

Crossing railway tracks can be especially hazardous for drivers of large vehicles because of the following:

- Longer vehicles need to travel further and will need more time to clear a crossing.
- Heavier vehicles take more time and need more room to stop before a crossing.
- Larger vehicles that have low ground clearances may cause trailers to get stuck on or displace the tracks.
- Larger trucks are more likely to derail a train if there is a collision.

Other considerations:

Never permit traffic conditions to trap you in a position where you have to stop on the tracks. Be sure you can get all the way across the tracks before you start across.

Avoid shifting gears on a crossing. Make your gear selection prior to crossing the railway tracks.

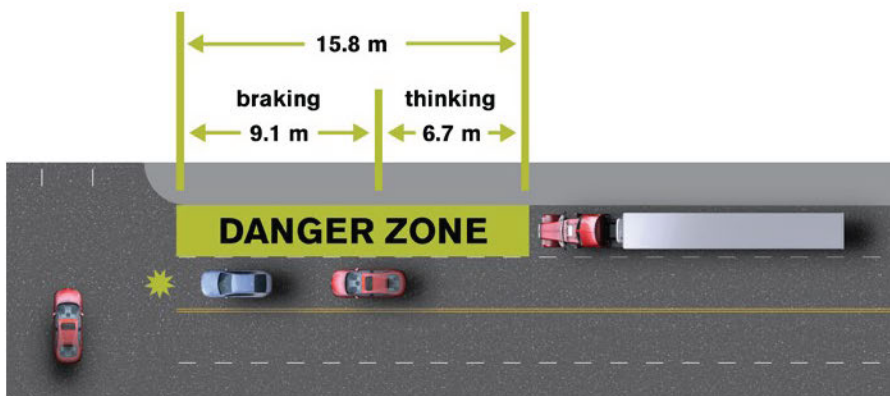
If your vehicle stalls or gets stuck on a crossing, get out of the vehicle immediately. If a train is coming, move away from the track toward the oncoming train. This will reduce the chances of being struck by flying debris if the train hits the vehicle. Contact the railway company if its emergency number is posted or call 911.

Danger zones

The danger zone of any vehicle can be described as the area directly in front of the vehicle in which the vehicle cannot stop. In the following diagram, the danger zone is shown as the shaded area. As the speed increases, the danger zone increases; if the road condition is less than ideal because of rain, snow, ice or gravel, the danger zone is increased. When you fail to reduce your vehicle's speed to suit these road conditions, the danger zone increases.

At 30 km/h you can stop – just!

The truck is approximately three and one-half car lengths from the crosswalk when the driver sees the pedestrian. Under ideal conditions, the driver may be able to stop just in time.



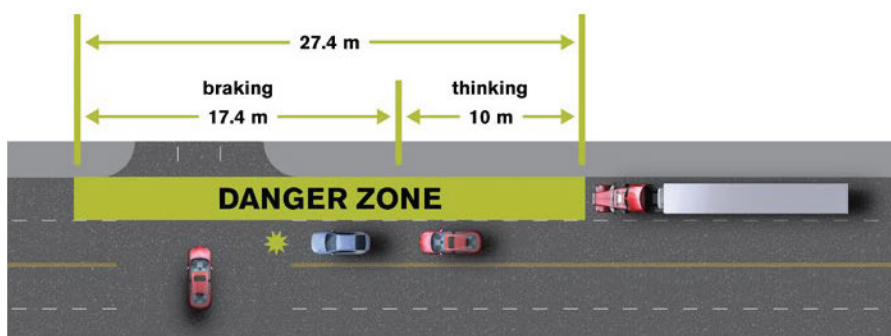
At 50 km/h you cannot stop in time!

Even under ideal conditions, the driver of the truck cannot stop in time! Both the pedestrian and the car on the left are about to enter the danger zone!

The distances in the diagrams are approximations only for illustration, as braking distances will vary according to the weight of the vehicle, condition of the brakes and the condition of the road surface.

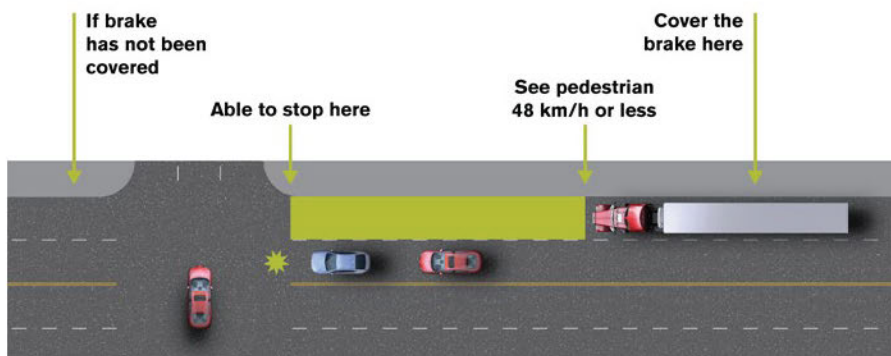
When conditions are less than ideal, commercial vehicles, like passenger vehicles, can decrease their stopping distance by reducing their speed.

If another vehicle or a pedestrian should enter the danger zone, the driver cannot stop the vehicle in time. It is not physically possible.



Shrinking the danger zone

The illustration of the danger zones shows how the distance is shortened if the speed of the vehicle is reduced.



The zone can also be reduced if you form the habit of “covering the brake” when you recognize potential danger developing. In the previous diagram, the driver has recognized that he/she is nearing an intersection which is a danger spot. The driver knows the line of cars on the right may hide hazards from view. The driver removes his/her foot from the accelerator and places it lightly on the brake. When the driver first sees the hazard, the reaction time has been reduced because the driver removed his/her foot from the accelerator. Therefore, the stopping distance has been reduced and he/she now has a better chance of stopping before the crosswalk, rather than across the intersection.

Speed, weight and stopping

If the vehicle's:	Then to stop, you need:
weight is doubled	double the braking force
speed is doubled	four times the braking force
weight AND speed are doubled	eight times the braking force

Braking

Bringing a vehicle to a complete stop on a level roadway usually requires only a single application of the brakes. The degree of application will be determined by the speed, weight and degree of emergency.

When the speed of the vehicle has been decreased sufficiently, ease off the amount of brake application and the actual stop will be gradual. The professional driver can perfect these stops by practising the amount of brake application release to prevent a jerk-back at the actual stop. This braking skill, coupled with factors of:

- looking ahead to time stops,
- maintaining safe following distance, and
- setting speed in relation to the distance you can see ensures a smooth stop every time (most passengers judge the driver's skill based on this).

Stopping on an icy road surface will require you to threshold brake to prevent the wheels from locking up. On vehicles equipped with anti-lock brakes, apply according to the vehicle manufacturer's instructions. A slow revolving wheel on an icy surface will be more effective than a locked wheel skidding on icy surfaces. To proceed down a steep grade, select a gear low enough to control the speed (usually one gear below the one you would use to climb the same hill) and use engine retarder brakes if so equipped. This should reduce the need to use your brakes to a point where they will overheat and your air supply will not be seriously depleted.

If you reach an unsafe speed while descending a downgrade on a highway, apply the brakes to reduce your speed and downshift to a lower main gear.

If you are unable to stop to prevent a collision, the fact that you were travelling downhill is no excuse; your speed should have been adjusted to the condition.

In normal stopping, the brake components heat up. Heat will continue to build up with excessive hard braking until it exceeds the capability of the brake components to absorb and dissipate the heat. As brake drums heat up, they expand away from the brake linings. Too much heat can result in brake fade, brake damage and/or brake failure. Brake components or tires may actually catch fire. The highest brake temperatures occur when braking from highway speeds while on long downgrades, or from repeated use of the brakes without enough cooling time between applications.

Note: Trailers weighing over 1,360 kg (3,000 lb.) must be equipped with service brakes.

Large vehicles such as truck-trailer and semi trailer units have engine governors which control the maximum rpm at which the engine may be operated. When descending steep grades, special caution should be taken by maintaining correct speed in relation to gear selection to keep the engine rpm at least 200 to 300 below the maximum governed rpm. In other words, if the momentum of the unit is allowed to push the engine over its governed speed, engine damage could occur.

Retarders

Retarders are designed to provide auxiliary slowing of the vehicle, such as for controlling the speed on long downgrades without the use of the main braking system. Engine retarders (also known as engine brakes) help to save the main braking system for emergency stopping.

Drivers of trucks equipped with engine brake retarders must avoid unnecessary use of these systems in cities and residential areas. The use of retarders on vehicles which are inadequately muffled results in a harsh irritating noise. The engine brake retarder develops its retarding efficiency at higher engine rpm, therefore, gear selection is important. The gear selected to descend the grade is usually determined by the driver's decision of the gear ratio needed to climb the grade. Gear selection should be made before descending the grade, rather than on the downgrade, to minimize the chance of missing a shift. Be cautious if you're using retarders/engine brakes on slippery road surfaces.

Some can actually cause the drive wheels to lock up, stalling the engine, and can result in loss of control or even cause a tractor/trailer to jackknife. The driver of a truck equipped with a retarder system must be familiar with the manufacturer's recommended use of the retarder under all road and weather conditions.

Combination braking

In a combination of vehicles (such as a truck and trailer, or power unit with a semi trailer unit) equipped with an air brake system, the trailer brakes are applied along with the tractor brakes by use of the foot control valve. This is often referred to as "balanced braking." The application pressure of the trailer brakes is equal to the application pressure of the tractor brakes. The trailer brakes may be applied independently of the tractor brakes by use of the hand control valve.

If the driver wishes, the amount of application on the trailer brakes may be increased during a foot valve application by using a higher application with the hand valve. Trailers equipped with electric or vacuum brakes are operated in a similar manner.

Brakes must be applied cautiously when the vehicle is negotiating a curve or travelling on wet or icy surfaces. Over-braking could result in jackknifing or skidding.

Water on roadways

Water entering brake drums will reduce the braking effort, so avoid running through large amounts of water whenever possible. Place a slight drag on the brakes when it becomes necessary to run through water, to reduce the amount of water admitted to the drums and shoes. During excessively wet conditions, or after passing through water, test the brakes. It may be necessary to drag the brakes slightly for a short distance to dry them out and restore normal braking. Always reduce your speed before driving through large pools of water on the road.

Antilock brake system (ABS)

An ABS is an electronic system that monitors wheel speed at all times and controls wheel speed while braking. If it detects a wheel locking up during a brake application, the system releases brake pressure to that wheel only. This keeps the wheel from skidding and increases vehicle stability and control during emergency stops and in adverse situations such as on wet or icy roads, through curves or during lane changes. The air brake system remains the same with the addition of the ABS components.

ABS indicator lights

ABS indicator lights are amber-coloured and marked with the letters ABS. They are there to tell you that the ABS is working properly. Know where the ABS indicator light is on every vehicle you operate and how to check that it's working properly. The lights are located on the instrument panel of trucks. Buses and truck tractors are dash mounted and on the exterior of trailers near the red side marker on the left rear side of the trailer. Converter dollies have a light located on their left side. If the vehicle you drive was built after March 1, 2001, and is equipped to tow a trailer, it will have two ABS lights on the dash, one for the towing vehicle and one for the trailers.

How ABS indicator lights work

When ABS is working properly, each time the vehicle ignition switch is turned on and kept in the on position the ABS indicator lights will turn on for a few seconds then turn off. One exception is for towing vehicles equipped with constant power supply (even with key off) through the trailer electrical cord, which may be required for safety or security on certain trailers or loads, such as gasoline tankers, ammunition loads and others. In this case, the ABS indicator light check can be accomplished by disconnecting and reconnecting the power connector (while following appropriate precautions for the powered systems).

When power is supplied to the ABS controller the ABS indicator lights momentarily turn on as the ABS automatically conducts a self test. If the light does not come on at all there could be a problem with the indicator light, the wiring or the ABS controller. When an ABS malfunction is detected the ABS indicator light stays on. If no malfunctions are detected the light turns off after a few seconds.

ABS on trailers also receive backup power through the brake light circuit. In some cases, certain types of malfunctions can cause the ABS indicator light to turn on each time the brake is applied. While the ABS may be partially working, in this condition it is not working properly. Whenever the ABS indicator light turns on when you are driving there is an ABS malfunction present that requires repair. Make sure you have the ABS problem fixed as quickly as possible. Remember, if the light does not work you will never know if the ABS stops working.

Know your ABS is working – check it during your trip inspection!

Knowing your ABS is working can give you peace of mind and it can help you when you need it. Always confirm your ABS is working – see that your ABS light(s) turn on then off when power is applied during your trip inspection. Failure to ensure the ABS system functions as prescribed by the manufacturer will result in a defect being identified on a CVSA road-side inspection.

Passing and being passed

Passing: On occasion, drivers of commercial vehicles are guilty of breaches of driving etiquette, which can irritate the motoring public. For example, one commercial vehicle may pass another when the speed differential is so slight that it takes a long time to complete the pass. In doing this, the passing truck occupies the fast traffic lane when it is not absolutely necessary, thus causing the following traffic to reduce its speed, resulting in bunching. Bunching on freeways and fast highways is a potential hazard.



Being passed: Do not direct the vehicle following you to pass; let the driver make their own driving decision. You may be encouraging a driver with limited experience to drive over their ability.

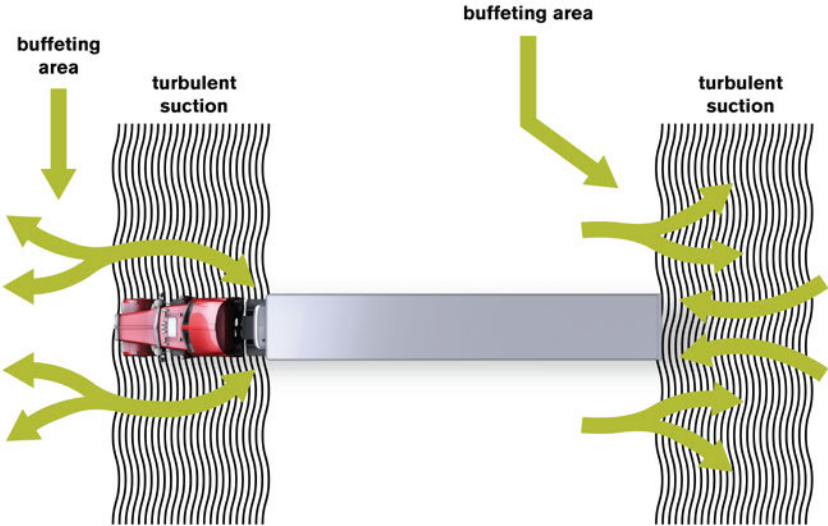


Do not encourage following traffic to overtake your vehicle when it would necessitate their crossing over solid lines.

When the driver does make their move, help them complete the pass. Reduce your speed if necessary. While driving beside your vehicle, the driver who is attempting to pass you is occupying the space you may need for an emergency out!

Large commercial vehicles have a louder exhaust resonance than passenger vehicles. Their size and highway noise often give the impression that they are travelling faster than they actually are. When passing passenger vehicles, the professional driver should observe speed limits carefully, and avoid startling the inexperienced or nervous driver.

Large commercial vehicles travelling at high speeds create varying degrees of air turbulence that can be hazardous to smaller passenger vehicles. A car riding directly in front of the truck, beside the fuel tank area or at the immediate rear of the trailer, is in an area of air turbulence. Be alert for the driver who rides in these areas. They may be forced off a narrow roadway or drawn into the side of the vehicle.



Passing on the right

When passing other vehicles, you must always pass on the left except when:

- There are two or more traffic lanes in your direction of travel, such as multi-lane streets and highways.
- The vehicle ahead is about to make a left turn and it is possible to pass safely on the right without driving on the shoulder.

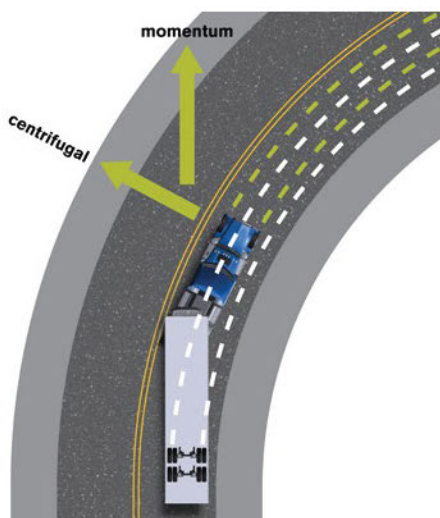
You must not drive off the roadway onto the shoulder to pass another vehicle.

Alleys, lanes and side roads

The driver of a vehicle shall, before entering a street from a lane or alley within a city or town, yield the right of way to pedestrians and vehicles, and shall not proceed until safe to do so.

Curves and jackknifing

A vehicle travelling in a straight line develops a force called momentum. The higher the speed, the greater the force. When the vehicle enters a curve, it must overcome the force of momentum if it is to change its direction from the straight line in which it has been travelling. A vehicle travelling around a curve develops a force called centrifugal force. The greater the speed at which a vehicle travels around a curve, the greater the centrifugal force developed. This centrifugal force pushes outward from the centre of the curve and tries to keep the object on its original straight line.



The degree of control you are able to maintain over your vehicle is determined by the amount of traction your vehicle's tires have with the road surface. Entering a curve too fast can result in skidding or a rollover. Applying brakes in a curve can cause a skid or a jackknife.

To avoid rolling, skidding or jackknifing, reduce your speed before reaching the curve. Enter the curve at a speed that will not require braking. This will permit you to apply gradual power in the curve. The application of a small amount of power in a curve counteracts the centrifugal force.

For the safe negotiation of curves, here are some tips to follow:

- Spot the curve in advance by heeding the curve ahead warning sign and suggested speed sign.
- If speed adjustment is needed, slow down before the curve.
- Accelerate when in the curve as conditions permit.

Sharing the road

As a professional driver, you are responsible for watching for other vehicles including motor vehicles, bicycles and motorcycles. Treat them courteously, since they have the same right to use the streets and highways, providing they are complying with the laws. Like a pedestrian, a bicycle or motorcycle is no match for a car or truck. If there is a collision, the cyclist is almost always injured or killed.

A problem for drivers is the inability to **see** the cyclist. It is your responsibility to be alert! Motorcyclists need a complete traffic lane: do not try to share a lane with one.

Motorcycle size

A motorcycle's smaller size makes it appear to be farther away and moving slower. Compensate for this illusion by allowing more time and distance for stopping. Most motorcycles can stop more quickly than cars. Unless you've allowed sufficient following distance, you might not realize the motorcycle has stopped before it's too late to avoid a collision. They may hit a bump, rut, a railway track or a hole and swerve or upset.

Check twice, save a life

During motorcycle season, check twice before making a lane change or turn; once for cars and trucks, once for motorcycles and bikes. You can easily lose a motorcycle in your blind spot.

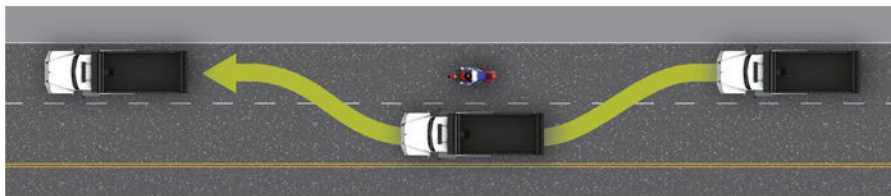
Passing

When you pass, especially on gravel or in wet weather, remember that you may throw dirt or water at the motorcyclist. Pass the motorcyclist as if they were a car or truck. Don't crowd them and be well ahead before you pull back in.

If a motorcyclist is riding in the right wheel track, don't pass in their lane. Motorcycles, like cars, are entitled to a full lane. Another danger of passing too closely is creating turbulence which can cause the motorcyclist to wobble or lose control.

Sometimes a motorcycle's turn signals are hard to see. Watch the driver. If they shoulder check or tilt their machine, they are probably going to change lanes or turn.

After dark, particularly in city areas, be alert for bicycles and mopeds.



Getting started

Start in low gear, using only enough power to place the vehicle in motion. Don't rev the engine up in this gear to maximum rpm, but shift to the next higher gear. Progress through each higher gear, increasing vehicle speed and engine rpm together. As each shift is completed, engage the clutch smoothly to avoid shock to the drive train, load and passengers.

Using an engine tachometer in shifting

Most engine manufacturers recommend 85% of governed engine speed to be the most efficient for normal operation of a vehicle. Knowing the governed speed, a simple calculation will give the most efficient operating speed. When driving, a glance at the tachometer will indicate the necessity of a change in gear.

All transmissions have a known split between gear ratios and knowing your transmission will give you the drop in revs required to make a clean shift.

Shifting down is also made easier by a tachometer. In reversing the above procedure, knowing the split or rpm difference between the gears, a driver will be able to increase the engine revs to make a clean downshift.

Shifting up through the gears (main transmission)

In each gear, sufficient speed must be built up to avoid labouring the engine in that gear; speed must be sufficient so the engine will not be laboured when the next higher gear is reached. Double-clutching should be used on most manual-shift truck transmissions. Shifting is faster and smoother when the double-clutch procedure of depressing the clutch twice with each change of gears is used.

Shifting down

Be alert to changing conditions which may require reduced speed and shifting to a lower gear. Don't wait until the engine starts to labour before shifting down. For dangerous downgrades, gears should be downshifted to make use of engine braking. A good driver will downshift before passing the crest of a hill because it's dangerous to downshift past that point. If you miss a gear you're in trouble.

In addition, if your brakes fail on a level road, you should shift to a lower gear and use engine compression to help stop the vehicle.

Your knowledge and ability to use the clutch and to select and shift gears, as would be required in the normal operation of the vehicle, will be observed during the road test.

Visibility and safety

Drivers of large trucks and buses generally have a better view of the road, traffic ahead and to the sides, than the passenger car driver. The seated height in most instances is higher and windshields are larger.

Outside rear-view mirrors reflect a large area, and if properly mounted and adjusted, give the driver a clear view of the roadway behind, **except** for the blind area immediately behind the vehicle.

Operators of Class 1, 2 and 3 vehicles, school buses and vans must depend on their mirrors to a far greater extent than drivers of passenger cars in order to observe traffic conditions behind them while manoeuvring. It is vital that these be maintained in good condition at all times. Some drivers use a convex mirror which gives them a much better and clearer view of traffic beside and behind

than the ordinary mirror. This is a good practice and you should learn to use the convex mirror whenever manoeuvring in confined spaces, or where there is a chance of other traffic or pedestrians getting in the way. Vehicles transporting wide loads must be equipped with mirrors which extend beyond the extreme portion of the load to give clear visibility to the rear at all times.

Parking

Never park your vehicle in a manner that would block other drivers' views of an intersection. Preferably park 153 m (500 ft.) or more away from an intersection when stopping for a break.

To ensure that your vehicle will stay in position when parked, the following precautions must be observed:

1. Set the parking brake(s). When towing a semi trailer you should apply the spring brakes on both power unit and semi trailer when parked.
2. When on a grade, place a manual transmission in the lowest forward gear if parked facing uphill, or reverse gear if parked facing downhill.
3. If the vehicle is equipped with a two-speed axle, the axle must be in low range.
4. If the vehicle is equipped with an auxiliary transmission, the transmission must be in low range.
5. If the vehicle is on a grade, turn the front wheels in the appropriate direction.

With curb

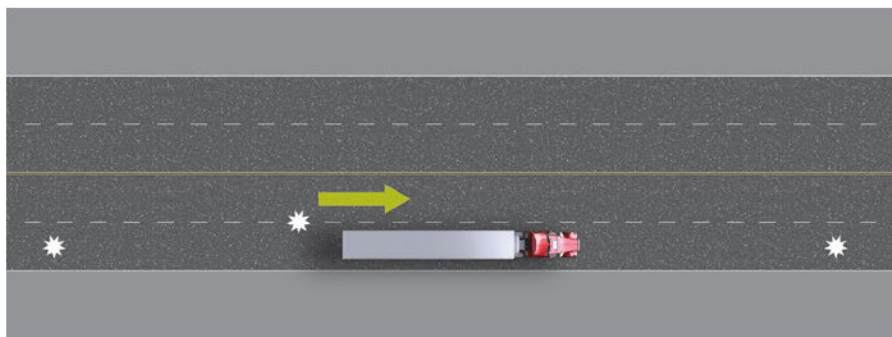
Downhill: Turn front wheels to the right. Uphill: Turn front wheels to the left. (Allow vehicle to roll until front wheel touches curb.) Block vehicle.

No curb

When parking downhill or uphill with a straight truck, turn front wheels sharply to the right. Block the wheels. For a tractor trailer, leave the wheels straight, apply the parking brake and block the wheels.

6. Under no circumstances should you use the trailer hand valve to hold a parked vehicle which will be left unattended.
7. When a vehicle is parked on a highway, it must be illuminated to warn other motorists of an obstruction as follows:
 - If the vehicle is completely clear of the travelled section, not disabled, and will be parked for less than four hours – activate hazard warning lights.

- If the vehicle intrudes into the travelled section, is disabled or will be parked for more than four hours, it's recommended to place flares or reflective triangles as follows:
 - One on the traffic side of and 4 paces (approximately 3 m or 10 ft.) from the stopped commercial vehicle in the direction of approaching traffic;
 - One at 40 paces (approximately 30 m or 100 ft.) from the stopped commercial vehicle in the centre of the traffic lane or shoulder occupied by the commercial vehicle and in the direction of approaching traffic; and
 - One at 40 paces (approximately 30 m or 100 ft.) from the stopped commercial vehicle in the centre of the traffic lane or shoulder occupied by the commercial vehicle and in the direction away from approaching traffic.



Backing

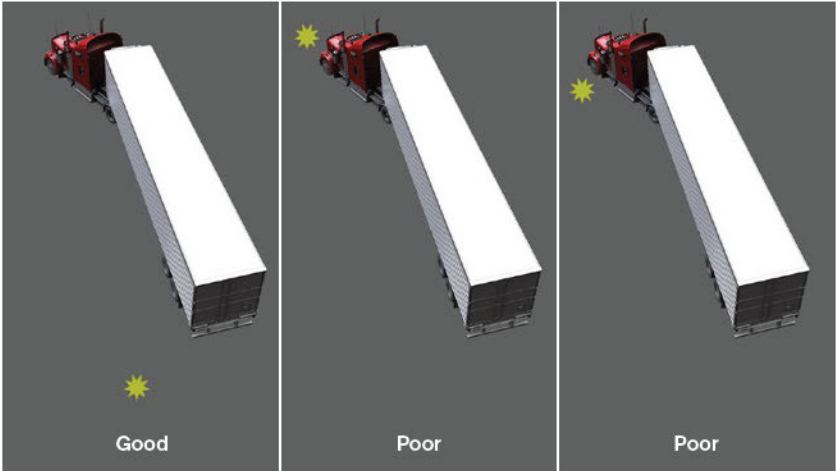
The driver is always responsible when backing.

Backing becomes dangerous if you don't ensure the way is clear. Investigations often show collisions that happen when a vehicle is backing is a result of the driver not paying attention.

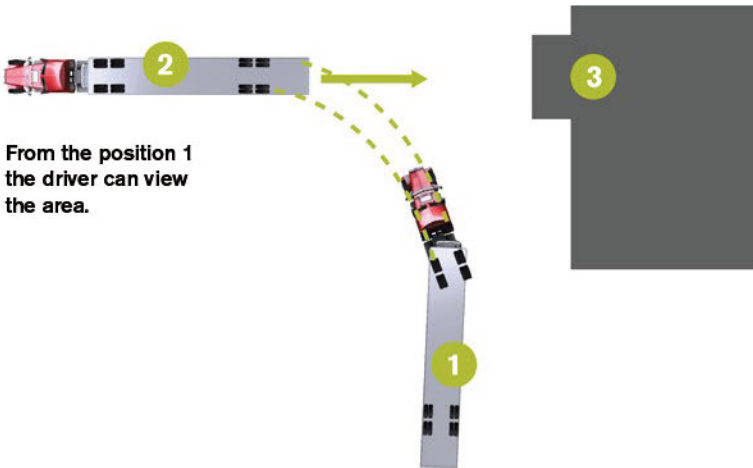
All drivers can reduce collisions when backing if they follow these backing rules:

- Avoid unnecessary backing – plan ahead to minimize backing distances.

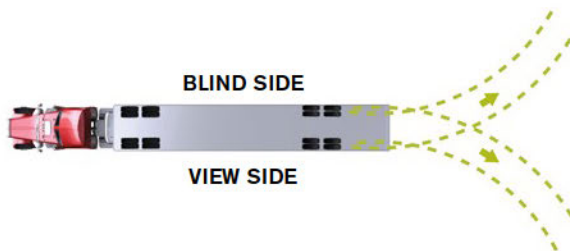
- Use a guide whenever possible. The guide should have a clear continuous view of the backing path the vehicle will follow and should be visible to you throughout the manoeuver.



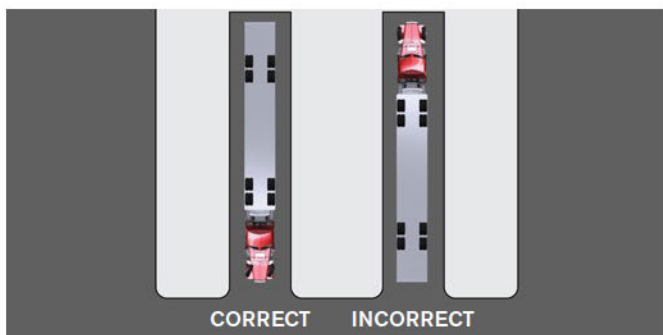
- Whenever possible, plan your approach so you can view the area into which you will be backing.



- Don't back the vehicle to the blind side when it is possible to back to the view side.



- Always back out of traffic rather than into traffic. The left driver has backed out of traffic. When they leave the laneway, they will be able to observe traffic readily. The right driver has taken the easy way out of traffic, but now faces the problem of backing into traffic to leave the laneway.



Before backing into a loading dock, you should:

- turn on your four-way flashers (hazard lights)
- sound your horn
- back the vehicle to the view side
- have someone guide you in

Before backing a vehicle without a guide, you must:

- Set the park brake.
- Step out of the vehicle and look at the backing area or hazards.

- Check for clearances and obstacles above, below, to the sides, to the rear and to the front of the vehicle.
- Enter the cab: if there is no guide present, sound horn before moving. Observe both mirrors while backing slowly. If the backing distance is long, stop at intervals and re-check behind, above, below, to the side and ahead. Rather than making one long backing manoeuver, it is safer to make a series of short backing manoeuvres.

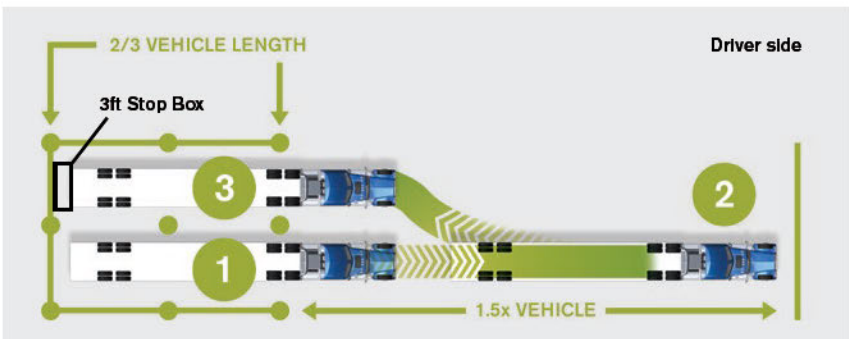
A human life is worth more than the few extra moments it takes to be sure the way is clear. Remember, even with a guide, you are responsible for any collision which might occur as a result of your actions.

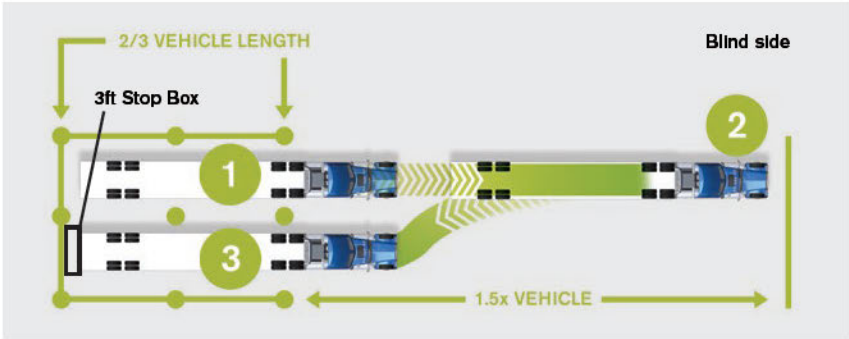
Offset backing (driver side)

There are two types of offset backing: driver side, where you offset back to the left; and blind side, where you offset back to the right.

Here is the procedure for offset backing (driver's side):

- Drive straight forward until the vehicle is in a straight line.
- Turn the wheel all the way to the right, angling the trailer toward the destination.
- Back up while watching the left mirror until the outside edge of the tractor tires lines up with the middle of the landing gear.
- Stop and turn the wheel as far to the left as possible.
- Back up until the tractor is straight and in line with the trailer.
- Straighten the wheels. Look out both mirrors while slowly backing toward the destination.



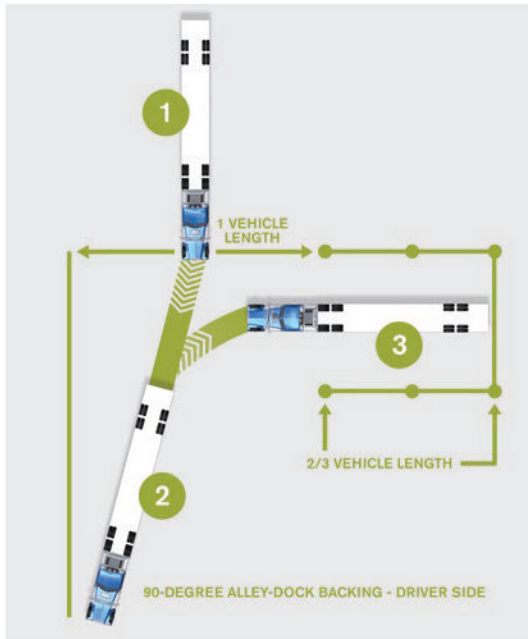


Alley dock (driver's side)

When performing an alley dock, backing from the driver's side (left) is recommended. Reversing to the left provides a clear view in the left mirror of the space you are reversing into.

Alley Dock Backing Procedures

- Align the vehicle with the target space (in the direction of your stopping point). This must be defined (3.5 and 3.7 metres wide) and be of sufficient depth to accommodate the entire length of the tractor-trailer. Activate warning flashers.
- Exit the vehicle and walk around and check for obstacles and clearance.
- Re-board the vehicle, sound horn and recheck mirrors before reversing.
- Shift into reverse and back up slowly.
- Look out the driver's window to monitor the rear of the trailer and use mirrors to guide your backing.
- Make slight adjustments to the steering wheel to the left if the turn is sharp, or to the right if the turn is wide.
- Stop the vehicle when the desired position is reached.



Tires

The amount of control the driver can maintain over a vehicle depends upon the amount of traction between the tires and the road surface.

Tire pressure and tire conditions are important factors in safe vehicle operation.

About pressure

The rotation of the tires under load causes a flexing of the casing. This flexing causes internal friction which generates heat. The tires dissipate the heat to the atmosphere. If the correct tire size is used in accordance with the load carried and tires have the proper air pressure at the start of the trip, the heat build-up will reach a heat balance temperature for which the tire is designed. The cooling rate will balance the heating rate.

If the tires are under-inflated or over-loaded for their size, or are subject to too much speed, the flexing action will be increased. This will result in the heat build-up rate exceeding the cooling rate and the tire will overheat. As the heat builds up, it causes the air pressure within the tire to increase to pressures which are higher than that for which the tire is designed.

Bleeding pressure

If the tire has the correct pressure when it is cool, the heat build-up which is normal will cause the pressure within the tire to increase and reduce the amount of wall flexing, controlling the heat build-up. If the driver bleeds the pressure down on a warm tire, the cooling balance will be upset and the tire will generate more heat. **Never bleed down a warm tire.** Pressure should be checked and adjusted when the tires are cold.

Tire pressure and tire wear

Correct tire pressure is an important influence on tire wear and steering control. An over-inflated tire will result in centre tread wear. Over-inflation of a tire also results in less tread surface being in contact with the road surface, which reduces the amount of traction.

An under-inflated tire results in wear on the outer edges of the tread surface. On a wet road surface, an under-inflated tire will not squeeze the water out from under the tire surfaces as well as a correctly inflated tire will. If the tire is under-inflated, it has more chance of riding up on a film of water (hydroplaning). The amount of traction with the road surface would be greatly reduced, in turn reducing steering control.

Tire condition

Regulations define the limitations of tire wear and condition permissible for certain vehicle operation.

The professional driver must be familiar with the standards as defined in regulations for Vehicle Safety Inspection requirements.

Tire matching

Never mount bias and radial tires on the same axle. Always ensure tire diameters are within 12.5 mm (1/2 in.) of each other on a set of duals.

Carbon monoxide poisoning

Carbon monoxide poisoning is an ever-present danger when you operate a motor vehicle. It is odourless, colourless and tasteless, and therefore hard to detect. It is in the exhaust of every motor vehicle. This makes it essential that you keep a constant check on your exhaust system for leaks.

Never run your engine in a closed garage. Maintain good ventilation in the cab when you drive. Don't follow too closely behind another car that has a smoking exhaust.

If you get dizzy or drowsy while driving, stop, get out and get plenty of fresh air.

Fire

Fire prevention in and around a vehicle is easier and cheaper than fighting a vehicle fire. Practise the following rules:

- Never start a vehicle that has a fuel leak. Hose away or wipe up spilled fuel.
- Shut off engines when refuelling vehicles.
- Ground the fuel hose nozzle against the filler pipe of the truck tank before delivering fuel.
- Don't smoke in garages or near fuelling areas.
- Never throw cigarette butts out of cab windows. They could blow back into tarps or loads.
- Check tires often for low pressure. Soft tires build heat. Flat or soft tires, which have become overheated, should be removed immediately. Do not move the vehicle until the tires have cooled.
- Ensure parking brakes and service brakes are fully released. Dragging brakes generate heat and can ignite grease in hubs when the vehicle stops. Make frequent checks of hubs and brake drums for overheating.
- Keep fire extinguishers in good working condition.

Fire fighting

Fighting a fire efficiently requires quick thinking and fast action based on training. All drivers should inspect the fire fighting equipment on their vehicle daily.

Familiarization with types of fires that could occur on the particular vehicle being driven, together with a study of the following, could prevent the loss of a vehicle or personal injury:

- Water spreads gasoline or oil fires. Use extinguishers, sand or dirt to smother.
- Use extinguishers only enough to knock down flames; keep some in reserve for flare ups.

- Disconnect battery cables first for electrical fires. (Shutting off switches and disconnecting battery cables of vehicles involved in collisions can prevent fires caused by leaking fuel, etc.).
- In the case of fires occurring on combination units, if you are sure you can do so safely, disconnect the tractor from the trailer and separate the units to a safe distance apart.
- Whenever possible, fight fires with the wind at your back. (This lessens the chance of asphyxiation).
- In the case of under hood fires – don't throw the hood open. Raise the hood very slightly to fight the fire. If the hood cannot be raised, direct your extinguisher from underneath the vehicle or through the radiator.
- Have the first spectator call the fire department. Warn others of the danger of explosion of gasoline or flammable loads and advise them to keep back a safe distance.
- Don't risk your own life. Gasoline fires can spread rapidly or explode.



About fire extinguishers

Multi-purpose dry chemical (monoammoniumphosphate base) extinguishers marked B.C. extinguish grease, oil, gasoline and electrical fires. If the cylinder is marked A.B.C., it will also extinguish class "A" fires such as paper and cloth. The operator can use these extinguishers without fear of the contents being a health hazard or causing bodily injury.

Petroleum (flammable) hauling vehicles must have an extinguisher with a rating of not less than 20 B.C. or two of 10 B.C.

CO₂ extinguishers (carbon dioxide) must be used in open spaces. There is danger of smothering.

Vehicles required to carry a fire extinguisher

Every vehicle registered as a commercial vehicle transporting fuel petroleum products and many vehicles registered as public service vehicles, except trailers, must be equipped with a fire extinguisher of a design or type approved by Underwriters Laboratories, and the extinguisher shall at all times be kept in satisfactory operating condition. Most school buses are required to carry an operative fire extinguisher of at least 2A-10 B.C. If it is a 2000 or newer bus, an operative fire extinguisher of at least 3A-40 B.C. is required.

Extinguishers must be secured in a quick release holder in view of the driver.

Vehicles required to carry flares

- Any vehicle greater than 2,060 mm (81 in.) in width and operating outside the corporate limits of a city, town or village is required to carry three flares consisting of:
 - three reflectors;
 - three advanced warning triangles; or
 - three electric lanterns.

All must be equipped with or carried in a suitable container.

- Flares which are reflectors or advanced warning triangles are required to emit a red reflection visible from a distance of 150 m on a clear night when illuminated by headlights.
- Flares which are electric lanterns are required to emit a red light visible from a distance of 150 m on a clear night and be capable of operating continuously for at least 12 hours.
- Flares must be placed in accordance with point 7 on page 37.

A growing priority: fuel efficiency

As fuel supplies decline and prices fluctuate, independent drivers and major transport companies are struggling to accurately budget for fuel costs – and are actively searching for ways to keep those costs under control.

Of course, money isn't the only consideration. The environment is a key factor, too. Nearly 30% of all greenhouse gas emissions in Canada are produced by the road transportation sector, a significant portion of them from heavy-duty vehicles. Fortunately, there are many practical decisions you can make as a driver to be more fuel-efficient – from vehicle equipment to driving techniques and behaviours.

Making smart choices

You may not be able to fight rising fuel prices, but there are steps you can take to reduce the amount of fuel you burn:

- Read the owner's manual for your vehicle and follow the manufacturer's driving recommendations.
- Use summer fuel whenever possible as it can improve fuel economy by as much as 3%.
- Optimize tractor aerodynamics: reducing aerodynamic drag by 10% can increase fuel efficiency by 5%.
- Use air deflectors as they reduce air pressure on a vehicle and provide fuel savings in the three to 10% range.



- Consider using doubles or triples instead of single trailers where applicable.
- Use rib design tires in all positions as they are more fuel efficient than using lug tires.
- Consider using low rolling resistance tires.
- Choose lighter truck specifications where appropriate. Less vehicle weight means better fuel economy and can also offer more freight capacity, increasing income per kilometre travelled.
- Use accessories such as oil pan heaters and block heaters (to help with cold starting and hasten lubrication), fuel heaters (to prevent fuel gelling), thermostatically controlled engine fans, winter fronts, battery blankets and in-cab auxiliary heaters to improve productivity and fuel efficiency.

Caring for your vehicle

Preventative maintenance plays a huge role in maintaining the health and efficiency of your vehicle. When your truck is serviced properly, you can run more efficiently and avoid unexpected downtime. Small problems should be fixed before they become bigger – and more expensive. In addition to regularly scheduled maintenance, you should also:

- Ensure your tires are inflated according to the manufacturer's recommendations – 1% of fuel is wasted for each 10 pounds per square inch of underinflation.
- Before you hit the road, make sure you've done a trip inspection – not only is it the law but it can also help you avoid unwelcome breakdowns during your travels.
- Perform a post-trip inspection to spot problems that could delay you next time.
- Ensure all fluid levels are correct – both underfilling and overfilling can damage your vehicle.
- Monitor your restriction indicator for signs of the air filter becoming plugged or contaminated.

Smart driving practices

Fuel efficiency starts when you turn your engine on. Proper warm-up helps lubricate components and seals, reducing wear and leakage.

Starting your truck properly can save money on fuel. Keep the following in mind:

- When setting your vehicle in motion, make sure you use zero throttle and are in a gear that doesn't need any throttle.
- Don't pump the throttle of a fuel-injected engine as the amount of fuel required for starting is pre-measured.
- Let your vehicle warm up for three to five minutes – if the temperature is below 0 degrees Celsius allow it to warm up until it reaches a safer operating temperature. Don't rev it, let it warm up gradually.
- Warm your vehicle up after the initial idle time by driving gently, don't try to get too much speed out of the engine by pushing the throttle down hard.
- Use cruise control where appropriate.
- Reduce your average speed – generally, for every 10 km/h over 90 km/h you use 10% more fuel.

- Change gears smoothly – shifting progressively will result in about 30% improvement in operating costs.
- Always use the clutch, failure to do so can wear the gear teeth down in the transmission.
- Practise progressive shifting. Shifting before you reach the maximum governed rpm (usually between 1200 and 1600) reduces equipment wear, decreases noise levels and saves fuel.
- Run the engine in the highest gear range to keep it in a low rev range.
- Use your retarder properly and turn it off when you don't need it – let the terrain work for you.
- Plan your route carefully: flat routes are more fuel efficient than mountainous routes and highway driving is more fuel efficient than inner city driving.
- Weather conditions affect fuel efficiency. Driving on snow-covered roads can increase fuel consumption by 15 to 20%.
- Choosing to drive a flat, multi-lane highway improves your fuel efficiency by:
 - four to 11% compared to a flat two-lane highway;
 - as much as 18% compared to a mountainous highway; and
 - 25 to 35% over taking a suburban route.

Idling: A special note

Idling a class eight truck engine burns up to four litres of fuel per hour at 900 rpm. Turn off your engine when you stop for any length of time – you will save fuel, reduce maintenance requirements, prolong engine life and prevent unnecessary emissions. If a 10-truck fleet were to cut idling by an hour a day for 260 days, it would save approximately 10,400 litres of fuel (\$11,440 at \$1.10 per litre). A 100-truck fleet would save \$114,400 and a 500-truck fleet \$572,000.

For more information about energy management and efficiency, visit the Natural Resources Canada website at: www.nrcan.gc.ca/energy/efficiency/transportation/7681

**Be
FleetSmart!**



Natural Resources
Canada

Ressources naturelles
Canada

Canada

3. Vehicle weights and dimensions

Vehicles are limited in height, width, length and weight by regulations under *The Highways and Transportation Act, 1997*. The following are only some of the regulations which will provide a professional driver with the basic knowledge required when driving vehicles that carry passengers or goods. The complete applicable act and regulations should be consulted for interpreting and applying the law in all cases. Provisions are made for the issuing of permits for the movement of vehicles carrying oversize or overweight loads. Regardless of licensing or permits issued, you must obey all posted signs which limit the dimensions or weight of loads on any portion of the highway.

To assist you in avoiding damage to your vehicle and its load, and possible injury to highway users, you must be alert to warning signs. This particularly applies to overweight loads which often strike overhead structures.

Interpretation and application of regulations

The following are some of the interpretations of terms used in *The Vehicle Weight and Dimension Regulations*.

“Act” means *The Highways and Transportation Act, 1997*.

“A-dolly” means a converter dolly that is towed from a single hitch located on the towing vehicle.

“Articulated bus” means a bus:

- (i) with an articulation point between the passenger-carrying sections of the vehicle;
- (ii) designed so that movement of passengers between the sections of the vehicle is possible at all times while the bus is operated on a highway.

“A-train” means a combination of vehicles composed of a truck tractor and a semi trailer towing either:

- (i) a semi trailer with an A-dolly; or
- (ii) a full trailer attached to the lead semi trailer in the same manner as if an A-dolly were being used.

“Axle” means an assembly of two or more wheels, which have a common axis of rotation, through which weight is transmitted to a public highway.

“Axle group” means any number of consecutive axles on a vehicle through which weight is to be equally distributed and transmitted to a highway so that the difference in weight on each axle in any axle group is not more than 1,000 kg from an adjacent axle.

“Axle spread” means the distance between the extreme axle centres of an axle group.

“Axle unit” means:

- (i) a multiple axle group;
- (ii) a single axle;
- (iii) a single-half axle unit;
- (iv) a tandem axle group;
- (v) a tandem drive axle group;
- (vi) a tridem axle group;
- (vii) a tridem drive axle group; or
- (viii) a wide-spread tandem axle group.

“Box-length” means:

- (i) for a semi trailer, subject to subclauses (ii) and (iii), the distance from the front of the semi trailer to its rear, including the load but not including auxiliary equipment;
- (ii) for an A-train, B-train or C-train, the distance from the front of the lead semi trailer to the rear of the rearmost vehicle in the A-train, B-train or C-train, including the load but not including auxiliary equipment mounted on the lead semi trailer; or
- (iii) for a truck and trailer combination, the distance from the front of the load carrying area on the truck to the rear of the rearmost vehicle in the truck and trailer combination, including the load but not including auxiliary equipment.

“B-train” means a combination of vehicles composed of a tractor and a semi trailer towing another semi trailer attached to a fifth-wheel mounted on the rear of the first semi trailer.

“Bus” means a motor vehicle designed and intended to carry more than 15 passengers.

“C-dolly” means a converter dolly that:

- (i) has two parallel arms that connect to two hitches located on a towing unit so as to prevent any rotation in a horizontal plane through the hitch points;
- (ii) has drawbars that are within three degrees of level;
- (iii) meets the C-dolly specifications set out in Standard 903 of the Canadian Motor Vehicle Safety Standards, being SOR/93-146; and
- (iv) is used with the dolly axle locked in the zero steer position at all times while travelling if:
 - one or more of the axle locking mechanisms are not in working condition; or
 - the C-train is operated at a speed in excess of 50 km/h on any surface other than a dry, paved road.

“Combination of vehicles” means two or more vehicles joined together.

“Combined weight” means the sum of the gross weight for two adjacent axle units.

“Converter dolly” means a device consisting of one or more axles, a fifth-wheel assembly and one or more drawbars used to convert a semi trailer to a full trailer.

“C-train” means a combination of vehicles composed of a tractor and semi trailer towing a full trailer connected with a C-dolly.

“Drawbar length” means the distance from the mid-point of the axle unit on a converter dolly to the hitch point on the vehicle towing the trailer.

“Effective overhang” means the greater of the following:

- (i) the distance from the turn centre to the rearmost point of the truck, trailer or semi trailer;
- (ii) if there is a load on the truck, trailer or semi trailer, the distance from the turn centre to the rearmost point of the load.

“End dump semi trailer” means a semi trailer designed so that its cargo carrying area may be raised to allow the end dumping of its load.

“Farm equipment” means equipment that is designed and intended for use in farming operations but does not include any of the following:

- (i) a truck;
- (ii) a semi trailer;
- (iii) a full trailer;
- (iv) a pony trailer;
- (v) farm equipment that is loaded on a truck, trailer or semi trailer; or
- (vi) farm equipment that is towing equipment other than farm equipment.

“Fifth wheel assembly” means a coupling device that:

- (i) is securely attached to the chassis of a vehicle; and
- (ii) consists of a skid plate, associated mounting brackets and a latching mechanism that couples or connects to a kingpin located on the other vehicles or component of the other vehicles, for the purpose of supporting or towing a semi trailer.

“Full trailer” means a vehicle that is designed to be towed by another vehicle and is designed so that the whole of its weight is carried on its own axles and includes a semi trailer and a converter dolly hitched together, but does not include:

- (i) recreational vehicles;
- (ii) agricultural implements;
- (iii) timbers or metal beams with wheels attached and used for the purpose of moving buildings;
- (iv) asphalt distributors used for the construction or maintenance of bituminous surfaced highways; or
- (v) pony trailers.

“Gross vehicle weight” means:

- (i) the combined weight of a vehicle and the load carried on that vehicle; or
- (ii) the combined weight of two or more vehicles coupled or joined together and the combined weight of the loads carried on each of those vehicles.

“Hitch offset” means the distance from the trailer turn centre to the hitch point used to tow a trailer.

“House trailer” means a vehicle drawn by a motor vehicle and designed and intended for use as living quarters or for office space.

“Interaxle spacing” means the distance separating centres of the nearest axles in two adjacent axle units.

“Kingpin setback” means the longitudinal distance from the centre of the kingpin on a semi trailer to any point on the semi trailer, including its load, in front of the kingpin measured in the arc from the centre of the kingpin to the most distant point on the trailer or load in front of the kingpin excluding any auxiliary equipment, heater or refrigeration unit or aerodynamic device that is attached to the front of the semi trailer and that is not designed for the transportation of goods.

“Lift axle” means an axle of a vehicle that is constructed with a device capable of raising the wheels on that axle from contact with the highway.

“Motor vehicle” means a vehicle propelled by or driven by any means other than by muscular power.

“Multiple axle group” means an axle group of three or more axles with an axle spread of not more than 4.5 m, but does not include a tridem axle group.

“Pony trailer” means a vehicle that is:

- (i) designed and intended to be towed by another vehicle;
- (ii) designed so that most of its weight is carried on its axles;
- (iii) equipped with a rigid drawbar; and
- (iv) equipped with only one axle unit.

“Provincial road” means any public highway shown as a provincial road on the current official highway map.

“Road construction and maintenance equipment” means self-propelled or towed equipment used directly in road construction or maintenance, but does not include a truck, trailer, semi-trailer or any road construction or maintenance equipment transported on a truck, trailer or semi-trailer.

“Semi trailer” means a vehicle with one axle unit that is designed for the transportation of goods and that is intended to be towed by another vehicle in a manner so that a substantial part of the weight of the vehicle being towed rests on or is being carried by the towing vehicle or trailer converter dolly through a fifth wheel assembly, but does not include:

- (i) a recreational vehicle;
- (ii) an agricultural implement;
- (iii) timbers or metal beams with wheels attached that are used for the purpose of moving buildings;
- (iv) an asphalt distributor used for the construction or maintenance of bituminous surfaced highways;
- (v) a converter dolly; or
- (vi) a pony trailer.

“Single axle” means:

- (i) any individual axle; or
- (ii) any combination of two or more axles whose centres are less than 1 m apart, but does not include any axle within a tandem, wide-spread tandem, tridem or multiple axle group.

“Single-half axle unit” means a group of two axles with four wheels on one axle and two single wheels on the second axle:

- (i) whose centres are not less than 1 m and not more than 1.85 m apart; and
- (ii) that is not subject to the axle group weight distribution requirements for adjacent axles.

“Steering axle” means:

- (i) the articulated axle or axles of a motor vehicle that are controlled by the vehicle operator and govern the direction travelled by the motor vehicle; or
- (ii) an articulated axle on a trailer or semi trailer where the direction of travel of the trailer is governed by the towing unit.

“Tandem axle group” means a group of two axles:

- (i) whose centres are more than 1 m and not more than 1.85 m apart; and
- (ii) that is not part of a tridem axle or a multiple axle group.

“Tandem drive axle group” means a tandem axle group in which one or both axles in the group are connected to a power source that transmits tractive power to all wheels on that axle or those axles.

“Track width” means the overall width of an axle measured from the outside of the outside tire located on one side of the vehicle to the outside of the outside tire located on that axle on the other side of the vehicle at any point above the lowest point of the rim.

“Tractor” means a motor vehicle designed, and normally used, to pull a semi trailer (also known as a power unit).

“Trailer” means a vehicle without motive power that is designed to be towed by another vehicle.

“Trailer wheelbase” means, in the case of a vehicle with a gross vehicle weight exceeding 4,500 kg, the longitudinal distance from the turn centre of the vehicle to:

- (i) the centre of the kingpin of a semi trailer;
- (ii) the centre of the turntable of a full trailer; or
- (iii) the centre of the hitching device of a pony trailer.

“Tridem axle group” means an axle group of three equally spaced axles that:

- (i) has an axle spread of not less than 2.4 m and not more than 3.7 m; and
- (ii) is not part of a multiple axle group.

“Tridem drive axle group” means a tridem axle group in which all axles in the group are connected to a power source that transmits tractive power to all wheels on those axles.

“Truck” means a motor vehicle that:

- (i) is permanently fitted with a special purpose device for the transportation of goods; or
- (ii) is designed and normally used for the transportation of goods.

“Truck wheelbase or truck tractor wheelbase” means the longitudinal distance from the centre of the steering axle unit to the geometric centre of the drive axle unit.

“Urban municipality” means:

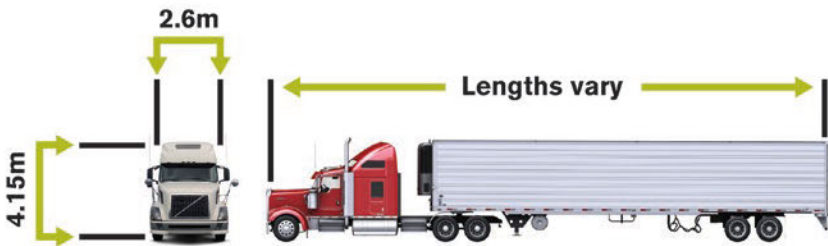
- (i) a city as defined in *The Cities Act*;
- (ii) a village, resort village or town as defined in *The Municipalities Act*; or
- (iii) a northern hamlet, northern village or town as defined in *The Northern Municipalities Act*.

“Vehicle” means a device or object in, on or by which a person or thing is, or may be, transported on a highway and includes:

- (i) any load on, or equipment attached to the vehicle; and
- (ii) any equipment that may be towed on a highway.

Vehicle dimensions

Subject to certain exemptions for farm equipment, “no person shall, without a permit issued pursuant to *The Highways and Transportation Act*, operate, move or cause to be operated or moved on or over a provincial highway or provincial road,” any vehicle, object, contrivance or combination of vehicles which exceed certain prescribed dimensions.



Length

- A single vehicle must not exceed 12.5 m in length.
- A combination of vehicles other than an A, B or C train must not exceed 23 m in length. You may tow more than one trailer. However, towing two trailers behind a car or light pickup increases the problems of stability in towing and braking. To make sure all vehicles are stable, the lead trailer must have at least two axles or be a fifth-wheel or gooseneck trailer. For example, if you are towing a camper and a boat, the camper must have two axles and must tow the boat. Fifth-wheel trailers or trailers with gooseneck hitches do not require two axles.

Note: Each jurisdiction has its own rules concerning towing more than one trailer. Check other jurisdictions' requirements before you travel there.

- A(n):
 - A or C train must not exceed 26 m in length.
 - B train must not exceed 27.5 m in length.

Flags

Red flags located on the extremities and along the edges of over-dimension loads are required for travel during daylight hours. These flags warn other traffic of the size and location of over-dimension loads so they can take the necessary precautions when meeting or passing the over-dimension load.

Warning: The driver of a truck which has an overhang over the rear axle must exercise caution in narrow roadways and alleyways when negotiating tight turns. Allowances must be made for the overhang to avoid striking objects such as poles, parked cars, buildings, etc.

Width

The maximum legal width, unless otherwise expressed in a permit, for a vehicle and its load on a provincial highway or provincial road is 2.6 m.

A rear vision mirror on the side of a vehicle may extend 30 cm past the width prescribed in the regulations or in a permit.

A tie-down device on the side of a vehicle may extend 10 cm past the width prescribed in the regulations or in a permit.

A tridem axle group or tandem axle group manufactured after June 1988 must not have a width less than 2.5 m measured from outside to outside tires.

A tandem axle group on a semi trailer manufactured after December 1991 must not have width less than 2.5 m measured from outside to outside tires.

A house trailer being moved between sunrise and sunset shall not exceed a width of 3.05 m.

A building, object or contrivance must not exceed 2.6 m in width.

Warning: Caution must be exercised by drivers of overwidth vehicles at narrow bridges, ravines, canyons and road construction areas. Drivers must also be careful that they do not strike signs, light poles or delineators with overwidth vehicles or loads.

Height

The maximum height of a vehicle, building, object or contrivance is 4.15 m unless otherwise expressed in a permit. You must know the total height of your vehicle and load at all times. Special attention should be given for low overhead clearance which may not be posted. A few examples of such hazards are:

- underpasses and tunnels
- fire escapes in alleyways
- boulevard tree limbs overhanging the roadway
- service station and store canopies
- low wires across residential driveways
- repair shop and warehouse doors

Warning: During winter months, snow buildup on the road surface can reduce overhead clearance.

Overheight

On all provincial highways and provincial roads, a permit is required when the height of your vehicle or load exceeds 4.15 m. Generally, overheight permits are restricted to non-divisible loads and loads deemed impractical to divide.

The overhead clearance on bridges and signs generally determines the maximum height allowable on a permit. However, heights allowed on many permits require that a driver must bypass certain structures that are lower than the height allowed on the permit.

Most power and telephone lines over provincial highways have a minimum clearance of 5.2 m. If the load exceeds this, the operator must check with SaskPower and SaskTel.

Some railway crossings have low overhead telegraph lines and overhead signals. When moving large loads over crossings, proper authorities should be contacted.

Buildings, objects or contrivances

A building, object or contrivance must not exceed 12.5 m in length, 2.6 m in width and 4.15 m in height.

Clearance lights

Clearance lights located at the extremities and along the edges of over-dimension loads are required for travel during the night or in periods of reduced visibility. These lights outline over-dimension loads and provide a warning to other traffic using the highway.

Amber flashing (rotating) lights

Amber flashing lights are required on most units carrying over-dimension loads. They must be located on the cab of the vehicle and spaced as widely as possible. These lights warn oncoming traffic of the presence of an over-dimension load, both during the day and at night.

Farm equipment

Farm equipment exceeding the prescribed dimensions may be towed or driven between sunrise and sunset on or over:

- Any public highway other than certain high-traffic volume designated highways.
- A designated highway except where it extends into the adjacent or opposite traffic lane.

Note: This exemption does not apply to farm machinery or grain bins when loaded on a truck, trailer or semi trailer.

Weight

Heavy vehicles are licensed in Saskatchewan according to their gross vehicle weight. Weight limits for both axle weights and gross weights are established separately under the act to protect highways and bridges. All drivers should be aware that these are separate requirements and that they cannot exceed a registered weight or a highway weight limit.

Saskatchewan has established different weight systems for various classes of highways. These are referred to as the Primary Highway System, the Secondary Highway System and the Municipal Highway System. Primary highways allow heavier gross weight limits than secondary highways.

Weight limits

For more information on weights and dimensions, obtain a copy of the Saskatchewan Truckers' Guide at www.saskatchewan.ca/highway-weights. If you have questions about weights and limits, contact the Ministry of Highways' Regulations, Policies and Programs inquiry line toll-free at 1-866-933-5290 or by email at mhitrucking@gov.sk.ca.

Warning: The maximum weights allowed on public highways and bridges are subject to change. Spring road bans, as designated by the Saskatchewan Ministry of Highways and Infrastructure, usually come into effect sometime in the months of March and April. For further information, contact the Highway Hotline at 1-888-335-7623. The conscientious, professional driver should stay knowledgeable about current weights by occasionally contacting the Saskatchewan Ministry of Highways and Infrastructure.

Overweight

Overweight permits are restricted to non-divisible loads and loads considered impractical to divide. Overweight permits are subject to certain conditions. Check with the SGI Permit Office at 1-800-667-7575.

Weight stations

Truck operators must report to weigh scales when so directed by an official highway sign.

4. Vehicle condition

Periodic Motor Vehicle Inspection (PMVI) Program

The following vehicles are required by regulations to be periodically inspected:

Description	Validation Term
Taxi (PT), Limousine (PB) or Rideshare (LV with TNC indicator)	12 months
Bus / Van registered in a commercial class (PC, PB and PS), operating within Saskatchewan only	12 months
Bus / Van registered in a commercial class (PC, PB and PS), operating extra-provincially	6 months
Any vehicle with a seating capacity of 15 or more, including driver	12 months
Power Units registered in a commercial class (A, C or D) at or above 22,000 kg, operating within Saskatchewan only	6 months
Trucks registered in a commercial class (A, C or D) at or above 22,000 kg, operating within Saskatchewan only	12 months
Power Units registered in a commercial class (A, C, D or LV) at or above 11,794 kg and operating extra-provincially	6 months
Trucks registered in a commercial class (A, C, D or LV) at or above 11,794 kg and operating extra-provincially	12 months
Trailers registered in a commercial class (TS), dollies, jeeps and boosters equipped with air brakes	12 months
Liquefied Petroleum Gas (LPG), Compressed Natural Gas (CNG) and Liquefied Natural Gas (LNG)	5 years

Please Note: Inspections completed on Power Units under Saskatchewan's Preventative Maintenance Inspection (PMP) program are valid for 12 months. Please check the requirements of the jurisdiction in which you are planning on travelling to ensure you're in compliance.

Other types of inspections

Total Loss Vehicles: A total loss vehicle operated on a highway must have a valid inspection certificate issued by the administrator after the occurrence that caused it to become a total loss vehicle.

First Time Registered (FTR) Vehicles: All vehicles that have not been previously registered in Saskatchewan, or have most recently been registered in another jurisdiction, are required to be inspected under the FTR program. The inspection is valid until it becomes a First Time Registered vehicle again.

Note: An inspection on any type of vehicle can be requested by the administrator or enforcement at any time.

Inspections are performed at certified Vehicle Safety Inspection Stations by certified mechanics.

For all items requiring inspection, the method of inspection and standards used are prescribed by regulation. The program is monitored by safety officers who may re-inspect previously inspected vehicles as well as the operation of the stations.

Vehicles passing inspection are given a certificate which should be carried in the cab of the vehicle. On semi trailers, the inspection certificate should be kept inside the document holder that is attached to the exterior of the trailer. A decal indicating the month and year the inspection expires is affixed to the left window on power units, right window on buses and school buses, and to the left front corner of semi trailers. Total loss and first-time registered vehicles are not required to have a decal or to carry a certificate in the vehicles.

Operators should be aware of when their inspection certificate expires and report to an inspection station before the vehicle is due for the next inspection. No person shall operate a vehicle which is required to be inspected and no owner shall allow such vehicle to be operated, unless the vehicle has been inspected and issued a valid inspection certificate.

Should you require any additional information, please call SGI's Vehicle Standards and Inspection department at 306-775-6188.

Trip inspection standards

Under regulations, all commercial vehicles (trucks/power units) with a registered gross vehicle weight of more than 11,794 kg, buses with a seating capacity of more than 10 people, and any trailers or semi-trailers being towed, must be inspected by the driver or a qualified person once in every 24-hour period while the vehicle is in use.

This inspection must be conducted in accordance with the applicable inspection schedule:

- Schedule 1 – Applies to trucks, tractors and trailers or combinations of them exceeding a GVW or RGWV of 11,794 kg.
- Schedule 2 – Applies to buses designed, constructed and used for the transportation of passengers with a designated seating capacity of more than 10, including the driver, but excluding the operation for personal use, and also applied to any trailer towed by a bus.

- Schedule 3 – Applies only to a motor coach equipped with air ride suspension, air brakes and automatic brake adjusters. Any trailer towed by a motor coach must be inspected in accordance with Schedule 2.

Each inspection schedule lists minor and major defects for each inspection item. Minor defects must be repaired before the next trip inspection. If a major defect is found, the commercial vehicle cannot be driven until the defect is repaired.

All details of the inspection, including any defects, must be recorded on a trip inspection report form, either on paper or electronically. The regulations do not state what type of form must be used; however, whichever form you choose, it must include the following information:

- licence plate or unit number of the vehicle and any trailers being towed by that vehicle
- odometer reading of the vehicle
- carrier or company name
- inspection date and time
- inspection location
- name of the person conducting the inspection (printed legibly)
- declaration signed by the person conducting the inspection and the person driving the vehicle (if different from the person conducting the inspection) stating that the vehicle, and any trailers being towed, have been inspected in accordance with the applicable requirements

See Appendix A for a sample trip inspection report form.

Commercial vehicle operators are required to carry a copy of a completed trip inspection report for both the current and previous day, and the applicable inspection schedule. You must produce both of these documents at the request of a peace officer.

Please refer to *The Trip Inspection Regulations* for more information and copies of the applicable inspection schedules.

Note: There are some exemptions to the regulations. For more information, contact the Saskatchewan Ministry of Highways and Infrastructure at 1-866-933-5290.

Driver's responsibility

It's necessary to inspect your vehicle and your equipment no matter how efficient and thorough the maintenance policy of a company or vehicle owner may be. Even if your vehicle is one which is required by law to be inspected periodically, and carries a valid inspection certificate and decal, you should inspect it. As a driver, you need to know which equipment must be inspected before driving. You should also inspect your vehicle periodically during a long trip. You must be able to determine if any equipment or component is showing signs of failure or improper operation.

It is an offence to drive, or permit another person to drive, your vehicle on a highway if any vehicle part (or parts of its equipment) is defective.

Investing the few minutes needed to inspect a vehicle before starting out will often prevent you from having costly delays en route, and reduce the risk of collisions resulting from mechanical failure.

To carry out an efficient and thorough trip inspection in a short period of time, follow the systematic inspection procedures explained in the following pages for the applicable class of vehicle you will be operating. The trip inspection can be completed in any order, but conducting the inspection in the same order every time will ensure that you don't miss any items.

Prior to a road test for a Class 1, 2, 3 or 4 licence and a G (heavy trailer) or S (school bus) Endorsement, you will be required to perform a trip inspection on the vehicle in which the road test will be taken. Based on the descriptions in the following pages, you will be asked to name and point out each item being inspected and describe what you are looking for in order to determine if the item is defective or not. This has to be done without any assistance and without using a checklist. The trip inspection described is the minimum type of inspection which is expected before a road test.

The purpose of testing your ability to complete a trip inspection is to assess your knowledge of vehicle safety requirements and to check the proper operation and condition of all equipment.

Note: The trip inspection test may not include all required items as per the applicable inspection schedule. It is your responsibility to ensure that your vehicle has had a full trip inspection completed within the last 24 hours as per regulations. This must be documented using a trip inspection report form.

5. A systematic trip inspection for vehicle roadworthiness

The images on the following pages illustrate a general method of performing a systematic inspection of your vehicle before starting on any trip. The daily inspection procedure includes starting at the front of the vehicle and moving in a counterclockwise direction down the driver side of the vehicle, to the rear, then up the passenger side of the vehicle. It is recommended to perform the vehicle inspection in the following order.

1. Engine compartment
2. Exterior of the vehicle
3. Interior of the vehicle
4. Brake response tests

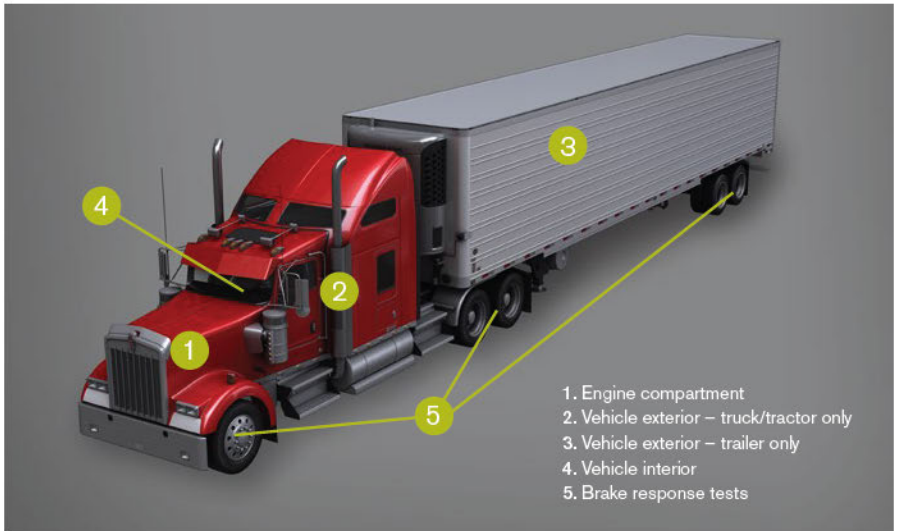
This sequence suggests that you complete the inspection in a circle and walk around the vehicle in a counterclockwise direction so you can watch for any oncoming traffic. Depending on your inspection method, it may be necessary to circle the entire vehicle up to three times. This is why the trip inspection is sometimes referred to as a circle check.

Details of the inspection can vary according to the type of vehicle. Your vehicle may have more or less items than what is listed here. The owner's manual for your specific vehicle can provide more information on how to operate specific systems and indicate safe operating ranges.

Always choose a safe location to conduct the inspection. Park the vehicle away from traffic on level ground whenever possible.

For vehicles equipped with air brakes, please refer to SGI's *Air Brake Manual* for the air brake trip inspection steps.

Class 1 – Tractor/trailer combination unit trip inspection



- 1. Engine compartment
- 2. Vehicle exterior – truck/tractor only
- 3. Vehicle exterior – trailer only
- 4. Vehicle interior
- 5. Brake response tests

Applicable inspection schedule: Schedule 1

Before you begin:

- set the parking brakes
- shut off the engine
- block the wheels

1. Engine compartment

Open the engine compartment and make sure the safety lock for the hood is in the locked position, if equipped.

Inspect the following items:

Fluid levels	All fluids must be at a safe operating level, including: <ul style="list-style-type: none"> ▪ engine oil (check when engine is cold) ▪ engine coolant (do not remove radiator cap) ▪ power steering fluid ▪ windshield washer fluid
Belts	Check all drive belts for tension, wear, cracks and fraying. Note: never check the belts while the engine is running.
Hoses	Check all hoses for leaks, fraying, poor connections or damaged hose clamps.
Electrical wiring and connections	Check for bare wires or loose connections and make sure wiring is securely attached to the vehicle.
Steering	Steering linkage system components are not loose or damaged and no excessive free play Bolts, nuts, clamps, universal joints are not missing or badly worn

2. Vehicle exterior – truck/tractor only

On a Class 1 vehicle, you need to inspect both the truck and the trailer. The truck and the trailer must be coupled together when conducting the inspection. For simplicity, we will identify the inspection items for the truck and the trailer separately.

If there are multiples of the same item on the vehicle, you must inspect each item the same way. For example, on a typical Class 1 combination unit, there will be a minimum of 18 tires and rims that need to be inspected individually.

Inspect the following items:

Headlights	Both the low beam and high beam lights must be working.
Hazard lights	Check the operation of all hazard lights on the front, sides and rear of the truck.
Signal lights	Check the operation of both the left and right signal lights on the front, sides and rear of the truck.
Clearance, marker and identification lights	Check that all lights on the top, front, rear and along the sides of the truck are working.
Tail lights	Make sure they are working.
Brake lights	Make sure they are working.
Reflective tape	All reflective tape on the rear of the cab and rear of the truck must be properly affixed and not damaged. Some trucks will also have reflective tape on the sides.
Inspection decal	Must be properly affixed and valid.
Mirrors	All mirrors must be securely attached to the vehicle and not damaged.
Doors	Both front driver side and passenger side doors must open and close properly from the outside. Must be securely fastened to the vehicle, not damaged; hinges are secure and not worn.
Batteries	Check for corrosion and leaks. Make sure the batteries and the battery cables are secure. Make sure the battery compartment cover is on and securely attached.
Fuel tank(s)	Fuel cap is on and secure. Tank is secure and the straps are not loose. Fuel lines are secure and there is no fuel leaking.
Exhaust system	Make sure there are no audible or visible signs of leaks. Components must be secure and not missing, perforated or patched.
Fluid leaks	Look for fluid leaks underneath the entire truck.
Suspension	All suspension components on each axle must be secure and not damaged, including: <ul style="list-style-type: none">▪ damaged or deflated air bags▪ cracked or broken springs▪ leaking shocks▪ loose U-bolts
Frame	Where the frame is visible, look for damage or cracks.
Underbody	Must be no structural damage, cracks, corrosion, deformations, perforations, or presence of openings not designed by the manufacturer.

Driveshaft	Must be no missing, loose or damaged parts, no excessive wear, and universal joints must not show evidence of free play.
Tires	Check each tire for: <ul style="list-style-type: none"> ▪ proper inflation ▪ adequate tread depth ▪ damages, cuts or bulges on the sidewall ▪ tread separation
Rims	Look for damage or cracks.
Lug nuts	Look for missing lug nuts.
	Look for rust or shiny rings around the contact surfaces to indicate a loose lug nut.
Hubs	Must not be cracked, bent, distorted, worn, missing or leaking.
	If a sight glass is visible, you must also check that the hub oil is at a safe operating level.
Brakes	Must not be any cracks or damage to drum or disc.
	Excessive wear on discs or inside drum must not exceed manufacturer's wear limit.
Mud guards/flaps	Must be secure, not damaged or missing.
Fifth-wheel attachment to the frame	Must be securely attached to the frame of the truck.
Fifth-wheel jaws	The jaws must be closed around the kingpin of the trailer.
Fifth-wheel locking handle	Must be in the locked position.
Fifth-wheel slide locking pins	Must be in the locked position.

3. Vehicle exterior – trailer only

In the above section we identified the inspection items for the truck/tractor only. We will now identify the inspection items for the trailer.

Inspect the following items:

Hazard lights	Check the operation of all hazard lights on the sides and rear of the trailer.
Signal lights	Check the operation of both the left and right signal lights on the sides and rear of the trailer.
Clearance, marker and identification lights	Check that all lights on the front, rear and along the sides of the trailer are working.
Tail lights	Make sure they are working.
Brake lights	Make sure they are working.
Reflective tape	All reflective tape along both sides of the trailer must be properly affixed, not damaged and cover at least 50% of the length of the trailer. All reflective tape on the rear of the trailer must be properly affixed and not damaged.
Inspection decal	Must be properly affixed and valid.
Electrical cord	Make sure it is properly connected to the trailer. Must not be loose so as to contact moving parts, rubbed through the insulation, peeled, cut or deteriorated.
Service and supply lines	If the vehicle is equipped with air brakes, make sure the glad hands are properly connected to the trailer and there are no air leaks. Must be properly secured, not dragging or rubbing and no leaks.
Landing gear and handle	Landing gear must be raised, secure and not damaged. Handle must be stowed in the retaining clip.
Frame	Check frame rails and cross members for cracks, bending or damage.
Tandem slide locking pins	All four pins must be in the locked position.
Underbody	Must be no structural damage, cracks, corrosion, deformations, perforations, or presence of openings not designed by the manufacturer.
Suspension	All suspension components on each axle must be secure and not damaged, including: <ul style="list-style-type: none"> ▪ damaged or deflated air bags ▪ cracked or broken springs ▪ leaking shocks ▪ loose U-bolts
Tires	Check each tire for: <ul style="list-style-type: none"> ▪ proper inflation ▪ adequate tread depth ▪ damages, cuts or bulges on the sidewall ▪ tread separation
Rims	Look for damage or cracks.
Lug nuts	Look for missing lug nuts. Look for rust or shiny rings around the contact surfaces to indicate a loose lug nut.
Hubs	Must not be cracked, bent, distorted, worn, missing or leaking. If a sight glass is visible, you must also check that the hub oil is at a safe operating level.
Load or cargo	Make sure the load is secure.
Tailgate or cargo doors	Must be closed and secure. All hinges must be secure and not damaged.
Rear impact guard/ bumper	Must be securely mounted, not missing, bent or broken, or have cracked welds.

4. Vehicle interior

For the in-cab inspection, some of the items will need to be inspected while the engine is running. We recommend starting the engine before you begin the in-cab inspection.

Inspect the following items:

Driver seat	Make sure the seat is secure and properly adjusted for you.
Driver seat belt	Fasten and unfasten seat belt to make sure it works properly.
Mirrors	All mirrors must be clear, unobstructed and not damaged. Make sure all mirrors are properly adjusted for you.
Windshield	Must be clear, unobstructed and not damaged.
Windshield wipers and washer	Check the wipers for damage and make sure they wipe properly. Turn on the windshield washer to make sure it works properly.
Windows	Side and rear windows must be clear, unobstructed and not damaged.
Doors	Both front driver side and passenger side doors must open and close properly from the inside.
Steering	Check for excessive free play.
Horns	Make sure both the air and electric horns work properly.
Accelerator pedal	With the engine idling, depress the pedal and release. Check for binding or sticking.
Clutch pedal	If equipped, check for free play and amount of travel.
Brake pedal	Total pedal travel does not exceed 80% of the total available travel when heavy force is applied. The brakes release immediately when pressure is released from the pedal. If pedal is mounted to the floor, make sure there is nothing under the pedal that will affect the application of the brakes.
Instrument panel	Make sure there are no warning lights present. Turn on the left and right signals, hazard lights and high beams to make sure the indicator lights are working properly.
Gauges	Engine must be running. Identify each gauge and make sure each gauge is in its normal operating range.
Switches	Engine does not have to be running, but the key must be turned on. Identify each switch and make sure each switch is in its normal operating position.
Heater, defroster and fan speed	Make sure all temperature controls work and it switches between the heater and defroster positions. Check the fan speed in both the heater and defroster positions. Use your hand to physically check for air blowing out of the vents.
Fire extinguisher	Must be present in commercial vehicles wider than 2,060 mm. Must be secure and properly charged.
Flares, reflectors or triangles	A minimum of three flares/reflectors must be present if vehicle is wider than 2,060 mm and being operated outside corporate limits of an urban municipality.

5. Brake response tests

Before driving anywhere, it is important to make sure that your brakes work. This section will explain how to test both the service and park brakes for both a truck and a trailer equipped with air brakes. If your trailer is equipped with electric brakes, please refer to the procedures in the trip inspection section for heavy trailers.

Remove the blocks and test the following items:

Trailer park brakes	With the trailer emergency brakes applied and the truck park brakes released, try to gently pull ahead to test the emergency application of the trailer brakes.
Truck park brakes	With the truck park brakes applied and the trailer emergency brakes released, try to gently pull ahead to test the application of the truck park brakes.
Trailer service brakes	Release all park brakes, drive slowly ahead and apply the trailer brakes using the hand valve (spike), if equipped.
Truck service brakes	Release the hand valve, drive slowly ahead and make a foot brake application using the foot valve.

Class 2 – Bus trip inspection

This section applies to buses with a seating capacity of more than 24 passengers, such as a motor coach.



Applicable inspection schedules: Schedule 2 or 3

Before you begin:

- set the parking brake
- shut off the engine
- block the wheels

1. Engine compartment

Open the engine compartment and make sure the safety lock for the compartment door is in the locked position, if equipped.

Inspect the following items:

Fluid levels	All fluids must be at a safe operating level, including: <ul style="list-style-type: none">▪ engine oil (check when engine is cold)▪ engine coolant (do not remove radiator cap)▪ power steering fluid▪ windshield washer fluid
Belts	Check all drive belts for tension, wear, cracks and fraying. Note: never check the belts while the engine is running.
Hoses	Check all hoses for leaks, fraying, poor connections or damaged hose clamps.
Electrical wiring and connections	Check for bare wires or loose connections and make sure wiring is securely attached to the vehicle.

2. Vehicle exterior

If there are multiples of the same item on the vehicle, you must inspect each item the same way. For example, on a typical Class 2 motor coach, there will be a minimum of eight tires and rims that need to be inspected individually.

Inspect the following items:

Headlights	Both the low beam and high beam lights must be working.
Hazard lights	Check the operation of all hazard lights on the front, sides and rear of the bus.
Signal lights	Check the operation of both the left and right signal lights on the front, sides and rear of the bus.
Clearance, marker and identification lights	Check that all lights on the top, front, rear and along the sides of the bus are working.
Tail lights	Make sure they are working.
Brake lights	Make sure they are working.
Inspection decal	Must be properly affixed and valid.
Mirrors	All mirrors must be securely attached to the vehicle and not damaged.
Batteries	Check for corrosion and leaks.
	Make sure the batteries and the battery cables are secure.
	Make sure the battery compartment cover is on and securely attached.
Fuel tank	Fuel cap is on and secure.
	Tank is secure.
	Fuel lines are secure and there is no fuel leaking.
Exhaust leaks	Make sure there are no audible or visible signs of leaks.
Fluid leaks	Look for fluid leaks underneath the bus.
Suspension	All suspension components on each axle must be secure and not damaged, including: <ul style="list-style-type: none">▪ damaged or deflated air bags (if equipped)▪ cracked or broken springs▪ leaking shocks▪ loose U-bolts
Frame	Where the frame is visible, look for damage or cracks.
Tires	Check each tire for: <ul style="list-style-type: none">▪ proper inflation▪ adequate tread depth▪ damages, cuts or bulges on the sidewall▪ tread separation
Rims	Look for damage or cracks.
Lug nuts	Look for missing lug nuts.
	Look for rust or shiny rings around the contact surfaces to indicate a loose lug nut.
Hubs	Must not be cracked, bent, distorted, worn, missing or leaking.
	If a sight glass is visible, you must also check that the hub oil is at a safe operating level.
Cargo doors	Must be closed and secure.

3. Vehicle interior

For the in-cab inspection, some of the items will need to be inspected while the engine is running. We recommend starting the engine before you begin the in-cab inspection.

Inspect the following items:

Driver seat	Make sure the seat is secure and properly adjusted for you.
Driver seat belt	Fasten and unfasten seat belt to make sure it works properly.
Passenger seats	All seats must be secure.
Passenger seat belts	If equipped, all passenger seat belts must be checked for proper operation.
Doors and emergency exits	All entry doors must open and close properly.
	All emergency exits including doors, windows and roof must open and close properly, and the audible alarm must work.
Accessibility devices	If equipped, make sure they work properly.
Mirrors	All mirrors must be clear, unobstructed and not damaged.
	Make sure all mirrors are properly adjusted for you.
Windshield	Must be clear, unobstructed and not damaged.
Windshield wipers and washer	Check the wipers for damage and make sure they wipe properly.
	Turn on the windshield washer to make sure it works properly.
Windows	Side and rear windows must be clear, unobstructed and not damaged.
Steering	Check for excessive free play.
Horn	Make sure it is working.
	If equipped with both an air horn and an electric horn, make sure both are working.
Accelerator pedal	With the engine idling, depress the pedal and release.
	Check for binding or sticking.
Clutch pedal	If equipped, check for free play and amount of travel.
Brake pedal	Total pedal travel does not exceed 80% of the total available travel when heavy force is applied.
	The brakes release immediately when pressure is released from the pedal.
	If pedal is mounted to the floor, make sure there is nothing under the pedal that will affect the application of the brakes.
Interior lights	Make sure all lights for both the driver and passenger compartments are working.
Instrument panel	Make sure there are no warning lights present.
	Turn on the left and right signals, hazard lights and high beams to make sure the indicator lights are working properly.
Gauges	Engine must be running.
	Identify each gauge and make sure each gauge is in its normal operating range.
Switches	Engine does not have to be running, but the key must be turned on.
	Identify each switch and make sure each switch is in its normal operating position.
Heater, defroster and fan speed	For both the driver and passenger compartments: <ul style="list-style-type: none"> ▪ make sure all temperature controls work and it switches between the heater and defroster positions ▪ check the fan speed in both the heater and defroster positions ▪ use your hand to physically check for air blowing out of the vents
Fire extinguisher	Must be present in commercial vehicles wider than 2,060 mm.
	Must be secure and properly charged.
Flares, reflectors or triangles	A minimum of three flares/reflectors must be present if vehicle is wider than 2,060 mm and being operated outside corporate limits of an urban municipality.

4. Brake response tests

Before driving anywhere, it is important to make sure that your brakes work. This section will explain how to test both the foot brake and the park brake for proper operation.

Remove the blocks and test the following items:

Park brake	With the park brake applied, try to gently pull ahead.
Foot brake	Release the park brake, drive slowly ahead and apply the foot brake.

Class 3 – Truck single unit trip inspection



Applicable inspection schedule: Schedule 1

Before you begin:

- set the parking brake
- shut off the engine
- block the wheels

1. Engine compartment

Open the engine compartment and make sure the safety lock for the hood is in the locked position, if equipped.

Inspect the following items:

Fluid levels	All fluids must be at a safe operating level, including: <ul style="list-style-type: none">▪ engine oil (check when engine is cold)▪ engine coolant (do not remove radiator cap)▪ power steering fluid▪ windshield washer fluid
Belts	Check all drive belts for tension, wear, cracks and fraying. Note: never check the belts while the engine is running.
Hoses	Check all hoses for leaks, fraying, poor connections or damaged hose clamps.
Electrical wiring and connections	Check for bare wires or loose connections and make sure wiring is securely attached to the vehicle.
Steering	Steering linkage system components are not loose or damaged and no excessive free play. Bolts, nuts, clamps, universal joints are not missing or badly worn.

2. Vehicle exterior

If there are multiples of the same item on the vehicle, you must inspect each item the same way. For example, on a typical Class 3 truck, there will be a minimum of 10 tires and rims that need to be inspected individually.

Inspect the following items:

Headlights	Both the low beam and high beam lights must be working.
Hazard lights	Check the operation of all hazard lights on the front, sides and rear of the truck.
Signal lights	Check the operation of both the left and right signal lights on the front, sides and rear of the truck.
Clearance, marker and identification lights	Check that all lights on the top, front, rear and along the sides of the truck are working.
Tail lights	Make sure they are working.
Brake lights	Make sure they are working.
Reflective tape	All reflective tape along the sides and rear of the truck must be properly affixed and not damaged.
Inspection decal	Must be properly affixed and valid.
Mirrors	All mirrors must be securely attached to the vehicle and not damaged.
Doors	Both front driver side and passenger side doors must open and close properly from the outside. Must be securely fastened to the vehicle, not damaged; hinges are secure and not worn.
Batteries	Check for corrosion and leaks. Make sure the batteries and the battery cables are secure. Make sure the battery compartment cover is on and securely attached.

Fuel tank(s)	Fuel cap is on and secure.
	Tank is secure and the straps are not loose.
	Fuel lines are secure and there is no fuel leaking.
Exhaust system	Make sure there are no audible or visible signs of leaks.
	Components must be secure and not missing, perforated or patched.
Fluid leaks	Look for fluid leaks underneath the entire truck.
Suspension	All suspension components on each axle must be secure and not damaged, including: <ul style="list-style-type: none"> ▪ damaged or deflated air bags ▪ cracked or broken springs ▪ leaking shocks ▪ loose U-bolts
Frame	Where the frame is visible, look for damage or cracks.
Underbody	Must be no structural damage, cracks, corrosion, deformations, perforations, or presence of openings not designed by the manufacturer.
Driveshaft	Must be no missing, loose or damaged parts, no excessive wear, and universal joints must not show evidence of free play.
Tires	Check each tire for: <ul style="list-style-type: none"> ▪ proper inflation ▪ adequate tread depth ▪ damages, cuts or bulges on the sidewall ▪ tread separation
Rims	Look for damage or cracks.
Lug nuts	Look for missing lug nuts.
	Look for rust or shiny rings around the contact surfaces to indicate a loose lug nut.
Hubs	Must not be cracked, bent, distorted, worn, missing or leaking.
	If a sight glass is visible, you must also check that the hub oil is at a safe operating level.
Brakes	Must not be any cracks or damage to drum or disc.
	Excessive wear on discs or inside drum must not exceed manufacturer's wear limit.
Mud guards/flaps	Must be secure, not damaged or missing.
Load or cargo	Make sure the load is secure.
Tailgate or cargo doors	Must be closed and secure.
	All hinges must be secure and not damaged.

3. Vehicle interior

For the in-cab inspection, some of the items will need to be inspected while the engine is running. We recommend starting the engine before you begin the in-cab inspection.

Inspect the following items:

Driver seat	Make sure the seat is secure and properly adjusted for you.
Driver seat belt	Fasten and unfasten seat belt to make sure it works properly.
Mirrors	All mirrors must be clear, unobstructed and not damaged. Make sure all mirrors are properly adjusted for you.
Windshield	Must be clear, unobstructed and not damaged.
Windshield wipers and washer	Check the wipers for damage and make sure they wipe properly. Turn on the windshield washer to make sure it works properly.
Doors	Both front driver side and passenger side doors must open and close properly from the inside.
Steering	Check for excessive free play.
Horns	Make sure both the air and electric horns work properly.
Accelerator pedal	With the engine idling, depress the pedal and release. Check for binding or sticking.
Clutch pedal	If equipped, check for free play and amount of travel.
Brake pedal	Total pedal travel does not exceed 80% of the total available travel when heavy force is applied. The brakes release immediately when pressure is released from the pedal. If pedal is mounted to the floor, make sure there is nothing under the pedal that will affect the application of the brakes.
Instrument panel	Make sure there are no warning lights present. Turn on the left and right signals, hazard lights and high beams to make sure the indicator lights are working properly.
Gauges	Engine must be running. Identify each gauge and make sure each gauge is in its normal operating range.
Switches	Engine does not have to be running, but the key must be turned on. Identify each switch and make sure each switch is in its normal operating position.
Heater, defroster and fan speed	Make sure all temperature controls work and it switches between the heater and defroster positions. Check the fan speed in both the heater and defroster positions. Use your hand to physically check for air blowing out of the vents.
Fire extinguisher	Must be present in commercial vehicles wider than 2,060 mm. Must be secure and properly charged.
Flares, reflectors or triangles	A minimum of three flares/reflectors must be present if vehicle is wider than 2,060 mm and being operated outside corporate limits of an urban municipality.

4. Brake response tests

Before driving anywhere, it is important to make sure that your brakes work. This section will explain how to test both the foot brake and park brake.

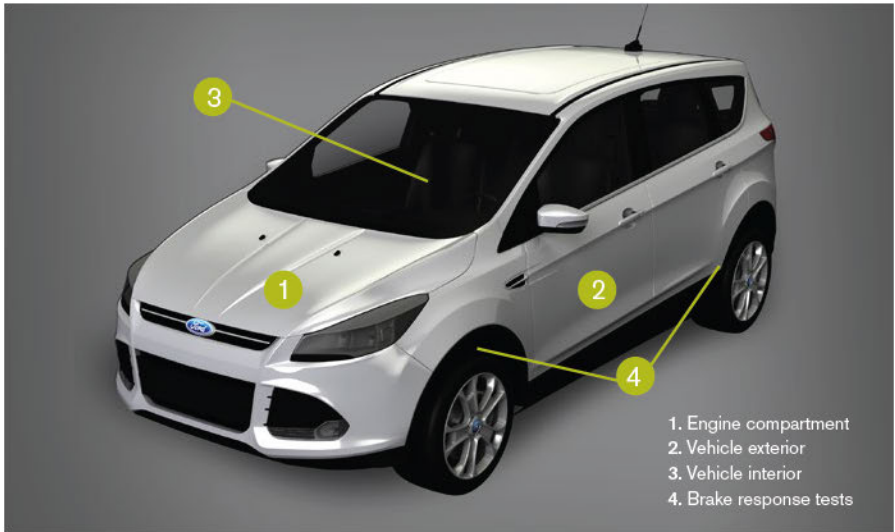
Remove the blocks and test the following items:

Park brake	With the park brake applied, try to gently pull ahead.
Foot brake	Release the park brake, drive slowly ahead and apply the foot brake.

Class 4 – Bus, ambulance, taxi trip inspection

This section applies to the following vehicles:

- buses with a seating capacity of 24 passengers or less
- ambulances when being used for hire
- vehicles transporting 24 passengers or less for hire, such as a taxi or limousine



Applicable inspection schedule: n/a

Before you begin:

- set the parking brake
- shut off the engine

1. Engine compartment

Open the engine compartment and make sure the safety lock for the compartment door is in the locked position, if equipped.

For a video series on how to perform a Class 4 trip inspection, please visit www.sgi.sk.ca/upgrade-to-commercial-licence.

Inspect the following items:

Fluid levels	All fluids must be at a safe operating level, including: <ul style="list-style-type: none">▪ engine oil (check when engine is cold)▪ engine coolant (do not remove radiator cap)▪ power steering fluid▪ brake fluid▪ windshield washer fluid
Belts	Check all drive belts for tension, wear, cracks and fraying. Note: never check the belts while the engine is running.
Hoses	Check all hoses for leaks, fraying, poor connections or damaged hose clamps.
Electrical wiring and connections	Check for bare wires or loose connections and make sure wiring is securely attached to the vehicle.
Battery	Check for corrosion and leaks. Make sure the battery and the battery cables are secure.

2. Vehicle exterior

If there are multiples of the same item on the vehicle, you must inspect each item the same way. For example, on a Class 4 taxi, there will be a minimum of four tires and rims that need to be inspected individually.

Inspect the following items:

Headlights	Both the low beam and high beam lights must be working.
Hazard lights	Check the operation of all hazard lights on the front, sides and rear of the vehicle.
Signal lights	Check the operation of both the left and right signal lights on the front, sides and rear of the vehicle.
Clearance, marker and identification lights	Where equipped, make sure all lights on the top, front, rear and along the sides of the vehicle are working.
Tail lights	Make sure they are working.
Brake lights	Make sure they are working.
Mirrors	All mirrors must be securely attached to the vehicle and not damaged.
Fuel tank	Fuel cap is on and secure. Tank is secure. Make sure there is no fuel leaking.
Exhaust leaks	Make sure there are no audible or visible signs of leaks.
Fluid leaks	Look for fluid leaks underneath the vehicle.
Suspension	All suspension components on each axle must be secure and not damaged, including: <ul style="list-style-type: none">▪ damaged or deflated air bags (if equipped)▪ cracked or broken springs▪ leaking shocks▪ loose U-bolts
Frame	Where the frame is visible, look for damage or cracks.
Tires	Check each tire for: <ul style="list-style-type: none">▪ proper inflation▪ adequate tread depth▪ damages, cuts or bulges on the sidewall▪ tread separation
Rims	Look for damage or cracks.
Lug nuts	Look for missing lug nuts. Look for rust or shiny rings around the contact surfaces to indicate a loose lug nut.
Cargo doors or trunk	Must be closed and secure.

3. Vehicle interior

For the in-cab inspection, some of the items will need to be inspected while the engine is running. We recommend starting the engine before you begin the in-cab inspection.

Inspect the following items:

Driver seat	Make sure the seat is secure and properly adjusted for you.
Driver seat belt	Fasten and unfasten seat belt to make sure it works properly.
Passenger seats	All seats must be secure.
Passenger seat belts	If equipped, all passenger seat belts must be checked for proper operation.
Doors and emergency exits	All entry doors must open and close properly.
	All emergency exits including doors, windows and roof must open and close properly.
Mirrors	All mirrors must be clear, unobstructed and not damaged.
	Make sure all mirrors are properly adjusted for you.
Windshield	Must be clear, unobstructed and not damaged.
Windshield wipers and washer	Check the wipers for damage and make sure they wipe properly.
	Turn on the windshield washer to make sure it works properly.
Windows	Side and rear windows must be clear, unobstructed and not damaged.
Steering	Check for excessive free play.
Horn	Make sure it is working.
Instrument panel	Make sure there are no warning lights present.
	Turn on the left and right signals, hazard lights and high beams to make sure the indicator lights are working properly.
Gauges	Engine must be running.
	Identify each gauge and make sure each gauge is in its normal operating range.
Switches	Engine does not have to be running, but the key must be turned on.
	If applicable, identify each switch and make sure each switch is in its normal operating position.
Heater, defroster and fan speed	For both the driver and passenger compartments: <ul style="list-style-type: none">▪ make sure all temperature controls work and it switches between the heater and defroster positions▪ check the fan speed in both the heater and defroster positions▪ use your hand to physically check for air blowing out of the vents

4. Brake response tests

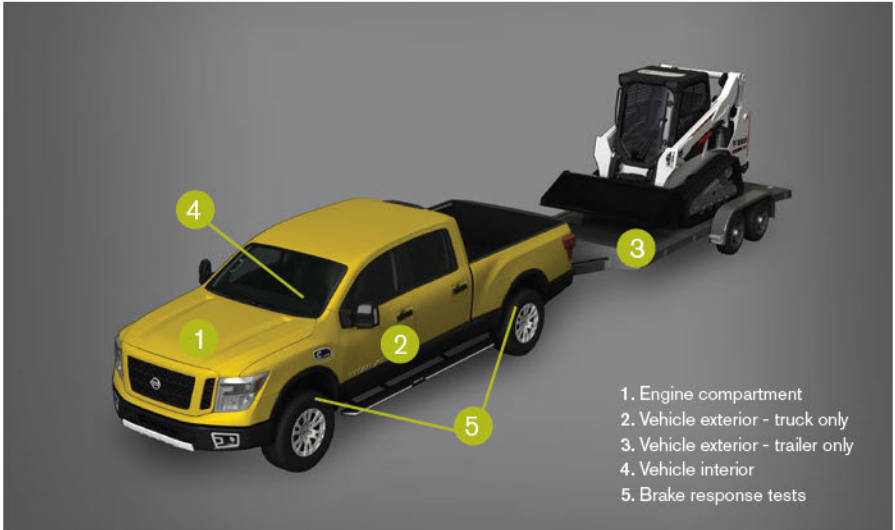
Before driving anywhere, it is important to make sure that your brakes work. This section will explain how to test both the foot brake and the park brake for proper operation.

Test the following items:

Park brake	With the park brake applied, try to gently pull ahead.
Foot brake	Release the park brake, drive slowly ahead and apply the foot brake.

G Endorsement – Heavy trailer trip inspection

This section applies to two-axle trucks towing a heavy trailer that weighs over 4,600 kg (10,141 lb.) including the load.



Applicable inspection schedule: Schedule 1*

Before you begin:

- set the parking brake
- shut off the engine
- block the wheels

* Applies to commercially licensed heavy trailer combination units with a registered gross vehicle weight of more than 11,794 kg.

1. Engine compartment

Open the engine compartment and make sure the safety lock for the hood is in the locked position, if equipped.

Inspect the following items:

Fluid levels	All fluids must be at a safe operating level, including: <ul style="list-style-type: none">▪ engine oil (check when engine is cold)▪ engine coolant (do not remove radiator cap)▪ power steering fluid▪ brake fluid▪ windshield washer fluid
Belts	Check all drive belts for tension, wear, cracks and fraying. Note: never check the belts while the engine is running.
Hoses	Check all hoses for leaks, fraying, poor connections or damaged hose clamps.
Electrical wiring and connections	Check for bare wires or loose connections and make sure wiring is securely attached to the vehicle.
Battery	Check for corrosion and leaks. Make sure the battery and the battery cables are secure.

2. Vehicle exterior - truck only

When conducting a heavy trailer inspection, you need to inspect both the truck and the trailer. The truck and the trailer must be coupled together when conducting the inspection. For simplicity, we will identify the inspection items for the truck and the trailer separately.

If there are multiples of the same item on the vehicle, you must inspect each item the same way. For example, on a truck towing a heavy trailer, there will typically be a minimum of eight tires and rims that need to be inspected individually.

Inspect the following items:

Headlights	Both the low beam and high beam lights must be working.
Hazard lights	Check the operation of all hazard lights on the front, sides and rear of the truck.
Signal lights	Check the operation of both the left and right signal lights on the front, sides and rear of the truck.
Clearance, marker and identification lights	Where equipped, check that all lights on the top, front, rear and along the sides of the truck are working.
Tail lights	Make sure they are working.
Brake lights	Make sure they are working.
Mirrors	All mirrors must be securely attached to the vehicle and not damaged.
Doors	Both front driver side and passenger side doors must open and close properly from the outside.
Fuel tank(s)	Fuel cap is on and secure. Tank is secure and the straps are not loose. Fuel lines are secure and there is no fuel leaking.

Exhaust leaks	Make sure there are no audible or visible signs of leaks.
Fluid leaks	Look for fluid leaks underneath the vehicle.
Suspension	All suspension components on each axle must be secure and not damaged, including: <ul style="list-style-type: none"> ▪ cracked or broken springs ▪ leaking shocks ▪ loose U-bolts
Frame	Where the frame is visible, look for damage or cracks.
Tires	Check each tire for: <ul style="list-style-type: none"> ▪ proper inflation ▪ adequate tread depth ▪ damages, cuts or bulges on the sidewall ▪ tread separation
Rims	Look for damage or cracks.
Lug nuts	Look for missing lug nuts.
	Look for rust or shiny rings around the contact surfaces to indicate a loose lug nut.
Coupling devices (fifth-wheel, pintle hitch, draw bar or ball hitch)	Coupling device must be securely attached to the vehicle.
	Must be properly coupled to the trailer.
	Must be in the locked position and locked by the applicable locking device such as a pin or jaws of a fifth-wheel.

3. Vehicle exterior - trailer only

In the above section we identified the inspection items for the truck only. We will now identify the inspection items for the trailer.

Inspect the following items:

Hazard lights	Check the operation of all hazard lights on the sides and rear of the trailer.
Signal lights	Check the operation of both the left and right signal lights on the sides and rear of the trailer.
Clearance, marker and identification lights	Check that all lights on the front, rear and along the sides of the trailer are working.
	Check that all lights at the top of the front and rear of the trailer are working.
Tail lights	Make sure they are working.
Brake lights	Make sure they are working.
Reflective tape	If equipped, all reflective tape along both sides of the trailer must be properly affixed, not damaged and cover at least 50% of the length of the trailer.
	All reflective tape on the rear of the trailer must be properly affixed and not damaged.
Electrical cord	Must be properly connected to the truck.
Safety chains	Must be properly connected to the truck.
Landing gear and handle	Landing gear must be raised, secure and not damaged.
	Handle must be stowed in the retaining clip.
Frame	Check frame rails and cross members for cracks, bending or damage.
Suspension	Check all suspension components on each axle including: <ul style="list-style-type: none">▪ cracked or broken springs▪ leaking shocks▪ loose U-bolts
Tires	Check each tire for: <ul style="list-style-type: none">▪ proper inflation▪ adequate tread depth▪ damages, cuts or bulges on the sidewall▪ tread separation
Rims	Look for damage or cracks.
Lug nuts	Look for missing lug nuts.
	Look for rust or shiny rings around the contact surfaces to indicate a loose lug nut.
Load or cargo	Make sure the load is secure.
Tailgate, cargo or entry doors	Must be closed and secure.
	All hinges must be secure and not damaged.

4. Vehicle interior

For the in-cab inspection, some of the items will need to be inspected while the engine is running. We recommend starting the engine before you begin the in-cab inspection.

Inspect the following items:

Driver seat	Make sure the seat is secure and properly adjusted for you.
Driver seat belt	Fasten and unfasten seat belt to make sure it works properly.
Mirrors	All mirrors must be clear, unobstructed and not damaged. Make sure all mirrors are properly adjusted for you.
Windshield	Must be clear, unobstructed and not damaged.
Windshield wipers and washer	Check the wipers for damage and make sure they wipe properly. Turn on the windshield washer to make sure it works properly.
Windows	Side and rear windows must be clear, unobstructed and not damaged.
Doors	Both front driver side and passenger side doors must open and close properly from the inside.
Steering	Check for excessive free play.
Horn	Make sure it is working.
Instrument panel	Make sure there are no warning lights present. Turn on the left and right signals, hazard lights and high beams to make sure the indicator lights are working properly.
Gauges	Engine must be running. Identify each gauge and make sure each gauge is in its normal operating range.
Switches	Engine does not have to be running, but the key must be turned on. If applicable, identify each switch and make sure each switch is in its normal operating position.
Heater, defroster and fan speed	Make sure all temperature controls work and it switches between the heater and defroster positions. Check the fan speed in both the heater and defroster positions. Use your hand to physically check for air blowing out of the vents in both the driver and passenger compartments.
Fire extinguisher	Must be present if commercial vehicle is registered in Class LV, A, C or D, wider than 2,060 mm and used for business or commercial purposes. Must be secure and properly charged.
Flares, reflectors or triangles	A minimum of three flares/reflectors must be present if vehicle is wider than 2,060 mm and being operated outside corporate limits of an urban municipality.

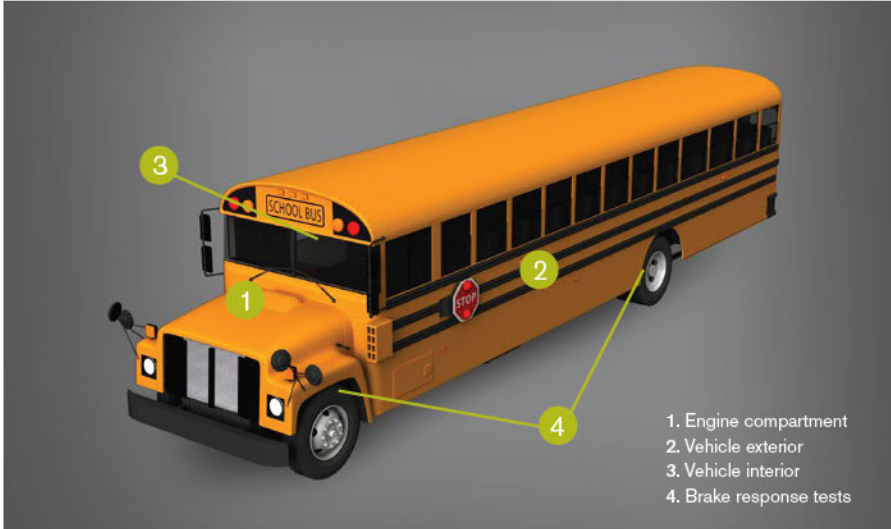
5. Brake response tests

Before driving anywhere, it is important to make sure that your brakes work. This section will explain how to test both the service and park brakes for both the truck and the trailer.

Remove the blocks and test the following items:

Trailer breakaway switch	Disconnect the electrical cord from the truck.
	Remove the pin on the breakaway switch and try to gently pull ahead to test the emergency application of the trailer brakes.
	Replace the pin for the breakaway switch and reconnect the electrical cord to the truck.
Truck park brake	Apply the truck park brake and try to gently pull ahead to test the application of the truck park brake.
Trailer brake hand control	Release the truck park brake, drive slowly ahead and apply the trailer brakes using the hand control, if equipped.
Truck foot brake	Release the hand control, drive slowly ahead and apply the foot brake.

S Endorsement – School bus trip inspection



Applicable inspection schedule: Schedule 2

Before you begin:

- set the parking brake
- shut off the engine
- block the wheels

1. Engine compartment

Open the engine compartment and make sure the safety lock for the hood is in the locked position, if equipped.

Inspect the following items:

Fluid levels	All fluids must be at a safe operating level, including: <ul style="list-style-type: none">▪ engine oil (check when engine is cold)▪ engine coolant (do not remove radiator cap)▪ power steering fluid▪ brake fluid▪ windshield washer fluid
Belts	Check all drive belts for tension, wear, cracks and fraying. Note: never check the belts while the engine is running.
Hoses	Check all hoses for leaks, fraying, poor connections or damaged hose clamps.
Electrical wiring and connections	Check for bare wires or loose connections and make sure wiring is securely attached to the vehicle.
Steering	Steering linkage system components are not loose or damaged and no excessive free play Bolts, nuts, clamps, universal joints are not missing or badly worn

2. Vehicle exterior

If there are multiples of the same item on the vehicle, you must inspect each item the same way. For example, on a typical school bus, there will be a minimum of six tires and rims that need to be inspected individually.

Inspect the following items:

Headlights	Both the low beam and high beam lights must be working.
Hazard lights	Check the operation of all hazard lights on the front, sides and rear of the truck.
Signal lights	Check the operation of both the left and right signal lights on the front, sides and rear of the bus.
Safety lights and stop arm	Make sure all safety lights are working. Check the operation of the stop arm.
Strobe light	Make sure it is working.
Clearance, marker and identification lights	Where equipped, check that all lights on the top, front, rear and along the sides of the truck are working.
Tail lights	Make sure they are working.
Brake lights	Make sure they are working.
Reflective Tape	All reflective tape must be properly affixed and not damaged.
Mirrors	All mirrors must be securely attached to the vehicle and not damaged.
Inspection decal	Must be properly affixed and valid.
Batteries	Check for corrosion and leaks. Make sure the batteries and the battery cables are secure. Make sure the battery compartment cover is on and securely attached.

Fuel tank	Fuel cap is on and secure.
	Tank is secure.
	Fuel lines are secure and there is no fuel leaking.
Exhaust leaks	Make sure there are no audible or visible signs of leaks.
Fluid leaks	Look for fluid leaks underneath the bus.
Suspension	All suspension components on each axle must be secure and not damaged, including: <ul style="list-style-type: none"> ▪ damaged or deflated air bags (if equipped) ▪ cracked or broken springs ▪ leaking shocks ▪ loose U-bolts
Frame	Where the frame is visible, look for damage or cracks.
Tires	Check each tire for: <ul style="list-style-type: none"> ▪ proper inflation ▪ adequate tread depth ▪ damages, cuts or bulges on the sidewall ▪ tread separation
Rims	Look for damage or cracks.
Lug nuts	Look for missing lug nuts.
	Look for rust or shiny rings around the contact surfaces to indicate a loose lug nut.
Hubs	Must not be cracked, bent, distorted, worn, missing or leaking.
	If a sight glass is visible, you must also check that the hub oil is at a safe operating level.
Cargo doors	If equipped, must be closed and secure.

3. Vehicle interior

For the in-cab inspection, some of the items will need to be inspected while the engine is running. We recommend starting the engine before you begin the in-cab inspection.

Inspect the following items:

Driver seat	Make sure the seat is secure and properly adjusted for you.
Driver seat belt	Fasten and unfasten seat belt to make sure it works properly.
Passenger seats	All seats and seat cushions must be secure.
Passenger seat belts	If equipped, all passenger seat belts must be checked for proper operation.
Doors and emergency exits	All entry doors must open and close properly.
	All emergency exits including doors, windows and roof must open and close properly, and the audible alarm must work.
Accessibility devices	If equipped, make sure they work properly.
Mirrors	All mirrors must be clear, unobstructed and not damaged.
	Make sure all mirrors are properly adjusted for you.
Windshield	Must be clear, unobstructed and not damaged.
Windshield wipers and washer	Check the wipers for damage and make sure they wipe properly.
	Turn on the windshield washer to make sure it works properly.
Windows	Side and rear windows must be clear, unobstructed and not damaged.
Steering	Check for excessive free play.
Horn	Make sure it is working.
Accelerator pedal	With the engine idling, depress the pedal and release.
	Check for binding or sticking.
Clutch pedal	If equipped, check for free play and amount of travel.
Interior lights	Make sure all lights for both the driver and passenger compartments are working.
Instrument panel	Make sure there are no warning lights present.
	Turn on the left and right signals, hazard lights and high beams to make sure the indicator lights are working properly.
Gauges	Engine must be running.
	Identify each gauge and make sure each gauge is in its normal operating range.
Switches	Engine does not have to be running, but the key must be turned on.
	Identify each switch and make sure each switch is in its normal operating position.
Heater, defroster and fan speed	For both the driver and passenger compartments: <ul style="list-style-type: none"> ▪ make sure all temperature controls work and it switches between the heater and defroster positions ▪ check the fan speed in both the heater and defroster positions ▪ use your hand to physically check for air blowing out of the vents
Fire extinguisher	Must be located where it can easily be reached by the driver.
	Must be secure and properly charged.
Flares, reflectors or triangles	A minimum of three flares/reflectors must be present.
First aid kit	Must be present, secure and sealed.

4. Brake response tests

Before driving anywhere, it is important to make sure that your brakes work. This section will explain how to test both the foot brake and the park brake for proper operation.

Test the following items:

Park brake	With the park brake applied, try to gently pull ahead.
Foot brake	Release the park brake, drive slowly ahead and apply the foot brake.

En route Inspections

The trip inspection ensures your vehicle is safe to drive before you start your trip. En route inspections will help to identify any change in the condition of your vehicle. Stopping at regular intervals to inspect your vehicle could eliminate any unnecessary delays later on in your trip.

For safety, always stop your vehicle clear of the travelled portion of the highway or find a rest area to pull into, and inspect the following items:

- tires, rims, lug nuts and hubs
- brakes
- trailer coupling devices and electrical connections
- lights and reflectors
- load or cargo security
- fluid leaks

Whether you are driving or stopped, use your senses (look, listen, smell and feel) to identify any potential problems.

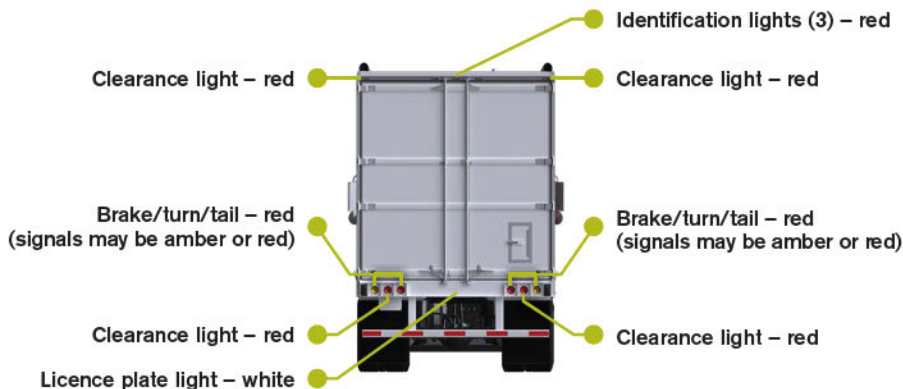
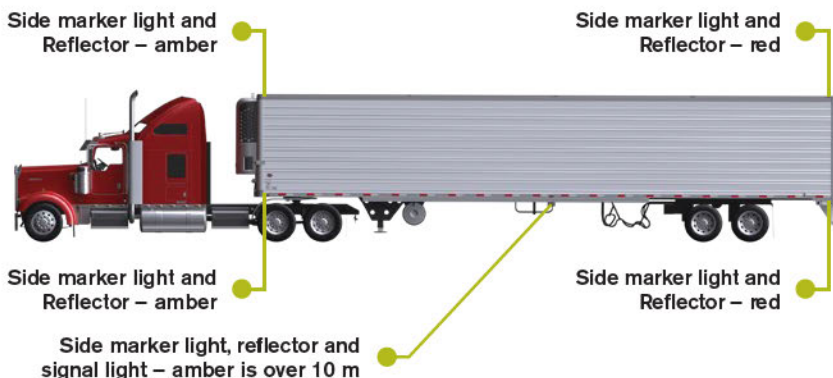
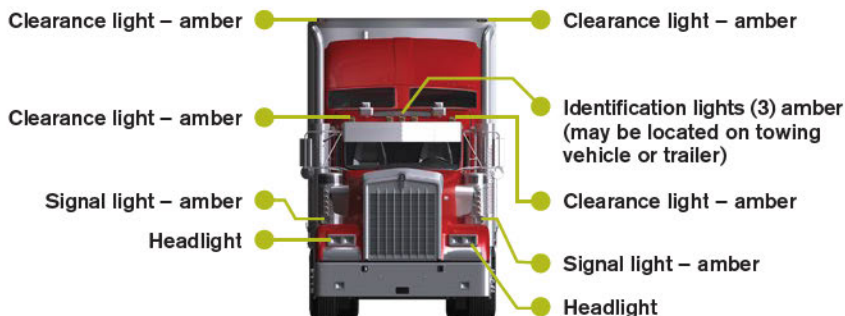
As you drive, you should also continuously monitor your gauges for any signs of change.

Post-trip inspections

Conducting a post-trip inspection at the end of your trip can help identify any defects and needed repairs before your next trip. This eliminates future delays. Similar to a trip inspection, you should inspect your vehicle for any damage or defects that may have developed during your trip. Defects found during this inspection should be recorded on the trip inspection report that you completed at the start of your trip.

Lighting requirements

Vehicles 2.06 m (80 in.) width or over



6. Information for Class 1 and Class 3 power units, semi trailers and trucks

The operation of trucks requires you to develop handling skills in accordance with the characteristics of the vehicle. A knowledge of the turning radius, amount of off-track of the rear wheels, overhang past the rear wheels and width of the vehicle, are important factors you must know to perfect your handling skills.

Steering forward

The degree of sharpness a vehicle will turn depends on two factors: the turning radius of the front wheels and the amount of off-track of the rear wheels.

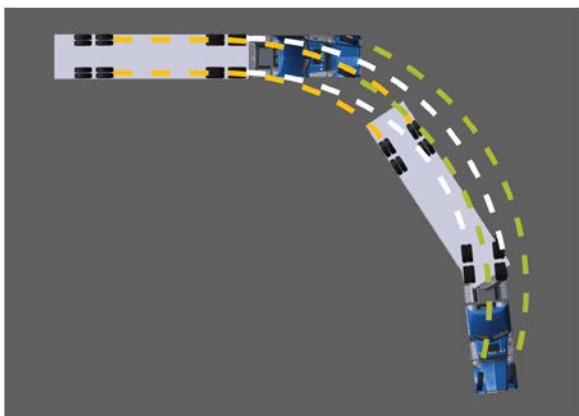
Turning radius

The number of degrees the front wheels will pivot to the left or to the right varies in different makes and types of vehicles. The wheel on the inside of the turn must pivot more sharply to travel on the shorter radius than the wheel on the outside of the turn.

Off-track

When a vehicle moves around a curve, the rear wheels follow a path that is different from the front wheels. This is called off-track. The greater the distance (wheel base) between the front wheels and the rear wheels of the vehicle, the greater the amount of off-track. The off-track path is a shorter radius than the path of the front wheels.

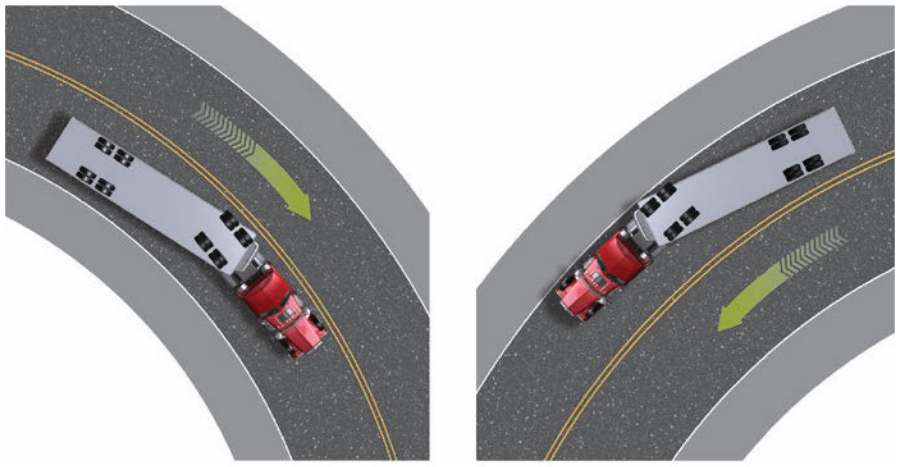
The combination vehicle, such as a semi trailer unit, has an off-track of the rear wheels of the tractor unit, and greater off-track again by the rear wheels of the semi trailer.



The combination unit of a truck-tractor and “pup” trailer has different turning characteristics than those of the semi trailer type. These units have turning radius and off-track patterns within each unit, but the amount of off-track is dependent upon the length of the draw bar and the wheel base of the units.

On the open highway you must adjust the turning arc of the front wheels in accordance with the sharpness of the curve and the amount of off-track of your vehicle. A curve to the right requires keeping the front wheels close to the centre line to prevent dropping the rear wheels off the pavement shoulders.

A curve to the left requires keeping the front wheels close to the right edge of the pavement to prevent the rear wheel from crossing into the other traffic lane.

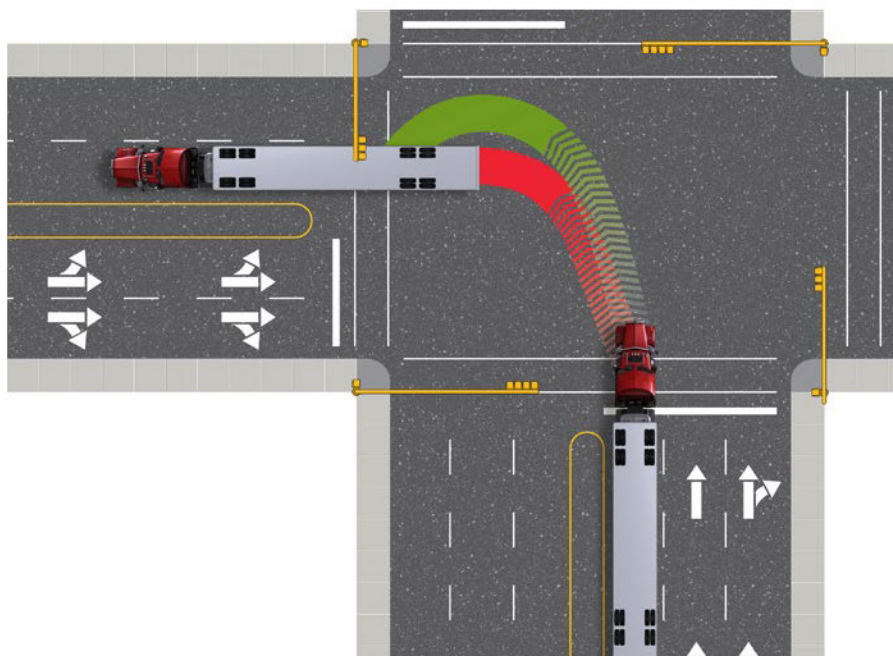


Negotiating narrow bridges which have a curved approach requires the driver of larger units to exercise caution and skill. You must be familiar with the amount of off-track of your vehicle and adjust your speed and approach accordingly.

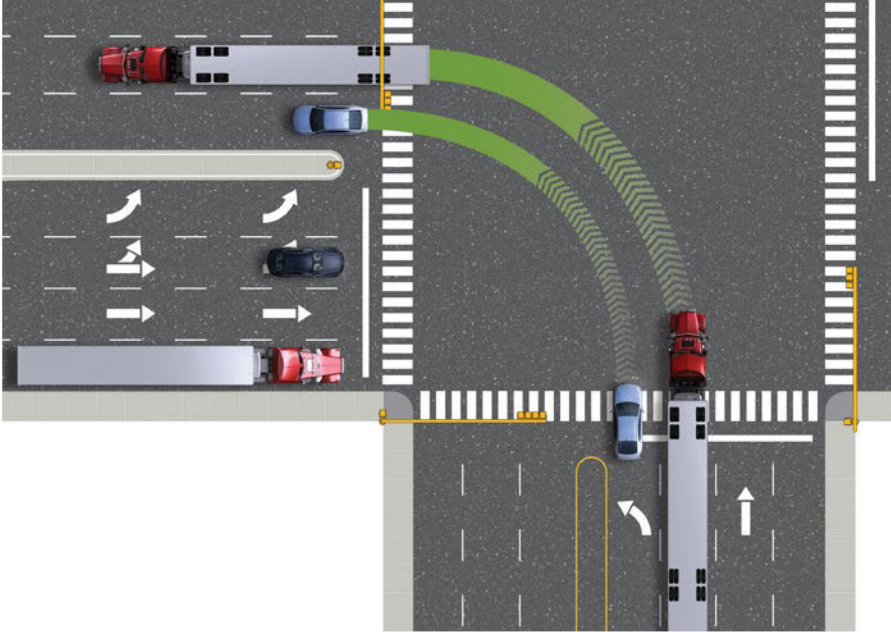
Turns at intersections

Left turns – two-way to two-way (see illustrations this page and next page)

All left turns must be started from the left lane. The turn should be completed so that the trailer “tracks” from the left lane through the intersection to the left lane on the street you are entering as shown on the next page. On narrow streets, it may be necessary to make an S-turn, or the power unit will travel over the centre line of the street you are entering or into the second (right) traffic lane. When it is necessary for you to do this, use extreme caution and watch for other traffic to ensure the movement can be made safely. Always ensure that you block off any traffic which may attempt to pass on your left, by positioning your trailer within one metre of the centre or dividing curb on the street you are travelling and entering. Continue checking trailer position throughout the turn.

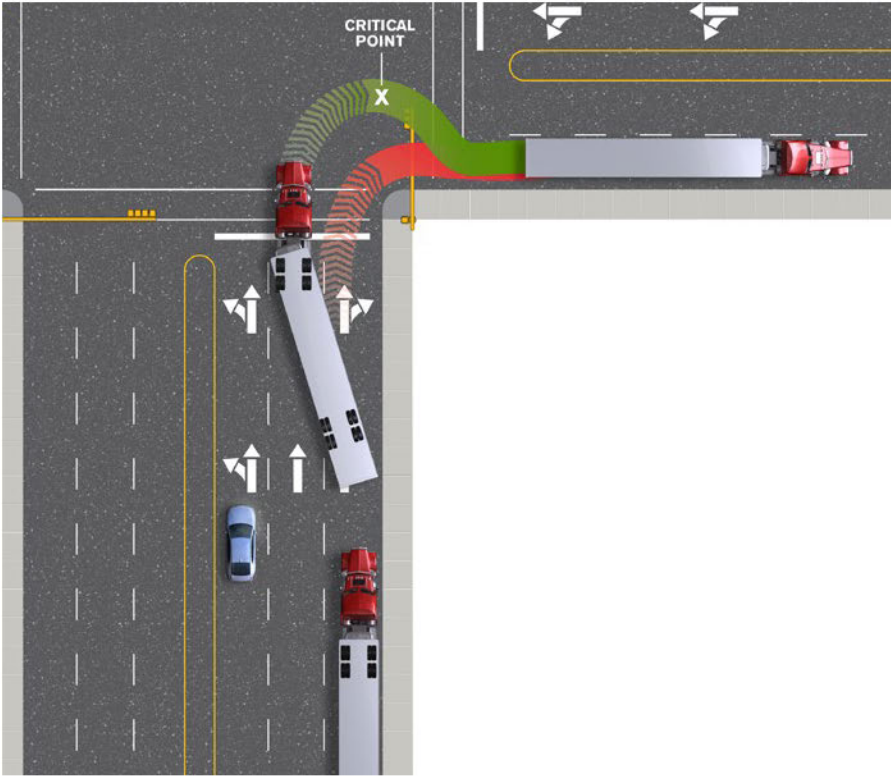


At some intersections, signs or traffic lights indicate two or more lanes may be used to complete a left turn. In these cases it is best to approach and complete the turn in the lane furthest to the right as this allows a wider radius. Use caution if other vehicles are beside you in the left lane.

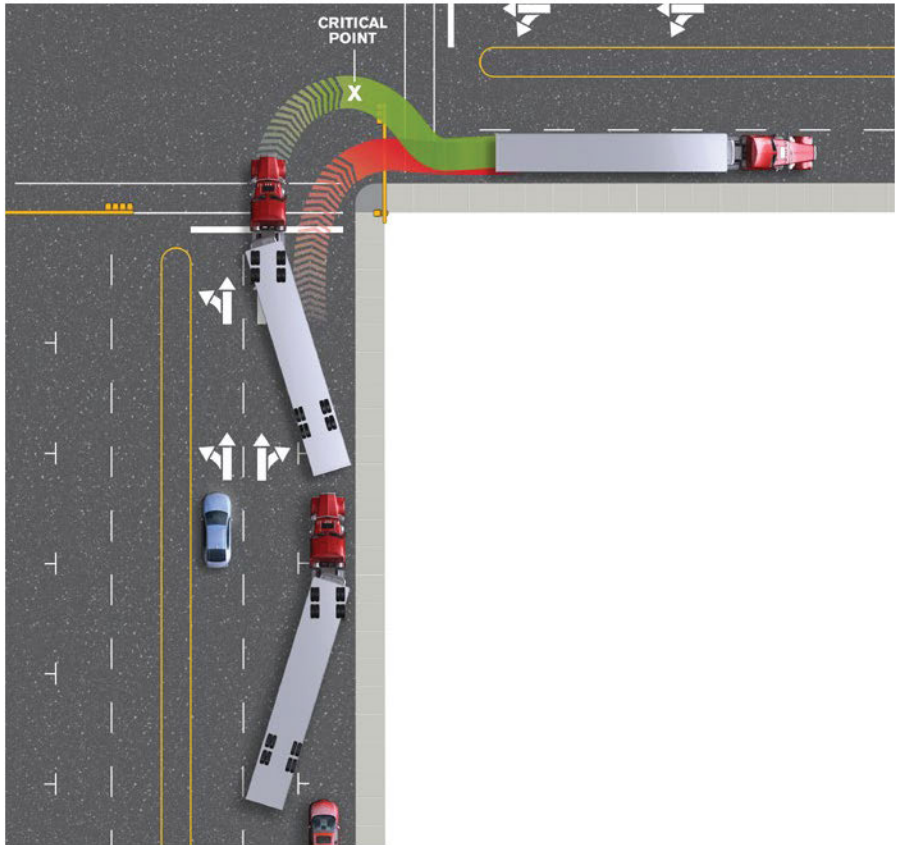


Right turns – two-way to two-way (see illustrations this page and next page)

All right turns must be started from the right lane as close to the right side of the street or road as possible and be completed into the first available driving lane. Caution must be used when turning from the shoulder of the road, at times it is too soft for heavy vehicles. Before starting your turn, you must position the trailer as shown, to block off any traffic which may attempt to pass on your right. Where parking is not permitted near the intersection or vehicles are not parked a sufficient distance from the intersection, you must position your unit along the curb before starting the turn.



When making turns at intersections with vehicles which have an appreciable amount of off-track, an S-turn requires you to adjust your turning arc in accordance to the amount of off-track. Running the rear wheel of the unit over curbings, the centre line or sidewalks, not only causes tire damage but also is hazardous to pedestrians and other traffic. Power poles, sign posts or light standards mounted close to the curbing at intersections are fixed object hazards.

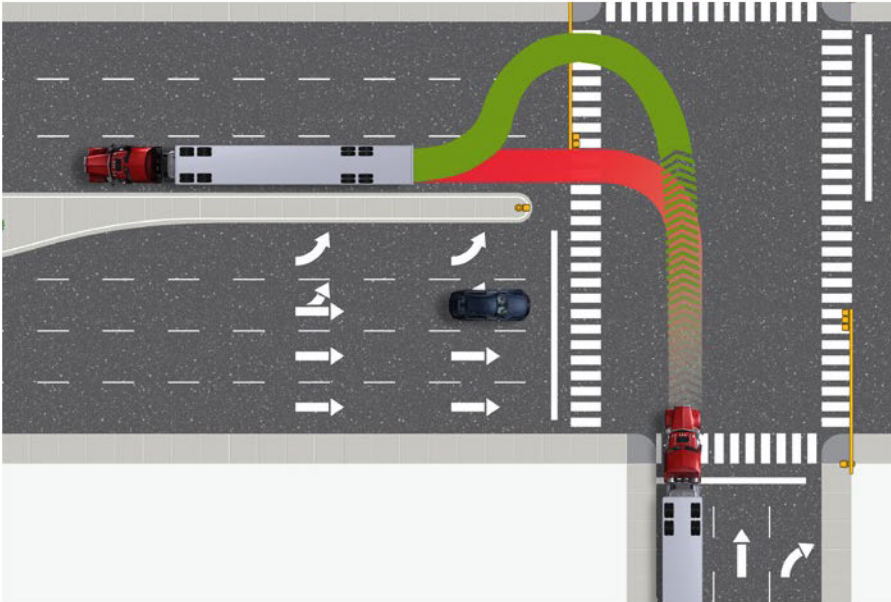


When it becomes necessary to block off the other traffic lane – for example, an extra long trailer, narrow road or partially blocked street – ensure that smaller vehicles, motorcycles or cyclists are not attempting to proceed on your right or left. The critical point is reached when the tractor is at the sharpest point of the turn in relation to the trailer, as the rear-view mirror vision is limited.

Either of the pictured methods is correct as long as the turn is completed safely.

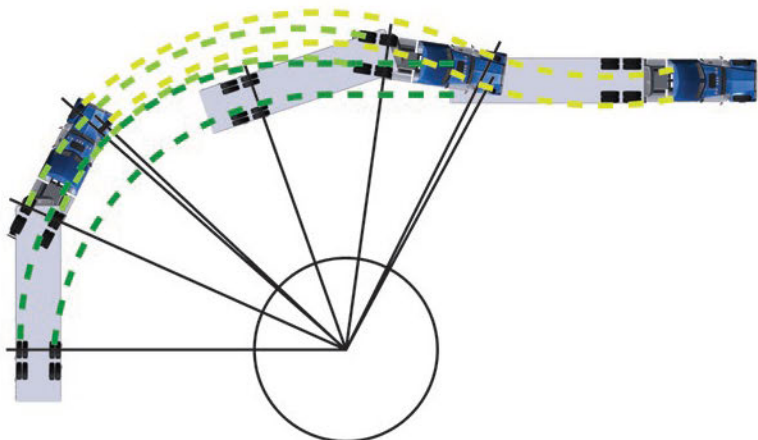
One-way to two-way turns (see illustrations this page and next page)

When turning left from a one-way street and there are no signs or lights indicating two or more turning lanes, the left turn should be made from the far left side of the road as safely possible. An S-turn could be used to block off any traffic that may attempt to pass on your left. Position your trailer to stay within one metre from the left side of the street you are travelling and entering. Continue checking trailer position throughout the turn.



Steering backward

The control of a single unit vehicle is maintained in the same manner as that of a passenger vehicle.



In backing a tractor with a semi trailer, the front wheels of the tractor must be turned in a direction opposite to that in which it is desired to move the rear of the trailer.

Depending on the amount of change in direction, the tractor must follow in a track related to the track of the trailer, otherwise a jackknife position will be reached. The tracking pattern for a normal right angle turn would be an "S" shaped curve.

U-turn

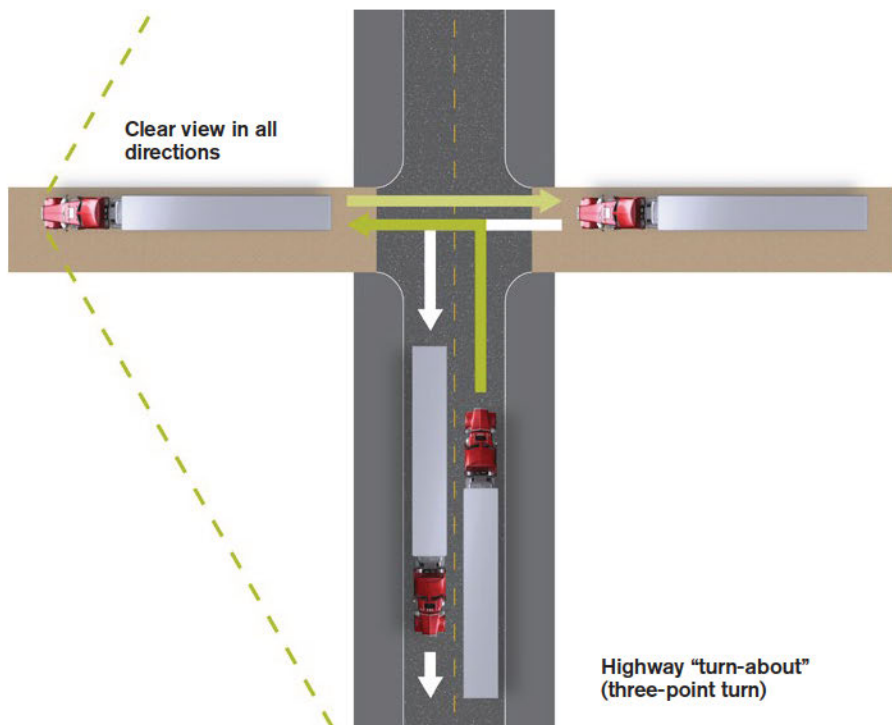
In a city, town or village, you should never attempt a U-turn, even on wide four-lane divided streets. It's preferable that you drive around the block. A U-turn may be made on a wide, divided four-lane highway only if traffic permits.

Highway "turn-about" (three-point turn)

When it's necessary to turn around with a power unit semi trailer on a two-lane highway, the following procedure is recommended. Use a guide whenever possible.

- Choose an intersection where the intersecting highway is built up with a solid base and wide shoulders. Ensure that there is unobstructed visibility in all directions.

- Traffic permitting – complete a left or right turn and stop your unit well off the highway.
- Check for traffic – when all four directions are clear, proceed to back straight across the highway until you are again clear and well off the main highway.
- Traffic permitting, complete a turn onto the main highway.

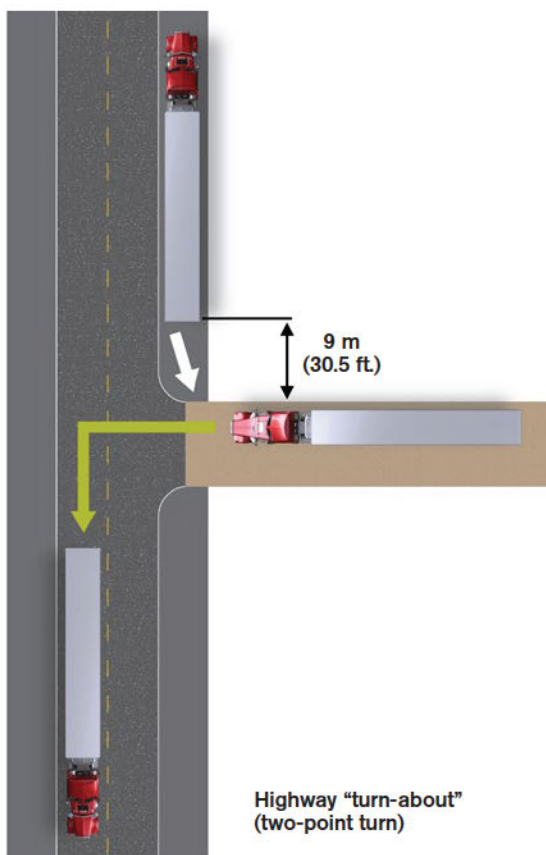


Highway “turn-about” (two-point turn)

Where it is necessary to turn a power unit semi trailer around on a highway where there is no hard surfaced intersection, you may use the following procedure. Use a guide whenever possible because you will be backing to your blind side.

- Well before the place where you wish to turn around, signal right, mirror check, position your vehicle in the right hand lane as close to the edge of the road as possible.

- Cancel the signal, proceed past the intersection and stop when the rear of the trailer is at least 9 m (30 ft.) from the intersection.
- Turn on four-way flashers. Check for traffic.
- Begin backing up slowly. Start turning steering wheel to the left approximately 9 m (30 ft.) before the trailer reaches the approach. Continue backing maneuver until the unit is positioned in a straight line on the approach and stop. Turn off four-way flashers.
- Check for traffic.
- Signal for a left turn, check for traffic again and proceed to make a left turn onto the highway.



For single units refer to pages 135-136

About loads and loading

Weight distribution

The weight distribution of cargo has a definite bearing on the handling characteristics of the vehicle, as well as the life of the tires, frame, springs, axles and bearings.

Even though the total load may not be over the total carrying capacity of the vehicles, poor distribution of weight could be overloading an axle or set of tires. Undue stress could be placed on the frame resulting in permanent damage and steering misalignment.

Distribution of weight will depend on the nature of the load. The loading of one piece of cargo which comprises the full load will present different problems from a load made up of a number of pieces of cargo.

Correct

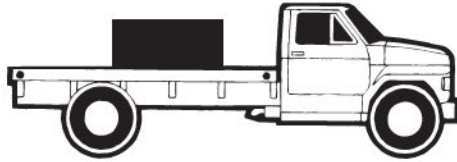


This loading distributes an equal weight on all rear tires and eliminates twisting and stress on the frame. Uniform crosswise loading also prevents axle housing and wheel bearing overloading.

Incorrect

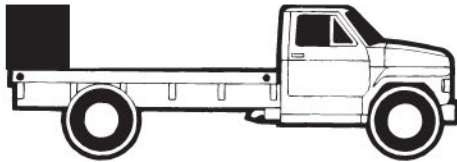


A very heavy load should not be loaded on one side. This overloads one spring and the tires on that side. This loading could be bad enough to allow the brakes to lock on the wheels on the light side and cause flat spots on the tires or a skid on a wet surface.



Correct

The proper place for the concentrated load illustrated is just ahead of the rear axle with the longest side on the floor.



Incorrect

This type of loading never should be permitted. The frame bends, the rear tires are very much overloaded and enough weight is taken from the front tires to make steering almost impossible.



Correct

A tractor-trailer combination is the proper vehicle for use in service like this. By using the proper vehicle, damage to the truck and tires, and even serious collisions, may be avoided.

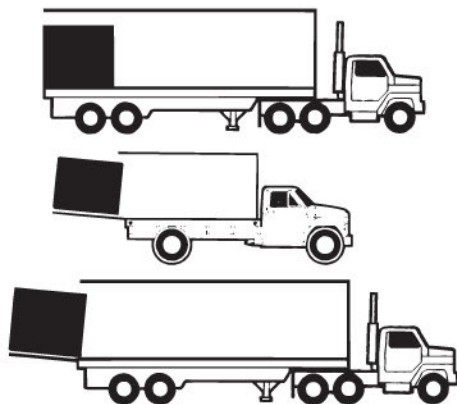
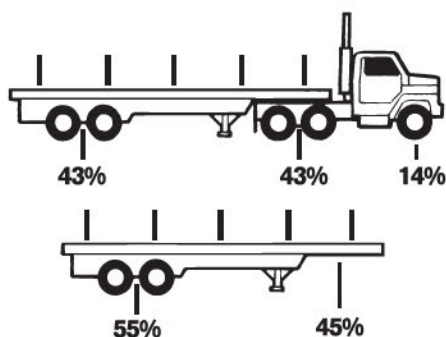


Incorrect

This type of loading results from the use of the wrong vehicle for the job. On rough roads, such loading can result in an actual pivoting of the truck on its rear wheels, taking the front wheels entirely off the road.

Approximate distribution of total weight – vehicle plus cargo

Trailers are designed for uniform load distribution, as shown previously. The fundamental difference between loading trailers and trucks is is: in the case of trucks, the average design provides for about 90% of the cargo on the rear tires and 10% on the front tires. In the case of a trailer, the cargo should be distributed equally between the rear tires and the fifth-wheel which transfers its load to the tractor unit.



Incorrect

These examples are obviously wrong. In the case of the first trailer, the heavy load at the rear is overloading the rear trailer tires. There is practically no load on the fifth-wheel, and the truck tractor rear tires would certainly slip and wear away rubber. Tailgate loading, of course, should never be practised, even in the interest of speed, as it puts a severe strain on the equipment and frequently results in serious collisions.

The load should be centred to give the proper wheel load distribution. The average single unit truck has a central weight distribution point midway between the rear of the cab and the tailgate. The average semi trailer type truck has a central weight distribution point at approximately the middle of the trailer.

Securing loads

As a general rule, both the driver and owner are responsible to ensure that a load does not drop or is not likely to drop on a highway.

Secure the entire load to prevent shifting or loss of any portion of the load. Periodic checks must be made to ensure lashing ropes or binder cables have not become slack or chaffed.

When hauling such loose materials as wood chips, paper, refuse, gravel and stones, etc., you should make certain that no part of the load is dislodged; make sure that you completely cover the load with a tarp to prevent dangerous driving situations for those following behind you.



Often the wind velocity is strong enough to force large stones to fly out of uncovered truck boxes or trailers causing them to smash windshields. Stones and other loose materials can cause collisions behind or to the sides of the load. As well, littering is an offence chargeable to the driver and the owner of the vehicle.

Load projections

Check your load and equipment before starting on the road. Extra wide or long loads require special permission for transportation, and such loads must carry the necessary warning signs as covered under the load permit (some widths may be moved during the hours of darkness, provided the permit requirements are met).

Some loads might not exceed the legal length but may overhang the vehicle body. Any overhang must carry a red flag at the end of the load between the hours of sunrise and sunset. The flag must be large enough to be clearly visible from the rear of the vehicle.

During night hours, there must be a visible red light at the extreme rear of the overhang.

Special cargoes

A vehicle, whether loaded or empty, that is used primarily for the purpose of transporting any petroleum product or a liquid that is flammable or explosive, shall be brought to a stop at all uncontrolled railway crossings. The vehicle should stop as far to the right as possible and not less than 5 m (15 ft.) from the nearest rail.

Note: For detailed load security information, please contact your nearest Saskatchewan Ministry of Highways and Infrastructure office.

Livestock

The driver of a vehicle engaged in the transportation of livestock is responsible for ensuring that such transportation is in compliance with the conditions outlined in the Criminal Code, the *Animal Identification Act* concerning registered brands, the *Animal Products Act* and the *Livestock Inspection and Transportation Regulations*. The onus of keeping the vehicle clean and not overcrowded is on the driver.

Cruelty to livestock is prohibited. No person, while transporting livestock or other animals in a motor vehicle, shall:

- By negligence or ill-usage in the transportation thereof, cause or permit any damage or injury to be done to the livestock or other animals;
- Transport the livestock or other animals in such a manner or position as to cause unnecessary suffering to any of them by overexposure to heat or cold; or
- Transport various classes of livestock unless separated by a partition.

To balance themselves, animals tend to shift back and forth, and to the side while they are standing in a moving vehicle. It is important to take curves carefully, for the sake of the animals as well as the vehicle.

Prohibited shipments

No express transporter shall accept for transportation, or permit to be transported, in or on a public service vehicle that is carrying passengers: any live animal; any acid; any explosive; any flammable substance or material; or any substance, material or article of a kind of quality that is likely to render it disagreeable or dangerous to passengers, or is likely to expose to risk, loss or damage anything being carried in or on the vehicle.

No freight transporter shall store or transport food commodities in premises used for storage of vehicles, livestock, acids or other materials that may, by their nature, render the food commodities unfit for human consumption.

Bills of lading

- A carrier shall at the time of acceptance of each shipment of freight for transportation on a public service vehicle issue or cause to be issued a bill of lading.
- A bill of lading shall contain at least the following information:
 - the name of the carrier
 - the name of the shipper
 - the name of the place at which the freight was accepted for transportation
 - the name of the consignee
 - the name of the place where the freight is to be delivered
 - a list showing the nature of the contents of each container in the shipment and the gross weight of each container and its contents
 - the name and business address of any other carrier who will participate in the movement of the freight to its point of delivery
- A bill of lading must consist of:
 - an original bill of lading to be retained by the carrier
 - a duplicate original of the bill of lading that must be kept in the possession of the driver of the vehicle while the freight is being carried on the vehicle
 - a duplicate original of the bill of lading that must be retained by the shipper if the shipper requests a copy of it; or delivered to the consignee

A bill of lading must be signed by the shipper and the carrier verifying that the itemized list of goods in the shipment is correct. Signing the bill of lading also serves as an acceptance of all terms and conditions contained in it. No person shall sign a bill of lading if they know the information contained in it is incorrect.

Upon demand of a peace officer, the driver shall produce for inspection the duplicate original of the bills of lading for the freight in their possession or any other document respecting the freight that contains the bill of lading number and all the information required to be included in a bill of lading.

Coupling a tractor-trailer with air ride suspension

1. Alignment of tractor and trailer

- inspect the area in front of the trailer for any hazards
- align the tractor in front of the trailer
- slowly reverse towards the trailer and align the centre of the fifth wheel with the kingpin
- stop the tractor when the fifth wheel is just ahead of the trailer

2. Tractor inspection

- air lines and electrical cord are in good condition and properly secured
- fifth wheel horns are tilted down and the jaws are in the unlocked position
- fifth wheel is securely mounted to the frame and there are no damaged, missing or loose parts
- if equipped with a sliding fifth wheel, confirm the slide pins are in the locked position
- there is adequate grease on the surface of the fifth wheel

3. Trailer inspection

- air and electrical couplers are in good condition and not damaged
- kingpin and apron should not have any excessive wear or cracks
- kingpin is aligned with the opening of the fifth wheel jaws
- check the height of the trailer in relation to the fifth wheel
- pins for the sliding trailer axles are in the locked position
- trailer is secure against movement before coupling
- there are no hazards or obstacles that could damage the trailer when driving away
- cargo is secure

4. Coupling of fifth wheel to kingpin

- release or dump the tractor air suspension and slowly reverse under the trailer until the fifth wheel is fully under the front of the trailer, but still ahead of the kingpin
- restore the tractor air suspension to its normal height
- continue to reverse slowly until you hear and feel the fifth wheel lock around the kingpin

5. Confirm fifth wheel is locked and secure

- perform a minimum of two tug tests
- visually inspect fifth wheel to ensure it is properly secured to trailer

6. Connect air and electrical lines

- connect electrical cord to trailer and confirm normal operation of all trailer lights
- connect air lines to the trailer
- supply air to the trailer by pushing in the trailer supply valve (red button)
- ensure the air pressure gauges show normal pressure levels and the trailer hand valve operates properly

7. Trailer air suspension

- ensure air bags have inflated

8. Raise landing gear

- make sure both legs come up and stow the handle into its retainer

9. Check operation of trailer brakes

- drive forward slowly and apply the trailer service brakes using the hand valve
- make sure all trailer wheels are turning

Uncoupling a tractor-trailer with air ride suspension

1. Parking of tractor and trailer

- inspect the parking area for any hazards and level and firm ground conditions
- park the tractor and trailer in a straight line
- chock trailer wheels, if required

2. Trailer air suspension

- ensure air bags have deflated

3. Lower landing gear

- use dolly pads anytime the trailer is loaded or if ground conditions are less than ideal
- lower landing gear until most of the trailer weight is off the tractor but does not raise the trailer completely off the fifth wheel

4. Disconnect air and electrical lines

- stow the couplers using the dead-end couplers and plug holder on the tractor and ensure the lines are secure

5. Uncoupling of fifth wheel from kingpin

- release and unlock the fifth wheel from the kingpin
- slowly drive ahead when the kingpin is just clear of fifth wheel jaws, stop the tractor
- release or dump the tractor air suspension
- continue to slowly drive forward and stop the tractor when the fifth wheel is fully out from under the trailer, but the frame of the tractor is still under the trailer

6. Confirm trailer stability

- ensure the ground and landing gear will support the weight of the trailer

7. Clear tractor from trailer

- slowly drive forward until the tractor is clear of the trailer
- restore the tractor air suspension to its normal height before driving away

“Train” or “pup-train”

To handle increased weights allowable under axle weight loading, many trucking operations have gone to the “train” or “pup-train” vehicle combination. In this type of combination, another trailer is pulled behind the regular tractor-trailer by means of a “converter dolly.”

Drivers on train operation will discover that new skills are required for safe operation as well as an understanding of the equipment operation and hook-up. More than ever, you must be ready to adjust for changing conditions well ahead of time in order to take defensive or appropriate action to avoid trouble.

Power should always be applied when pulling on a straight stretch while underway (a steady pull, as opposed to intermittent application and reduction of power) with a small amount of reserve power always available. In the event that the rear trailer starts to fishtail or whip, apply trailer brakes lightly and increase power.

Drivers in “train” operations, as well as those driving semi trailers, should avoid sudden lane changes or turns and speeds too fast for conditions as these actions can result in severe whipping or possible jackknife situations.

Regular vehicle checks should be made of the complete unit, paying particular attention to the hook-up of the rear trailer, including:

- the hitch on the rear of the lead trailer
- the safety catch on the hook
- the safety chains or cables
- airlines between the trailers are secured and not allowed to sag down too low

Hooking up a “train” or “pup-train”

1. Park the rear trailer and set trailer brakes.
2. Position the dolly converter in front of the rear trailer so that it is in line with the kingpin.
3. Hook up the tractor and lead trailer.
4. Back the tractor and lead trailer in line with and up to the converter dolly.
5. Before hooking up to the converter, a thorough trailer hitch inspection should be made. Watch for cracks or breaks in the weld, loose bolts, weak lock springs and bent or distorted cross-members where the trailer hook is attached.

6. Hook and secure the converter dolly tongue to the pintle hook by hand. Fasten safety latch and chain. Ensure that the safety pin is fastened (if so equipped). This is extremely important! This action will ensure the high degree of safety the trucking industry maintains, not only for themselves, but for other users of highways as well. "Train-drivers" should make a point of checking the safety latch on the trailer hitch each time they stop for a vehicle check.
7. Safety chains and cables should be inspected before being attached. When fastened to the lead trailer, they should be crossed so that if the converter dolly tongue breaks loose, it will be held suspended off the roadway while the driver attempts a safe stop.
8. Connect the air hoses between the two units, ensuring that all air lines, especially on the converter dolly, are well secured and not sagging too low.

Some companies that operate equipment with brakes on the converter dollies have applied coloured tape to the air lines in order to identify the service and emergency lines, thereby eliminating the possibility of improper hook-up.

Connecting vehicles

Draw-bars or coupling devices must be in accordance with legislation. These devices should be of sufficient strength to hold the vehicles together and be fastened to integral parts of the frames of the vehicles: you should not draw or tow a trailer or special mobile machine unless the attachment for connecting the draw-bar of the trailer or special mobile machine to the motor vehicle is firmly and directly affixed to the frame of the vehicle.

When a coupling device is used (other than the fifth-wheel coupler of a semi trailer unit), an auxiliary chain or metal cable of equal strength to the coupling device should also be used.

Except for a motor vehicle pulling a pole trailer, the draw-bar or other connection between the motor vehicle and the trailer should not exceed 1.83 m (6 ft.) in length.

Swerving and whipping – the trailer must not swerve or whip unreasonably when being towed by a motor vehicle.

If the trailer whips or swerves, slow down and stop to determine the cause.

Note: All trailers equipped with brakes must have a device to apply the brakes automatically if the unit should become disconnected.

7. Information for Class 2 and Class 4 – passenger carrying vehicles

The prime consideration of the professional driver is the safe operation of the vehicle. This must take precedence over schedules or any other factors that might contribute to a less than safe operation.

In addition to your own safety, as a professional driver operating a Class 2 or Class 4 vehicle, you must be considerate of the safety and comfort of your passengers by completing a trip inspection as illustrated in Section 4 - Vehicle condition.

The safe and efficient transportation of people is a task which requires a high degree of driving skill. You should at all times be aware of the traffic around the bus to prevent panic stops or sudden swerves.

When approaching a loading zone, the speed should be such that a slow smooth stop can be made. The doors should remain closed until the bus has come to a full stop. The bus should be brought as close to the curb or loading zone as possible.

Before starting, you must be certain the doors are closed properly. The bus is then accelerated smoothly, picking up speed gradually.

The operation of buses requires you to develop handling skills in accordance with the characteristics of the vehicle. A knowledge of the turning radius, amount of off-track of the rear wheels, overhang past the rear wheels and width of the vehicle are important factors you must know to perfect your handling skill.

Many passenger accidents have been attributed to:

- being improperly parked at a loading zone
- picking up or discharging passengers when unsafe to do so
- sudden stops or starts with standing passengers
- sharp turns at excessive speed
- improper operation of bus doors

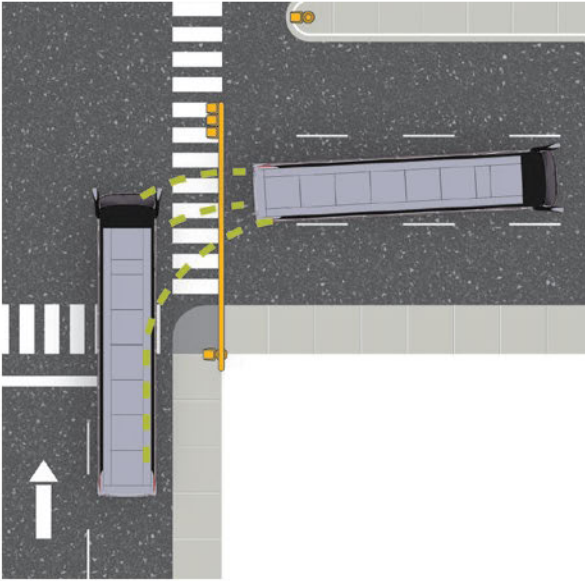
Accidents of these types are the result of improper operations by the driver and are **preventable**.

Every vehicle used for conveying passengers shall have at least two exits.

Right turns

When making a right turn, the driver must avoid running over or scuffing the curbing with the rear wheels. The sharpness of the turn depends on the wheelbase.

When executing a sharp turn to the right (particularly with a forward control vehicle) position the bus 1 to 1.5 m (3 to 5 ft.) out from the curb as you approach the intersection. Ensure, by checking your mirror, that you block off any vehicle which may attempt to pass on the right. Proceed straight until you can see the curb line of the side street through the front entrance door.



Entering the turn at a low speed requires less turning speed of the steering wheel, making a smoother turn with less exertion by the driver.

Right turns into very narrow streets may require that you proceed into the intersection before commencing the turn. It may be necessary to travel over the centre line as the turn is made. When such movement is necessary, you must use extreme caution, and ensure that the movement can be made safely.

Left turns

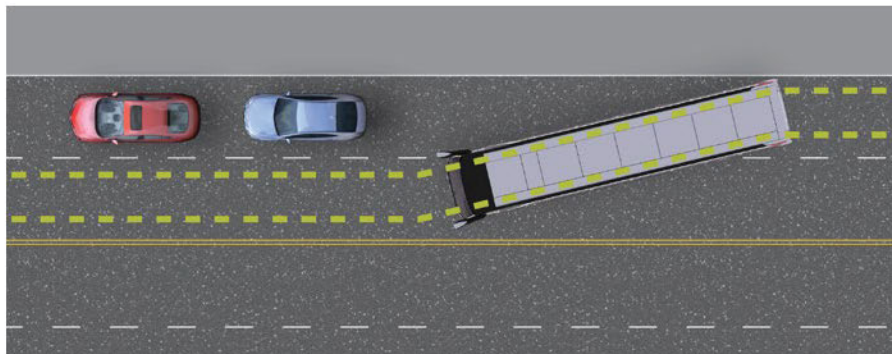
Turning a large vehicle requires more attention and care than turning a passenger car. All left turns with buses, as with other vehicles, must be started in the left lane as close to the centre line or dividing curb as possible. With the bus positioned approximately 1 m (3 ft.) from the centre line or curb, proceed straight until the intersecting curb line can be seen through the front left window. Complete the turn as near as possible into the left lane of the street you are entering. Narrow intersecting streets may require that you proceed straight ahead over the centre of the intersection before the turn can be started. When this movement is necessary, you must use caution, using your mirrors to ensure the movement can be made safely.

Left turns – one-way streets

Left turns from a one-way street into a one-way street will require that you adjust the turning arc in a similar manner as in the right hand turn, to avoid running over or scuffing the curbing with the left rear wheels.

Leaving the curb

You should not rely solely on the side mirror to check if the traffic is clear before pulling out. You should also glance over your left shoulder to verify the way is safe.



Leaving the curb with a bus will require a signal be given by means of the signal lights, but you should not use the turn signal until you are prepared to proceed from the curb.

Leaving the curb with a bus which has an overhang over the rear wheels requires you to use caution to avoid striking pedestrians, poles or sign posts which are located close to the curbing. Cars parked close to the front of the bus and vehicles approaching in the opposite direction are factors which you must assess before moving your vehicle.

Parked cars

Passing parked cars requires you to be constantly alert for hazards: cars pulling out without warning, sudden opening of doors on the traffic side or pedestrians stepping out from between cars.

Watch for warning clues:

- front wheels turned out
- driver sitting behind the wheel
- exhaust from tail pipes
- brake lights

Precautions

The laws governing the operation of a motor vehicle must be carefully observed so that every good driving practice and safety rule is followed.

- Backing a bus should be undertaken with the utmost care and caution. The driver should use the rear-view mirror and, if possible, turn and look back and have someone direct them. A professional driver backs slowly and cautiously and watches traffic conditions around the vehicle at all times. Backing should, however, be avoided wherever possible.
- Adverse weather conditions require adjustments to driving procedures. Every driver should exercise an exceptional degree of care and prudence during adverse weather conditions.
- A driver must adjust their speed to meet conditions. Additional hazards, such as narrow roads, sharp turns, narrow bridges, rough roads and severe dust conditions must be anticipated, recognized and safely met.
- No passenger should be allowed to occupy any position that would interfere with the vision of the bus driver to the front, sides or rear.
- The driver should not leave the bus without first stopping the engine and removing the ignition key, setting the brakes and putting the manual transmission in its lowest gear and out of gear in an automatic transmission.
- All doors should be tightly closed whenever the bus is in motion.

- The bus should be heated and ventilated properly.
- At no time should the bus be loaded beyond its licensed capacity.
- Buses carrying passengers must stop as far to the right as possible and at a recommended distance of not less than 5 m (15 ft.) from the nearest rail, at all uncontrolled railway crossings. These are railway crossings where no automatic signals or flagperson is stationed. The driver should make note of the number of railway tracks and, before proceeding, make sure that no trains are approaching from either direction.
- When stopped at railway crossings the driver may open the door of the bus and listen for approaching trains.
- The driver should avoid situations that require quick stops. Stopping and starting a bus should be a gradual and smooth operation.
- The driver must not permit any unauthorized person to occupy the driver's seat or to operate the bus or any of its controls.
- A driver of a passenger vehicle shall not collect fares, or take on or discharge passengers while the vehicle is in motion, nor may they engage in unnecessary conversation with passengers while driving the vehicle.

Driver's vision

When driving, your view ahead and to the sides must not be obscured in any way. You must also have full movement of your arms and legs, and have ready access to emergency equipment at all times.

No passenger may sit to your left when you are driving. In the case of a sedan-type vehicle, a maximum of two passengers (in addition to the driver) may be seated on the front seat only if there is adequate room for the driver to operate the vehicle safely.

Standing passengers

Standing is prohibited on public service vehicles other than a local transit vehicle.

Passengers are not allowed to ride on the running boards, fenders or any part of the vehicle other than the seats.

Drivers of local transit vehicles should not permit passengers to stand to their right, so as to obstruct their view.

Refusal to transport passengers

No person may be refused passage on a public passenger vehicle when they present themselves at any regularly scheduled stopping-place and tenders the legal fare, unless at the time the vehicle is carrying the maximum authorized number of passengers.

Passage may be refused to someone who is intoxicated, disorderly or who is using profane language.

Emergency vehicles

As the name implies, an emergency vehicle is operated under conditions and circumstances of danger to life and property. The ordinary rules of the road, traffic signs and signals that apply to other traffic are suspended while the vehicle is being driven in response to a call for help, or to apprehend a person suspected of having committed a serious crime and only when continually sounding the siren and flashing lights. While such rules may be waived to provide a swift response to an emergency, the law does impose an obligation on all drivers of emergency vehicles to exercise due care for the safety of other persons. They're still responsible for the safe operation of their vehicle. To save the life of one person while endangering the lives of others is a trade-off society is not prepared to accept. Under no circumstances should a driver of an emergency vehicle take advantage of the law when not responding to an emergency.

Drivers of emergency vehicles provide a service to their community which sometimes goes unrecognized and is beyond monetary calculation. The skills, foresight and judgment required to operate such vehicles, often under extremely hazardous conditions, and where a speedy response is vital, is far above that required of other types of drivers.

The following are some of the rules and good driving practices of which you should be aware.

An emergency vehicle is any vehicle that is used for any one of the following purposes:

- police duty
- firefighting, including a fire pumper operated under authority of a municipality
- ambulance

Duties of other drivers

The law requires that drivers of other vehicles give the right of way to an emergency vehicle which is displaying flashing lights and is sounding a siren or other warning device. Such drivers are obligated to drive parallel to the right-hand side of the roadway, as close to the edge as circumstances permit and, where the vehicle is within an intersection, to clear the intersection and stop on the other side **until the emergency vehicle has passed**.

These laws were passed to assist operators of emergency vehicles to carry out their responsibilities with a minimum of delay. However, you should not presume that all drivers will comply with the law at all times.

Sometimes, a driver has difficulty in identifying the direction from which an emergency vehicle is approaching, particularly at intersections, and may inadvertently drive into your path. At other times, particularly during cold weather when all windows are closed, drivers have difficulty in hearing the siren and may not react as quickly as they might under more favourable conditions.

When approaching an emergency vehicle stopped on the highway with its emergency lights flashing, drivers must slow to 60 km/h when passing unless the emergency vehicle is on the opposite side of a divided highway.

When roads and traffic conditions are severe, extra care is required. It is far better to take a few extra minutes to arrive at your destination safely than to be delayed by a collision.

Recovery vehicles (tow trucks)

Flashing lights should be used only when the recovery vehicle, or the vehicle in repair or tow is creating a hazard or obstruction on the highway. When in tow, temporary tail, brake and signal lights shall be at the rear of the vehicle in tow.

Even though the vehicle is equipped with flashing lights, the driver is not granted any special privileges and must respect all right of way rules and other provisions.

You should remove derelict or damaged vehicles from the highways so that they do not obstruct the free passage of other vehicles. You should also clean up any debris that may be laying on the highway as the result of a collision.

Extreme caution should be used if a tow line is required to be stretched across a highway. Serious collisions have resulted where precautions have not been taken or a flagperson not posted.

When towing another vehicle, such as a power unit semi trailer, where the overall length exceeds the maximum allowable length, the driver must obtain a permit.

Drivers must slow to 60 km/h when passing a tow truck or service vehicle stopped on the roadside with its amber or amber and blue lights flashing while it is rendering assistance to a disabled vehicle, unless the truck is on the opposite side of a divided highway.

Taxis

The operation of a taxi is unique. Unlike any other vehicle, the driver is constantly exposed to the risk of collision. Generally, taxis operate 24 hours a day in high traffic density areas. The average number of kilometres travelled by a taxi driver in the course of one year is approximately 64,000, or nearly four times the average distance driven by drivers of passenger cars.



Taxi drivers have to contend with many problems. In addition to operating their vehicle in continuous traffic, most taxis are equipped with two-way radios and meters which create distractions when driving.

Taxi drivers are:

- Sometimes called to attend emergency situations.
- Urged by their passengers to hurry in order to catch a plane or to attend a meeting for which the passenger may be late.
- Exposed to and have to cope with unruly and sometimes intoxicated passengers.

The resulting pressures require taxi drivers to have a high degree of skill in the operation of their vehicles and to have a thorough knowledge of the street systems so that they can plan their destination routes quickly.

Examination of the driving records of taxi drivers shows two things:

1. Some taxi drivers have an exceedingly high incidence of collisions. This is attributable, in part, to the high exposure rate mentioned earlier.
2. A more disturbing aspect reveals that taxi drivers are frequently charged and convicted for speeding and failing to obey traffic control devices.

While the higher involvement rate in collisions may be somewhat understandable, it is difficult to justify why some taxi drivers commit these offences with such frequency, causing them to lose, at times, their driver's licence and their job.

Studies have shown that it is virtually impossible to pick up time in heavy traffic areas. Experiments carried out in other cities have shown that the time saved by a driver driving as fast as traffic conditions allow and disregarding other regulations, compared to a driver driving within the speed limit and observing all traffic rules, is a matter of a few minutes, scarcely worth the increased collision risk or the possibility of getting a traffic ticket.

A person wishing to operate a taxi must obtain a criminal record check.

Suggested practice for taxi drivers

It is a good practice to check the condition of your vehicle before taking it out for a day's work. If you detect any defects or inoperative equipment, you shouldn't take the vehicle out until the defect or inoperative equipment has been repaired. During the working day, if you detect any malfunction in the safety equipment, advise your dispatcher of the nature of the defect. The vehicle should be taken in for repairs as soon as possible; if the defect is serious, you should not attempt to drive the vehicle. Have it towed instead.

8. School buses

Becoming a school bus driver

To become a school bus driver you must be at least 18 years old and have a valid Class 1, 2, 3, 4 or 5 licence, and not be a novice driver (see page 9). You must also pass a medical and school bus examination and obtain a valid school bus S Endorsement.

The minimum requirement to drive a school bus is a Class 5 licence. This allows you to drive a school bus with up to 15 passengers. If the school bus is equipped with air brakes, you must have the air brake Endorsement A specified on your licence.

School bus driver S Endorsement

If you successfully complete the school bus examinations, you will need to visit any SGI motor licence issuer to have the S Endorsement added to your driver's licence.

To retain your S Endorsement you must re-test every five years. Re-testing is your responsibility. A reminder letter will be sent out to you 90 days prior to your five-year anniversary date. You can re-test at any time during this 90-day period with no change to your original anniversary date. Your next five-year anniversary date will be adjusted if you re-test before or after this 90-day period, though.

You must also have a current satisfactory medical examination on file with SGI.

School bus inspections and maintenance

With the lives of so many students in their hands, school bus drivers have certain responsibilities to the Saskatchewan Ministry of Education, local school boards, principals, parents and students. Therefore, it is essential that every school bus is in serviceable condition at all times. Regular vehicle inspections and maintenance, as required by current regulations, will keep the bus in good condition.

Safety is the most important and obvious reason for a daily trip inspection. It lets you know your vehicle is safe. This inspection is your responsibility. Refer to Section 4 - Vehicle condition on how to complete a trip inspection on a school bus.

Routine maintenance

Cleaning the bus is important. For safety's sake, the vehicle must be maintained at all times.

On a weekly basis, or more often if required, you should clean the:

- floors and steps
- interior and exterior mirrors
- windows, inside and out
- seats
- exterior of the bus
- repair minor defects that you have come across on daily inspections

School bus driver regulations

1. A school bus driver **must not**:

- Consume alcohol in the eight-hour period immediately before driving a bus.
- Operate a bus unless it is clean and sanitary.
- Leave a bus that contains passengers unless:
 - The bus has an interlock system or a device that prevents the bus from being moved or operated by anyone other than the driver and the driver has activated that system or device.
 - The driver has turned off the engine of the bus, removed the ignition key and engaged the parking brake.
- Operate a bus unless its headlights and tail lights are activated.
- Operate the bus until all passengers are seated in a seat designated for the purposes of transporting passengers.
- Back up on school grounds except with the direction of a responsible person who is positioned in such a manner that the driver can see that the bus can be safely backed up.
- Transport firearms, explosives or other dangerous items.
- Enter a provincial highway* without:
 - Stopping the bus not less than four and not more than 10 m from the travelled portion of the provincial highway.
 - Making sure it is safe to proceed.

* Where a provincial highway passes through a town with a population over 1,000, it is not deemed to be a highway within the town limits.

- Activate the safety lights unless the bus is stopped or in the process of stopping to load or unload the passengers.
- Activate the stop arm unless the bus is stopped for the purpose of loading or unloading passengers.

2. Every school bus driver shall:

- Activate safety lights, except where prohibited by law, before stopping to load or unload passengers:
 - At least 100 m before stopping on a highway with a speed limit over 50 km/h.
 - At least 25 m before stopping on a highway with a speed limit of 50 km/h or less.
- Activate the strobe lights on the bus any time the driver is transporting passengers outside a city, town or village.
- Except where prohibited by municipal bylaw, activate the stop arm when the bus is stopped for the purpose of loading or unloading passengers.
- Maintain discipline, and report any misconduct of passengers to the principal of the school.
- When loading or unloading passengers:
 - Exercise due caution.
 - On a highway, move the bus as far to the right as is practical.
 - At a school on any street that allows traffic in both directions, stop on the side of the street nearest the school with the door of the bus opening for students to exit immediately onto the sidewalk.
- Each day before operating the bus, perform the daily circle check.
- Ensure that every object carried onto the bus for transportation that cannot be held by a passenger is placed as close to the front barrier as possible and as low as possible. These objects should not exceed the height of the barrier and should be placed, when possible, in front of or under a seat that is close to the front of the bus.

Railway crossings

School buses are required to stop at all railway crossings, unless the crossing is equipped with automatic light signals indicating it's clear to cross.

When approaching a railway crossing that is **not** equipped with an automatic signal, every school bus driver **shall**:

- Signal right and move the bus as far to the right as is safe and practical.
- Cancel the right signal and activate the four-way flasher:
 - Not less than 100 m from the railway crossing on a highway with a speed limit of over 50 km/h.
 - Not less than 25 m from the railway crossing on a highway with a speed limit of 50 km/h or less.
- Stop the bus not less than four and not more than 10 m from the railway crossing.
- Open the front door of the bus and look in both directions for oncoming trains.
- Close the door.
- Proceed across the tracks when it is safe to do so and, in the case of standard transmissions, remain in gear until the bus is completely clear of the tracks.
- Check mirrors.
- Turn off the four-way flasher, turn on the left signal and move back onto the travelled portion of the highway when it is safe to do so.

Driver to notify employer of certain matters

Every driver shall promptly notify the school board, municipality or employer of any of the following:

- Any conviction against the driver pursuant to:
 - *The Alcohol and Gaming Regulation Act, 1997* respecting the operation of a motor vehicle
 - the Criminal Code (Canada)
 - *The Traffic Safety Act*
 - any regulation made pursuant to any of the acts mentioned in subclauses i) to iii)

- Any suspensions or revocations of the driver's licence, a refusal by the administrator to issue a licence to the driver or a licence restriction imposed on the driver by the administrator.
- Any medical condition that, in the opinion of the driver's physician or health care provider, could have an impact on the driver's ability to safely operate a bus.

Driving techniques

Braking

When you are braking a school bus, you should brake gently and over a long period of time to keep your passengers in their seats – remember your passengers are not secured. You should also make sure that the wheels are straight throughout braking. See the *Saskatchewan Driver's Handbook* (available at www.sgi.sk.ca/handbook) for a discussion of braking techniques.

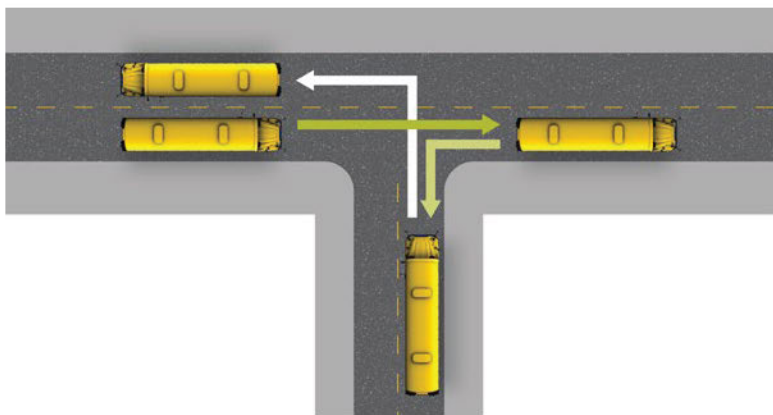
Backing

You should try to avoid backing your school bus whenever possible; it is a difficult and potentially dangerous practice. In fact, backing a bus on school property is not permitted unless you have a responsible person to guide you.

Two-point turns

During your bus driver's test, you will have to demonstrate that you can back straight, and perform a two-point turn.

To back straight, use your side mirrors to see where you are going.



- Well before the place where you wish to turn around, signal right, check mirrors, shoulder check and position the bus in the right lane.
- Cancel the signal light, proceed past the intersection and stop the bus as close to the edge of the road as possible.
- Turn on four-way flashers. Check for traffic.
- Begin backing up slowly. When the rear bumper is in line with the edge of the approach, turn the wheels sharply to the right. If your bus has a long overhang at the rear, you will have to back up a bit farther before turning the wheels to the right to ensure your rear wheels stay on the road.
- Watch the front end swing of the bus to ensure it is clear of traffic. As you back onto the approach, straighten your wheels and stop clear of the intersection. Turn off the four-way flashers.
- Signal for a left turn, check for traffic and proceed to make a left turn into the first available driving lane.

Mirror use and shoulder checks

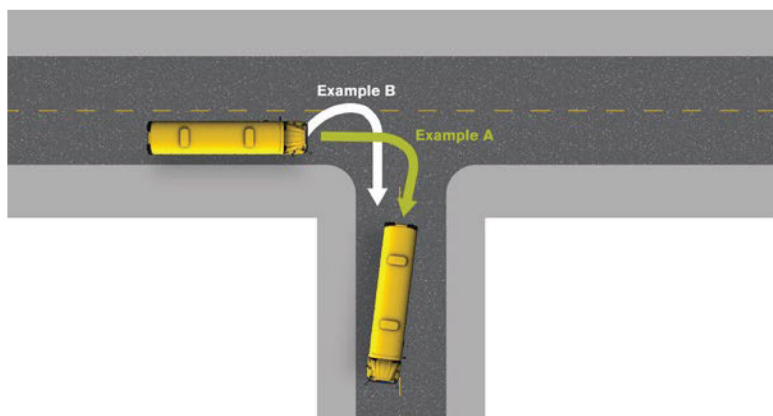
Check your two outside mirrors to see if your gates are open. See the *Saskatchewan Driver's Handbook* (available at www.sgi.sk.ca/handbook). Use your convex mirrors to see if there are any vehicles in your blind spot. A shoulder check to your left may also help, but you will have to rely on your convex mirrors to see what is on the right side of your vehicle.

Lane position

Since you are driving a wide vehicle, you should drive in the centre of the lane as often as possible. Your lane position becomes critical on turns and curves.

Right turns

It is difficult to stay in one lane when making a right turn with a long vehicle. Often you have to choose between crossing the lane line before turning the corner or after the corner. In most circumstances, when clear, cross the lane line after the corner (see Example A), provided the road design and traffic allows you to do so. There may, however, be situations where using Example B would be better. In doing so, every effort must be made to approach the turn in a position that partially blocks the curb lane preventing traffic from getting in between the bus and the curb. Either choice is acceptable if done safely.



Passing

Because school buses make frequent stops and starts, it is best to avoid passing slow-moving vehicles. If you must pass, you should only do so on a long straight stretch of highway with a sight distance of at least 50 seconds. Practise the passing judgment system described in the *Saskatchewan Driver's Handbook*.

Sharing the road

As a school bus driver, you must always watch out for other motorists, especially when pulling into or out of traffic. Try to time your entry into traffic so that you will disrupt the traffic flow as little as possible. This courtesy should prevent any close calls with other vehicles.

General procedures for stopping the bus and moving back into traffic

1. Check your rear-view mirrors early when you know a school bus stop is approaching. Consider traffic patterns for both following and oncoming vehicles:
 - Is traffic relatively clear, and can the stop be made with little or no hazard?
 - Is there a long line of following vehicles waiting to pass the bus?
 - Does a following driver appear impatient and anxious to get by?
2. If possible, let following traffic pass, signal your intention, reduce speed and, if safe and practical, move to the edge of the driving lane or shoulder.
3. Activate your safety lights at least 100 m before the bus stop on a highway with a speed limit of more than 50 km/h and at least 25 m before the bus stop on a highway with a speed limit of 50 km/h or less. This will give other drivers ample warning.
4. As you approach the stop, pull the bus to the edge of the road. You should attempt to stop as far to the right as practical. But stay at least 1 m (3 ft.) away from any waiting students, just in case one accidentally pushes another or slips while trying to get close to the bus.
5. While stopped, you should set the parking brake and shift into neutral. This prevents the bus from moving while students are loading or unloading.
6. Leave your safety lights on, cancel your turn signal and check that oncoming and following traffic is completely stopped. When you activate the release on the door handle, the stop arm will go out on some buses. On other buses, you must activate the stop arm separately.
7. When it is safe to do so, open the door of the bus and allow the students to board or leave.
8. When students have been safely loaded or unloaded, turn off your safety lights. In winter, you can close the door, but do not lock it until you are sure your students are safe. The stop arm will stay activated until the appropriate time.
9. When traffic is clear, signal, pull back onto the highway and proceed to your next stop.

Different locations have different hazards. Discuss the particular problems of loading and unloading on your route with your supervisor, or with a school bus driver who has had your route before.

Your loading and unloading operations will be successful if you are patient and courteous and refuse to allow the students to leave the bus until it is safe for them to do so.

When unloading students in an urban area where use of safety lights and stop arms are prohibited, use this as a guide:

1. Unload on the same side of the street as the student's home.
2. Unload as near to the residence as possible.
3. Maintain eye or mirror contact with the student until the student is well away from the bus.
4. If it is impractical to unload on the same side of the street as the student's home, unload as near to an intersection as possible.
5. Instruct the students to proceed across the street only when your bus has cleared the intersection and it is safe to do so.
6. Bring the matter of the street crossing to the attention of your superior so the parents may be notified the student is required to cross the street.

Motorists who pass unlawfully

In your daily travels, you may come across motorists who unlawfully pass your school bus when the safety lights and stop arm are activated. In such cases, the driver may be given a warning or be charged by police. It is up to you to report any violations of school bus legislation to the police. You must first establish that the law was broken, then try to identify the driver. You should obtain the licence plate number of the vehicle.

Emergency evacuation procedures

For information on the proper procedure for evacuating the bus in case of an emergency, contact:

Saskatchewan Safety Council
445 Hoffer Dr.
Regina, SK
S4N 6E2
306-757-3197

Legislation

The Traffic Safety Act and regulations are the law for school bus operations, vehicle equipment and maintenance.

The Education Act and regulations provide legislation which school boards must adhere to. You should be familiar with these laws as they apply to you. Each board has its own policy which clearly specifies what you, as a school bus driver, must do. You must know the policy and procedures in detail and carry them out.

9. Winter driving

Driving collisions increase at a chilling pace in winter. That's because many drivers don't understand the winter driving picture. They fail to take into consideration the hazardous conditions created by winter weather – tricky traction and poor visibility.

Years ago most drivers worked out their own winter driving problems. Those were the days of partially deflated tires, back off or removal of front brakes, wheel sanders, etc., but skidding, jackknifing and traffic tie-ups during the winter kept on happening.

Front brakes were often blamed because drivers learned that locked front wheels could not steer, regardless of how the steering wheel was turned. The idea of backing off or removing the brakes during the winter months was considered, but it didn't help; in fact, it reduced effective braking and lengthened stopping distances. Jackknifing and rear skids increased because of this practice.

Winter driving demands special defensive driving skills and adjustments, as well as just plain common sense.

Prepare early for winter

The trucking industry has often been criticized because its heavy vehicles have jackknifed or skidded, blocking traffic on crowded roads and highways. The first step in preventing these unnecessary occurrences, which cause adverse publicity as well as much property damage, is to make sure equipment is ready for that first unexpected freeze or storm.

Essential items to inspect

1. **Radiator** – Make sure proper winter coolant is installed and that there are no leaks.
2. **Tires** – Make certain all tires have good tread.
3. **Wipers** – Be sure your wiper blades are in good condition, so they will sweep snow and sleet off, rather than slide over it.
4. **Heater and defroster** – Make sure the heater and defroster are functioning well enough to keep the windshield clear at all times.

5. **Lights** – Be sure both headlights work on upper and lower beams and are correctly adjusted; also that brake, tail, marker, clearance lights and directional signals work properly and are clean, so they are clearly visible to other drivers.
6. **Brakes** – As roads become slippery, it's necessary that the brakes be in the best condition and balanced for uniform braking. This is even more critical with trains or doubles operations.
7. **Muffler and exhaust system** – These should be in good condition and tightly fitted so carbon monoxide does not seep into the interior of the vehicle where it could cause serious illness or death to the driver or occupants.
8. **Battery** – Cold weather greatly lowers battery power. Make sure yours is in good condition, and in case it's necessary, know the proper procedure for using a battery booster.
9. **Fifth-wheel lubrication** – For tractor trailer combinations, make sure a winter grade of lubricant is used on the fifth-wheel. Some heavy summer grades of lubricant at low temperatures become too heavy and interfere with steering on slippery surfaces.
10. **Windows and mirrors** – Make sure that windows are clean to ensure good visibility. Mirrors should also be kept adjusted and clean for good visibility to the rear.

The six primary hazards of winter driving

While the two major hazards in winter driving are commonly referred to as poor traction and reduced visibility, research has shown that there are six important problems which confront the commercial drivers.

These are:

1. **Poor traction** – Being unable to pull away from a standstill on an icy road, to go up slippery hills or to negotiate deep snow can cause trouble ranging from aggravating delays because of burnt tires to major traffic tie-ups and collisions.

To improve traction, good tire treads are necessary. Start off slow and easy, and do not spin your wheels, because this only digs you in deeper. In deep snow, in order to get room to move, a good idea is to turn your wheels from side to side to push the snow away from the tires. Another good trick is to move your vehicle back and forth four or five feet before you shut down.

This packs heavy snow. When you are pulling out use a light foot on the accelerator, easing forward gently.

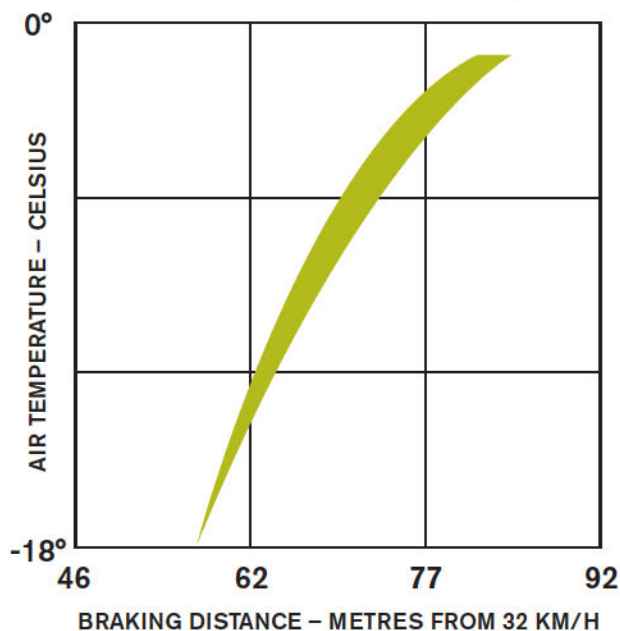
2. **Reduced ability to stop** – On ice and snow it takes three to 12 times more stopping distance than required on dry roads. These longer stopping distances contribute to the cause of many winter collisions.

Test studies indicate that the heavier the vehicle the greater the stopping distance. Under severe winter conditions this gap widens accordingly. Gearing down of the vehicle also assists in bringing it to a safe stop.

3. **The effect of temperature on starting and stopping** – Temperature plays an important part in braking distance and traction on ice and snow. As the temperature rises, ice becomes much more slippery.

Your braking distance can double with a temperature variation from -18°C to around 0°C . It is important, when driving in winter weather, to periodically get the feel of the road. This should be done only at a slow speed.

The chart shown below shows the effect of temperature on braking distance, with a tractor and semi trailer on ice, gross load 19,100 kg.



4. **Ice and snow made slippery by traffic** – The action of tires spinning and sliding on snow and ice greatly decreases traction on already hazardous road surfaces. This happens mainly at intersections, on curves and on hills. This polishing of the road surface increases braking distances, slows traffic and presents a severe hazard at intersections. It's up to you to understand this fact and compensate for it in your driving. **Slow down** before you reach that slippery intersection and **slow down** before getting into a curve or before going down a hill. Adjust to the existing road, weather and traffic conditions. Gearing down may be necessary to slow down safely.
5. **Reduced ability to see and be seen** – Winter driving hazards can be avoided, but you've got to see them.

Driving without completely clearing your windows invites disaster. Before starting your trip, clean off the entire windshield and all windows. Wipe off the headlights, brake and tail lights and turn signals so that others may see you. This may be necessary several times during a heavy storm. An extra few minutes could save your life.

There is a tendency by many drivers to overdrive their headlights. A heavily loaded truck travelling at 100 km/h requires approximately 138 m of braking distance. Therefore, with headlights strong enough to illuminate 108 m ahead, a vehicle could travel 31 m beyond where an object was first seen. The effective range of headlights varies greatly and the visibility of objects is affected by many factors. When driving at night or during adverse weather conditions, use headlights – not parking lights – to increase your ability to see and be seen.

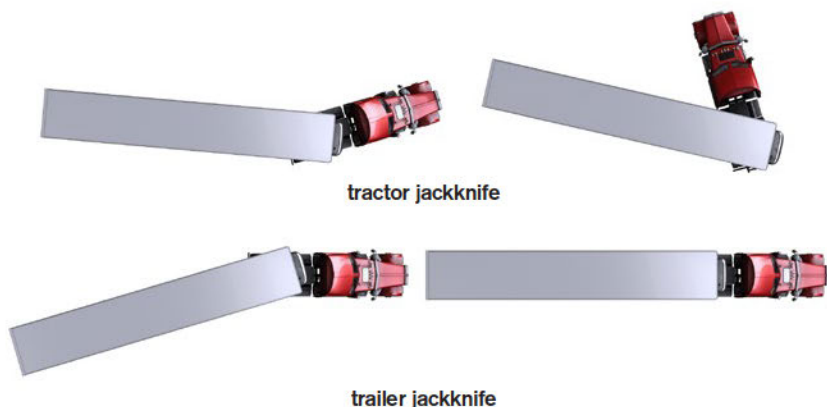
Road spatter can leave you driving blind. Use your windshield wiper often. At night, stop occasionally to clean off headlights. In fog or heavy snowfall keep lights on low beam and adjust your speed accordingly.

Run your heater and defroster a few minutes before you start out. You'll prevent sudden fogging of your windshield.

Wipers should be in top condition – both blades and arms. If new blades are installed they can be inefficient if arm pressure is inadequate. This shows up in poor wiping. Pressure of one ounce per inch of blade is needed and recommended.

6. Jackknifing – There are two distinct kinds of jackknifing:

- a **tractor jackknife** in which the tractor rear skids sideways
- a **trailer jackknife** in which the rear of the trailer comes around



Repeated tests have shown that if a jackknife develops beyond 15 degrees it is almost impossible to recover. The faster this 15 degree angle develops the greater the severity and potential damage of the jackknife.

Since a jackknife can go to 15 degrees in length in one and half seconds, any attempt to recover must be fast in order to take preventive action.

Winter driving tips for the professional driver

Recognize the special hazards of winter driving and know the techniques needed to drive safely in spite of them. The facts are here, the rest is up to you.

Be able to see and be seen – Clean all the snow and ice off of your windshield, other windows, outside mirrors, lights and reflectors. Make sure your vehicle is equipped with good windshield wiper blades and that wiper arms are exerting enough pressure on the blades to ensure a clean sweep. If moisture or ice builds up on your windshield, stop and clean it off.

Tires – Tires with good deep treads are essential for good cornering and handling on slippery roads. Check air pressure frequently to maintain the manufacturer's recommended pressure.

Get the feel of the road – Occasionally, try your brakes or gently depress your accelerator while driving; adjust your speed according to existing conditions. Rising temperatures greatly reduce traction on ice and snow.

Stretch your following distance – Knowing that winter road surfaces may increase stopping distances three to 12 times, the smart driver increases the normal dry road following distance. Heavy trucks require longer stopping distances on slippery roads than passenger cars – don't tailgate.

Brake before curve – All vehicles are particularly sensitive to overpowering, oversteering and overbraking on curves. Unseen hazards around the bend may require evasive action, so turn your steering wheel slowly and smoothly, keep a constant speed in the turn, and pump the brakes carefully if it's necessary to slow down or stop.

Intersections – Be extra cautious at intersections where snowbanks can reduce visibility.

Watch for reduced clearances – These are caused by accumulated snow or ice.

Air tanks – Drain air tanks daily and leave them empty when not in use.

10. Transporting dangerous goods

Federal and provincial legislation is in force to promote public safety when transporting dangerous goods. Canada's federal, provincial and territorial governments work together with the transportation industry to ensure that requirements for transporting dangerous goods are the same across the country, and that they apply to all means of transport – air, marine, rail and road.

Safe transport of goods

Everyone in charge of dangerous goods – everywhere along its journey – is responsible for its safe transport and must keep these things in mind:

Whoever is in charge of dangerous goods must immediately report to a designated authority in the event of:

- Any discharge, emission or escape of dangerous goods from any container, packaging or means of transport.
- A reportable dangerous occurrence or a collision involving dangerous goods.
- The loss, theft or misplacement of a consignment of products of certain classes of dangerous goods.
- A delay in delivery of certain explosives.

Anyone who handles, offers for transport or transports dangerous goods must be a trained person, or performing those duties under the direct supervision of a trained person. It is the employer's responsibility to ensure that employees are trained with respect to the dangerous goods that will be assigned to them. When training is complete, that person is issued a Transportation of Dangerous Goods certificate. Certificates must be renewed every 36 months.

The consignor is responsible for:

- Supplying the initial carrier with the appropriate safety marks, like placards and the product identification number; and
- Providing the initial carrier with the shipping document or waste manifest, as required.

The carrier is responsible for:

- Displaying the appropriate safety marks in the proper manner and location.
- Replacing any safety marks that are damaged or lost while the consignment is in the carrier's charge.
- Ensuring that all required documentation is complete and accompanies the consignment, that any change in the consignment while it's in their charge is documented and that when a consignment leaves the carrier's charge, copies of all necessary documents are passed on to the receiver.
- Loading and segregating the consignment if appropriate.
- Refusing consignments of dangerous goods that do not meet the requirements of the regulations.
- Retaining all documents for two years.

The consignee is responsible for:

- Completing, signing and forwarding all required documents for wastes to the proper authorities.
- Meeting the requirements of a consignor when returning empty packages, containers or vehicles that are not purged or cleaned.

Classifying dangerous goods

Transport Canada's Transportation of Dangerous Goods Regulations divides dangerous goods into nine classes according to the type of hazard involved:

Class 1 – Explosives

Class 2 – Gases

Class 3 – Flammable Liquids

Class 4 – Flammable Solids

Class 5 – Oxidizing Substances

Class 6 – Toxic and Infectious Substances

Class 7 – Radioactive Materials

Class 8 – Corrosives

Class 9 – Miscellaneous

Safety marks

Safety marks are used to indicate the presence of dangerous goods and to identify their hazard class. The visible safety marks are generally the labels, placards and UN/product identification number.

Labels are used on packages, cylinders, drums and other small containers.

Placards are used on large containers (capacity over 450l) and transport units.

UN/Product Identification Numbers are four digit numbers that are assigned to a specific product; e.g., gasoline is UN1203. UN/PIN is required if the dangerous good is in trailerload, truckload or bulk quantities. Please refer to Transport Canada's website (www.tc.gc.ca/eng/tdg/safety-menu.htm) for more information about labels and placards.

Dangerous goods routes

Routes may be established within certain cities, towns and villages over which dangerous goods must be transported.

These routes are identified by the posting of signs. Dangerous goods routes are authorized by civic bylaw and the respective civic administration may be contacted for particulars of their dangerous goods route bylaw.



Documentation

Proper information on a shipping document helps ensure the safe handling and transporting of dangerous goods. It also provides valuable information to those who may have to deal with a dangerous occurrence or collision involving these goods.

The consignor must ensure that the shipping document contains all the required information in the order specified, that the document is signed, and is accompanied by any other required documents or certificates and that it is given to the initial carrier.

The regulations provide that the shipping document shall be located during transport as follows:

- When the driver is in the cab, one copy in the cab within the driver's reach or in a pocket mounted on the driver's door.
- When the driver is not in the cab, one copy on the driver's seat or in a pocket mounted on the driver's door.

- If the transport unit is a tractor/trailer and the trailer containing dangerous goods is detached and left in a parking area, leave a copy of the shipping document with the person in charge of the parking area.
- In cases that are not covered by the above, leave the shipping document in an accessible, identifiable waterproof receptacle securely attached to the transport unit.

The carrier must also ensure the document is passed along with the dangerous goods to any subsequent carrier or to the consignee.

Except when dangerous goods that are to be transported as waste or by air, any kind of shipping document may be used providing that it contains all of the criteria for shipping documents that is required by the regulations.

When the dangerous goods have been unloaded but due to residues that remain in the transport unit a danger still exists (e.g., bulk fuel haulers), the regulations provide that the carrier's copy of the shipping document is to be marked "RESIDUE – LAST CONTAINED" and accompany the transport unit until it has been re-loaded and/or cleaned and purged so that no hazard exists.

When transporting waste dangerous goods, a manifest that is prescribed in the regulations must be used. A pamphlet explaining how to obtain and use the manifest is available from the federal and provincial departments of the environment.

Vehicles displaying a dangerous goods placard must stop at uncontrolled railway crossings.

For further information, contact:

**Transport Canada – Transportation of Dangerous Goods Services
Regional Office – Prairie & Northern**

Phone: 306-975-5105 or Toll-free: 1-888-463-0521

Email: pnrweb@tc.gc.ca or any traffic officer in your area, or consult the *Saskatchewan Truckers' Guide*

Note: *The Dangerous Goods Act* and regulations restrict the movement of vehicles while displaying dangerous goods placards. Accordingly, these vehicles CANNOT be permitted to be used for examination purposes.

11. Appendix A

Sample Trip Inspection Report

Date _____ Time _____ Location of Inspection _____

Name _____ Carrier Name _____
Print name of person performing inspection

Licence Plate and/or Unit No: Truck/Tractor _____ Trailer(s) _____

Odometer Reading (if equipped) _____

Results of Inspection

No defects found The following defects were found

I declare that the vehicle(s) shown above has (have) been inspected in accordance with the applicable requirements.

Signature of person conducting inspection

Signature of driver
(if different than person conducting inspection)

The above noted defects were repaired.

Authorized signature

Date

Note: This sample is provided for reference only. It is not a prescribed form in regulation and carriers/drivers are free to use this form or develop their own form, or any other form available (e.g., one's that are pre-printed on the back of some log book pages), provided it contains all the necessary information. The form can contain an inspection item checklist but it is not required to. If in electronic form, a check box can be used for declaration and an electronic signature is acceptable.

