

Mandatory Entry-Level Training (MELT)

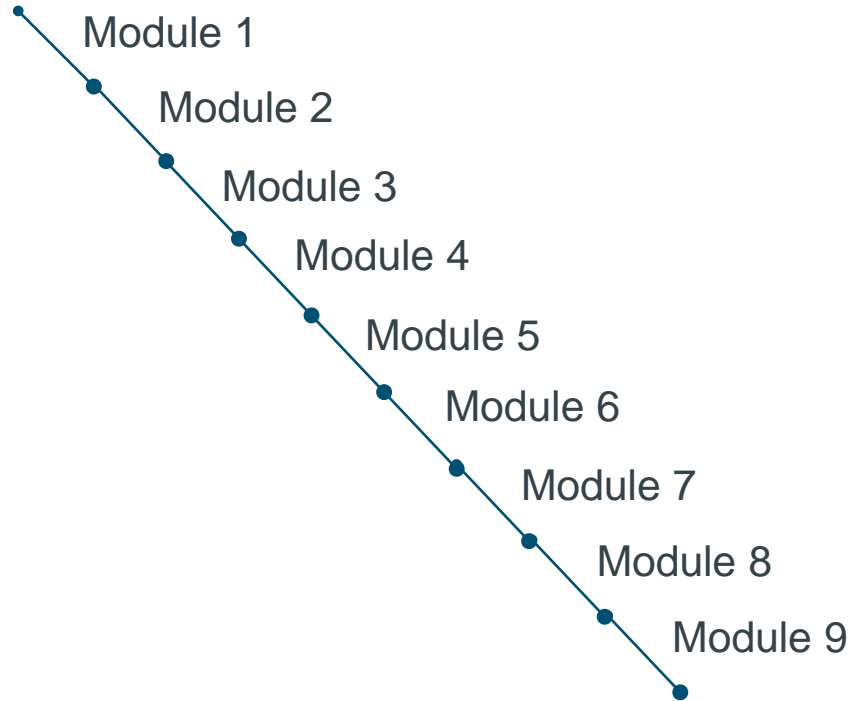
Experience and Equivalency Class 1

Government of Alberta

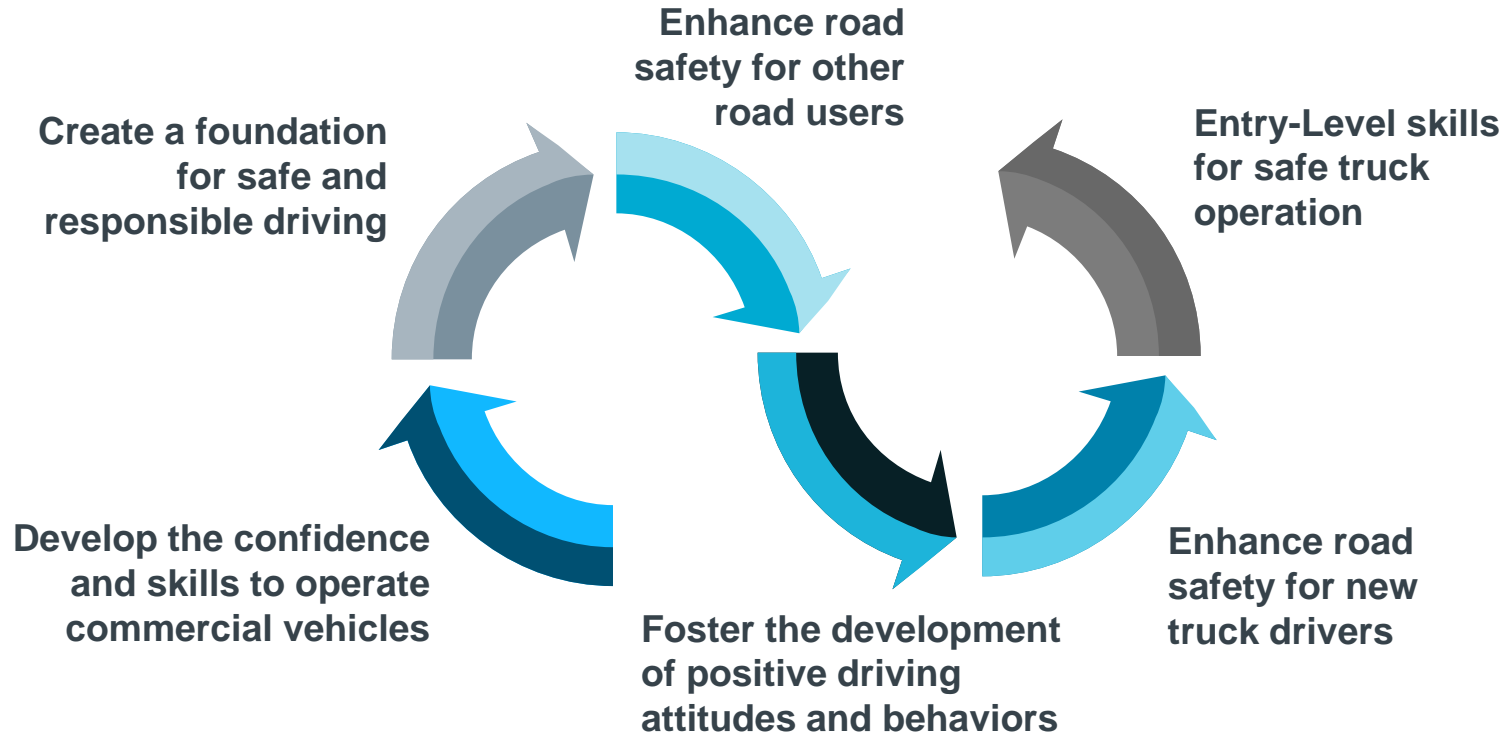
December 2020



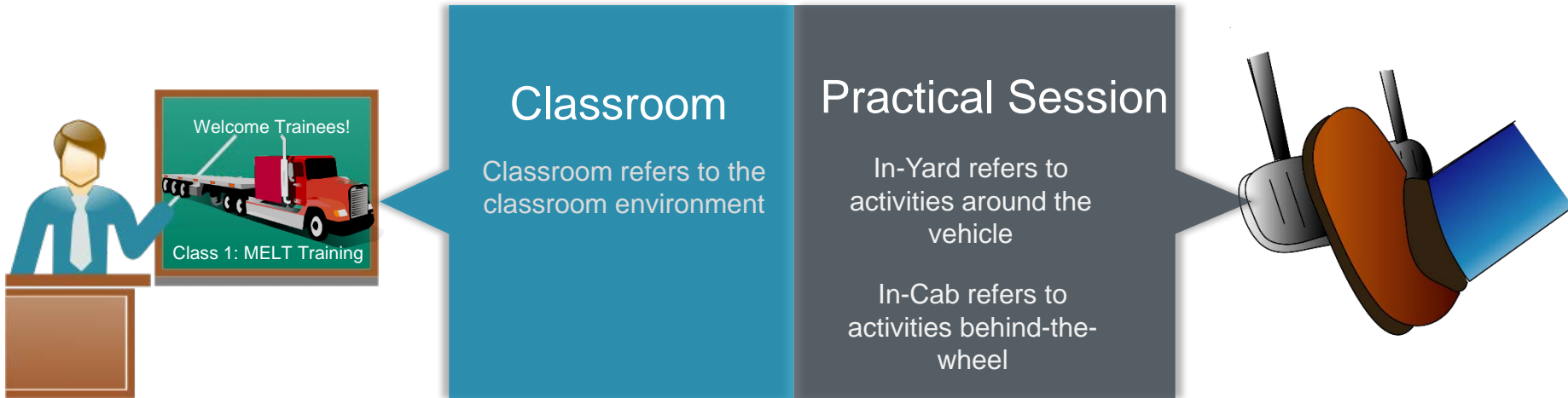
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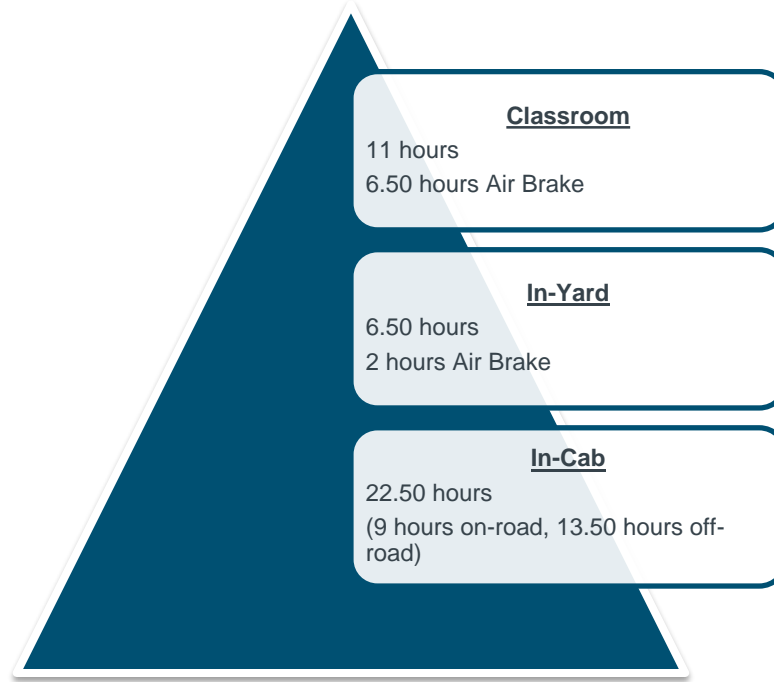
Goal of MELT



Learning Environment



Course Hours



Prerequisites

✓ Be at least 18 years of age



✓ Hold a Class 3 driver's licence with two years or more years experience driving Class 3 vehicles



✓ Strongly Recommended: Medical Assessment



Course Modules

Module 1	Employment in the Trucking Industry
Module 2	Vehicle Components and Inspection Activities
Module 3	Basic Driving Techniques
Module 4	Professional Driving Habits
Module 5	Off-Road Tasks and Manoeuvres
Module 6	Documents, Paperwork, and Regulatory Requirements
Module 7	Hours of Service Compliance
Module 8	Cargo Securement and Loss Prevention
Module 9	Handling Emergencies

Module 1

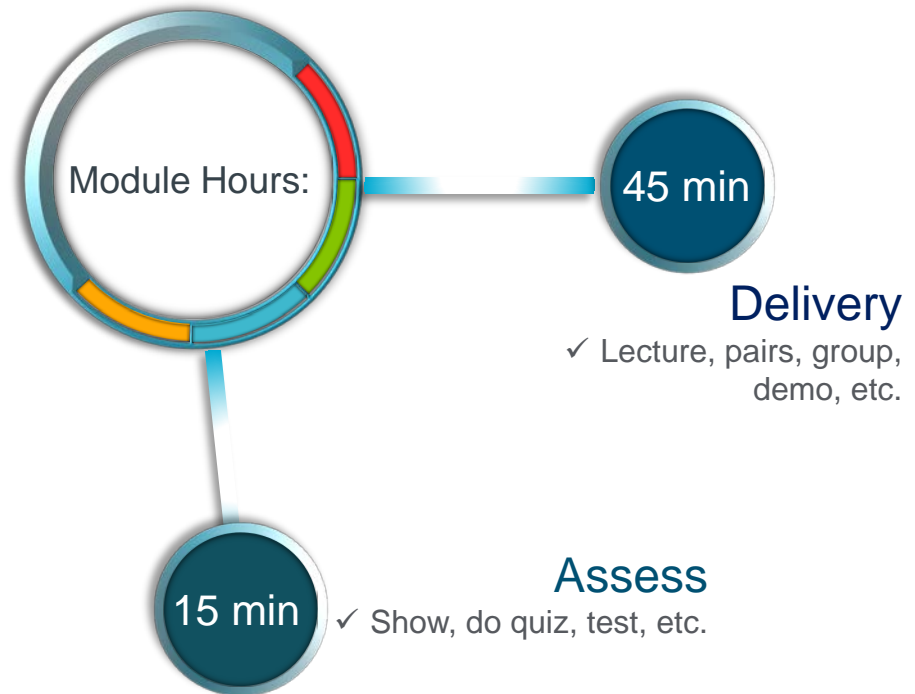


Employment in the Trucking Industry

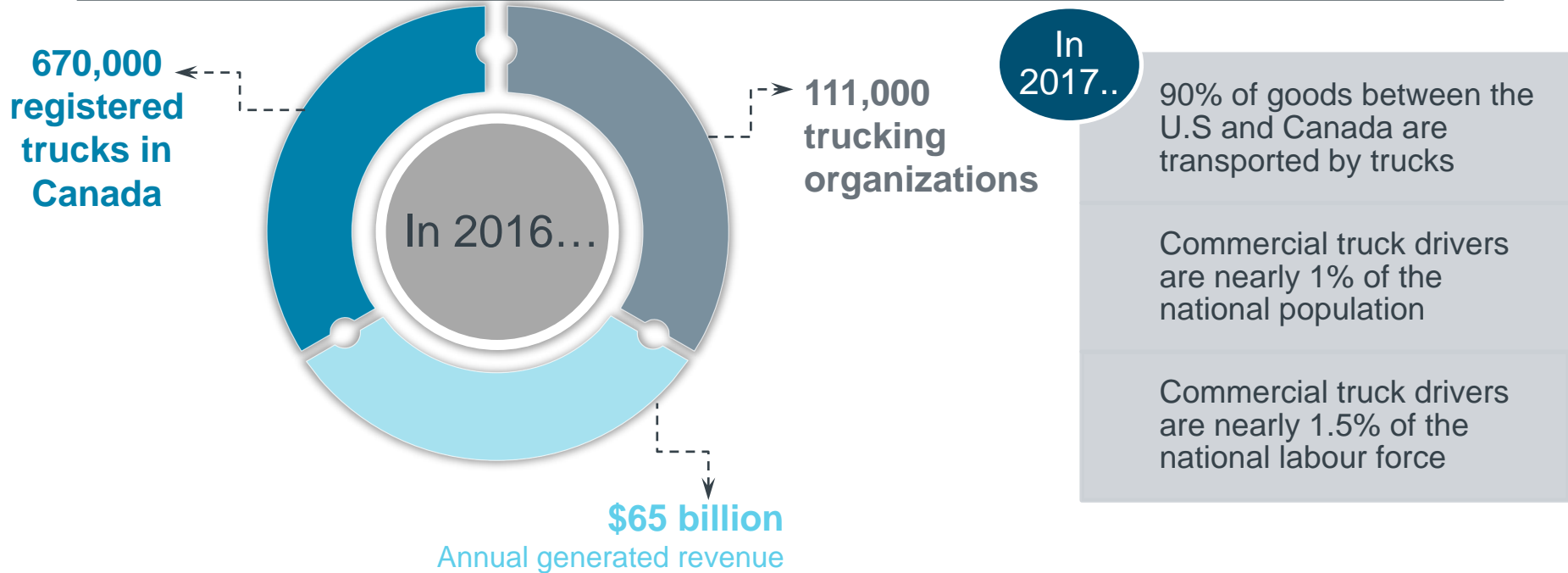
Purpose

Module 1:

- ✓ Understand their roles and responsibilities as commercial truck drivers.
- ✓ Understand the requirements and process of obtaining a Class 1 driver's licence.
- ✓ Understand the regulations that govern driving on public roads and highways in Alberta.
- ✓ Understand the federal and provincial laws governing the operation of trucks in Alberta.



Trucking Industry and Career Opportunities



Truck drivers are important to the growth of the economy. A lack of truck drivers may have significant impact of the economy and way of life of the people

Employment in the Trucking Industry

“Good” drivers vs “Poor” drivers

What are employers looking for?

The Commercial Carrier Record-keeping and Commercial Vehicle Driver Reporting Regulations

Employment in the Trucking Industry

Employers
may request
the following

After employment,
employers are
required to provide
additional training

**Personal & Commercial Driver's
Abstract**

**Submission of medical fitness
certificate**

Criminal Record Check

Drug Testing

Roles and Responsibilities of a Commercial Driver

Drive with the correct
Class of Licence

1

2

Sound knowledge of the laws and other regulatory standards governing the operation of a commercial vehicle

Drive Responsibly

3

4

Physically and emotionally fit to operate a motor vehicle

Maintain a positive
and professional
attitude

5

6

Develop advanced driving skills

Licensing



Note

Air brake or Q- endorsement is required prior to operating or testing in a vehicle equipped with air brakes.

Enhanced Knowledge Test

After successful completion of this course, trainees will be required to complete an enhanced knowledge test at any registry agent office in Alberta

Class 1 Road Test

After successful completion of the Class 1 knowledge test, trainees can schedule their Class 1 road test

Class 1 Driver's Licence

A Class 1 driver's licence will be issued after successful completion of the road test.

Class 1 Licence Holder

The holder of a Class 1 driver's licence can operate:

- ✓ *A motor vehicle or a combination of vehicles, other than a motorcycle;*
- ✓ *Class 6 type vehicles for learning only.*

Licensing Cont'd

- Class 1 driver's licence will be issued after successful completion of the road test
 - Restrictions may apply
- The holder of a Class 1 driver's licence can operate a motor vehicle or a combination of vehicles, other than a motorcycle

Medical Condition



Requirements for Commercial Vehicles

- ✓ ☒ Legally responsible to report any disease or disability
- ✓ ☒ Medical report required:
 - First time applying for a driver's licence
 - Upgrading a driver's licence to a Class 1, 2, or 4
 - Every 5 years after that, until 45 years of age
 - Every 2 years from age 45 to 65
 - Every year after you turn age 65

Traffic Laws/Regulations

Use of the Highway
and Rules of the
Road Regulation

Demerit Point
Program and Service
of Documents
Regulation

Vehicle
Equipment
Regulation

Distracted
Driving
Regulation

Traffic Control
Device
Regulation

Drivers Hours of
Service Regulation

Operator Licensing
and Vehicle Control
Regulation

Commercial Vehicle
Certificate and
Insurance Regulation

Commercial Vehicle
Safety Regulation

Commercial Vehicle
Dimension and
Weight Regulation

Vehicle Inspection
Regulation

Bill of Lading and
Condition of
Carriage
Regulation



Province of Alberta

TRAFFIC SAFETY ACT

National Safety Code (NSC)

Federal Law

A truck, tractor, or trailer or any combination of these vehicles registered for or weighing in excess of 4,500 kilograms

A commercial passenger vehicle with an original manufacturer's seating capacity of 11 or more persons including the driver

Provincial Law

A truck, tractor, or trailer or any combination of these vehicles registered for a weight of 11,794 kilograms or greater

A commercial passenger vehicle with an original manufacturer's seating capacity of 11 or more persons including the driver



- ✓ There is both **provincial** and **federal** NSC legislation that may require a carrier to obtain a Safety Fitness Certificate (SFC)
- ✓ Only **one** piece of legislation will apply to a carrier at any given time

National Safety Code (NSC)

Single Driver's Licence Concept

Knowledge/ Performance Tests

Driver Examiner Training program

Classified Driver Licence system

Self-Certification Standards and Procedures

Medical Standards for Drivers

Carrier and Driver Profiles

Short-Term Suspension

Hours of Service

Cargo Securement

Commercial Vehicle Maintenance and Inspection (PMVI)

Commercial Vehicle Safety Alliance (CVSA) On-Road Inspections

Trip Inspection

Safety Rating

Facility Audits

First Aid Training

Traffic Laws

- Alberta *Traffic Safety Act* -
<http://www.qp.alberta.ca/documents/Acts/t06.pdf>
- Municipalities
- Your responsibility to know

Criminal Code of Canada

Impaired Driving



Leaving the Scene of a Collision



Failure to provide a breath
or blood sample



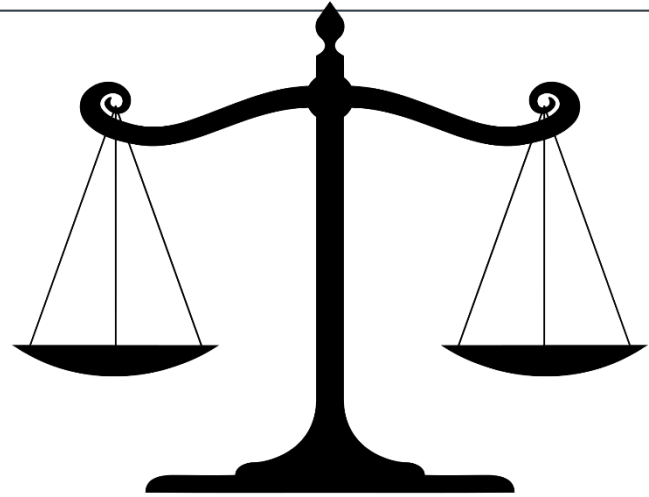
Impaired driving causing bodily
harm



Impaired driving causing death



Driving while suspended or
disqualified





Fines



Demerit Points



**Driver's Licence
Suspension**



Jail Time



Criminal Record



Insurance Cost



Travel Restrictions



**Loss of
employment**

Traffic Convictions

Review

What are demerit points and how do you accumulate them?

Answer

They are negative points placed on your licence and they are received from a traffic convictions.

Review

Who's responsibility is it to know the laws and company policy and procedures?

Answer

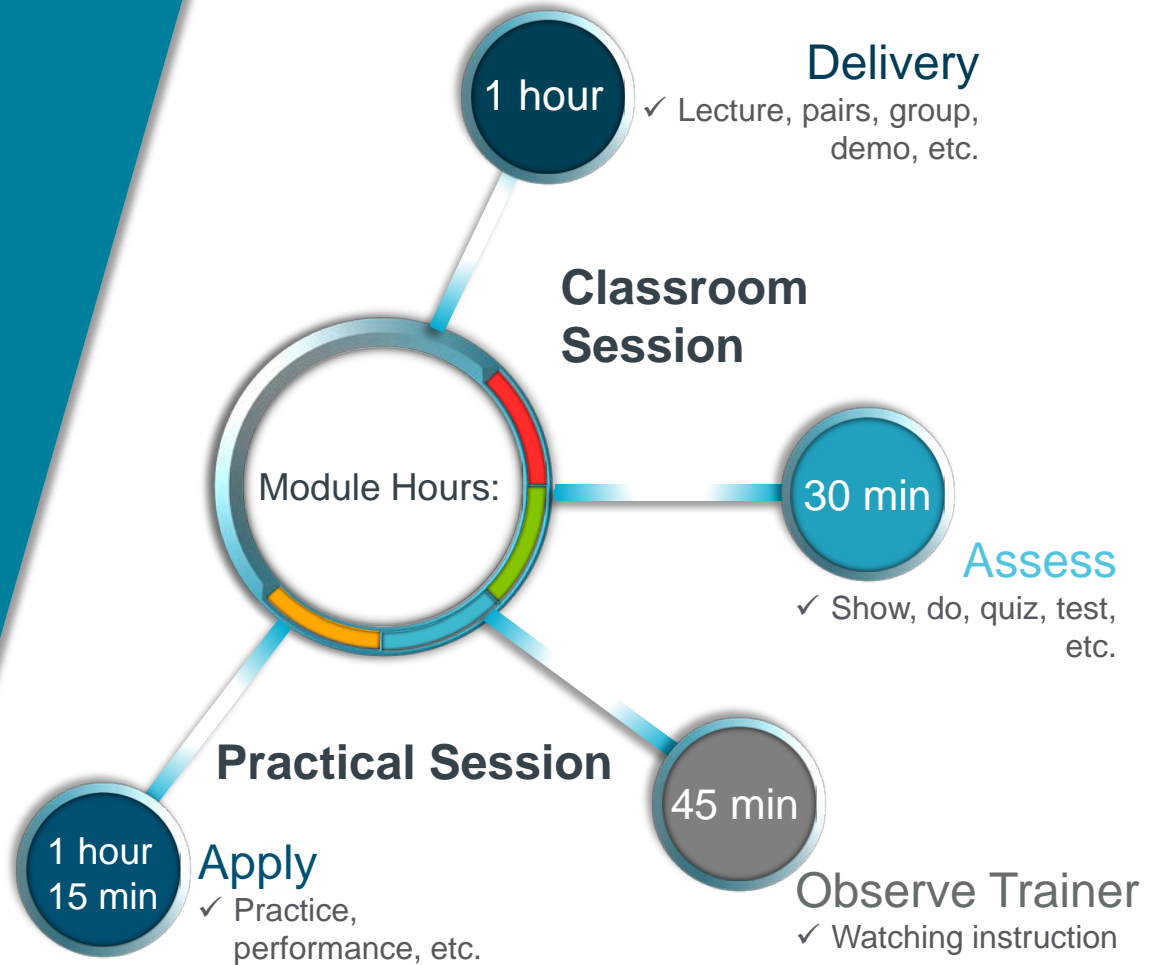
The Driver



Purpose

Module 2:

- ✓ Identify the basic components and systems of a truck/tractor.
- ✓ Understand the function and safe use of the components and systems.
- ✓ Know how the components and systems work.
- ✓ Understand the importance for drivers to know the basic components of vehicles.
- ✓ Recognize the importance of inspecting and maintaining a tractor.
- ✓ Understand the importance of a pre-trip checklist.
- ✓ Identify signs of potential problems.



Know Your System and Components

- Primary Vehicle Controls
- Secondary Vehicle Controls
- Engine
- Air Intake and Exhaust Systems
- Lubricating System

Know Your System and Components

- Cooling system
- Suspension system
- Brake System
- Auxiliary Equipment

Know Your System and Components

- Electrical System
- Vehicle Body and Frame
- Tires and Wheels
- Coupling System
- Gauges
- Switches

Know Your System and Components

- Some controls, systems and instruments are unique to a truck/tractor trailer and may not be found in other types of vehicles.
- Consult the manufacturer's vehicle manual.

Components and Systems in a Truck

Primary Vehicle Controls

Accelerator Pedal



Transmission

It is a box of gears located behind the clutch.

Clutch / Clutch Pedal



Steering Wheel

It is used to determine the direction of travel of a vehicle in motion

Note: The position of the components and systems may vary with truck models

Components and Systems in a Truck

Primary Vehicle Controls (Cont.)

Gear Lever



Steering Mechanism



Brake Pedal



Parking Brake



Note: The position of the components and systems may vary with truck models

Components and Systems in a Truck

Secondary Vehicle Controls

Exterior



Air Vents/Air condition/ Heater

Important in safety issues relating to comfort of the driver and other occupants

Horn

Important in safety issues relating to communication.

Radio

Important in safety issues relating to communication

Note: The position of the components and systems may vary with truck models

Components and Systems in a Truck

Secondary Vehicle Controls

Wiper/Windshield Washer

Important in safety issues relating to vision

Instrumental Panel



Interior Lamps

Illuminates the interior of the cab and the dashboard

Note: The position of the components and systems may vary with truck models

Components and Systems in a Truck

Engine

Engine Block



Cylinders

This is a closed chamber inside which fuel is burned by the engine

Fuel Injectors

This supplies fuel (diesel) to the cylinders

Fuel Filter



This component keeps contaminants out of the fuel system

Note: The position of the components and systems may vary with truck models

Components and Systems in a Truck

Engine

Piston



Creates motion that compresses the air-fuel mix in the cylinder

Crank

This is an arm attached to the crankshaft at a right angle and connected to the piston by a rod

Crankshaft



This a shaft to which series of cranks and crank pins are attached to an engine's connecting rods.

Note: The position of the components and systems may vary with truck models

Components and Systems in a Truck

Air intake and Exhaust System

Exhaust System



Muffler



Air Intake System



Note: The position of the components and systems may vary with truck models

Components and Systems in a Truck

Air Intake and Exhaust System

Turbocharger



Aftercooler

Assists in cooling the intake air received from the turbocharger to a safe temperature level.

Note: The position of the components and systems may vary with truck models

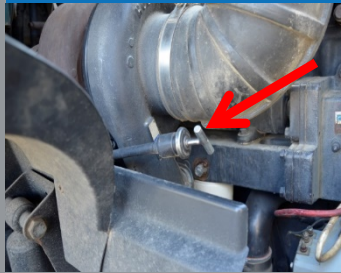
Components and Systems in a Truck

Lubricating System

Power Steering System



Oil Dip Stick



Hoses and Clamps



Oil Filter



Removes impurities before they circulate to all the moving components.

Note: The position of the components and systems may vary with truck models

Components and Systems in a Truck

Cooling System

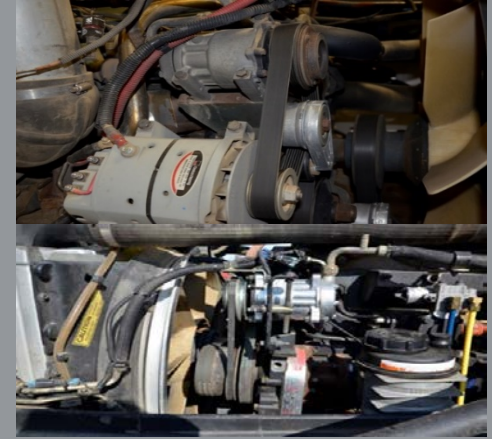
Radiator



Radiator Cap



Fan Belts and Blades



Note: The position of the components and systems may vary with truck models

Components and Systems in a Truck

Suspension System

Suspension & Frame Attachments



Front tractor axle



Components and Systems in a Truck

Suspension System

Rear tractor axle



Single axle



Tandem axle



Tridem axle



Components and Systems in a Truck

Suspension System

Drive Shaft



Air Bag Suspension



Shock Absorber



Components and Systems in a Truck

Brake Systems

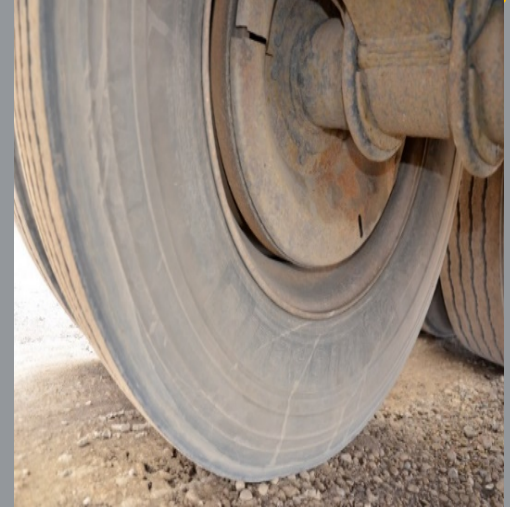
Hydraulic Brake System

Hydraulic brakes apply instantly

Disc Brake System



Drum Brake System



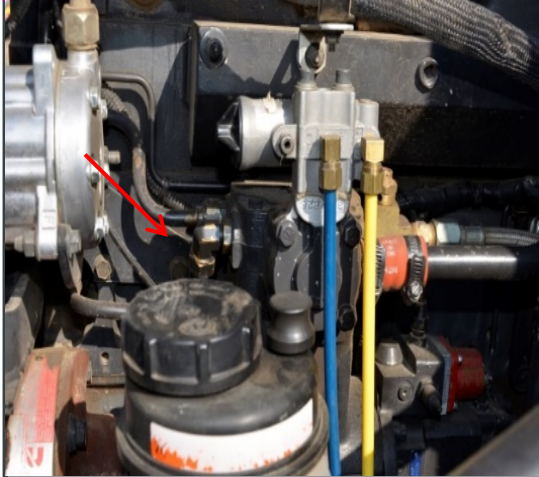
Note: The position of the components and systems may vary with truck models

Components and Systems in a Truck

Brake Systems

Air Brake System

Air compressor



Air tanks



Air tank check valve



Note: The position of the components and systems may vary with truck models

Components and Systems in a Truck

Auxiliary Equipment

Advance warning Triangle



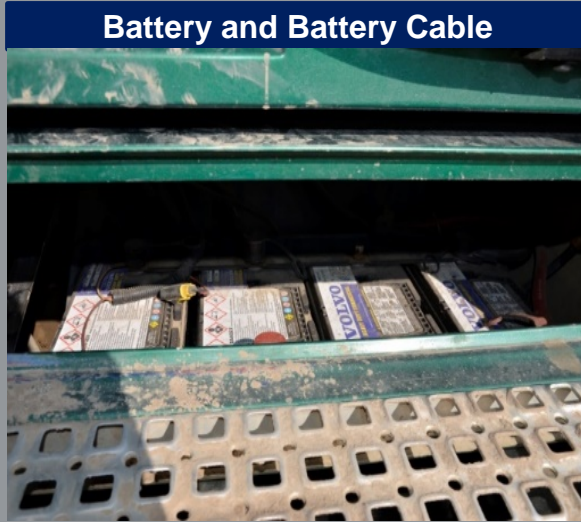
Fire Extinguisher



Components and Systems in a Truck

Electrical System

Battery and Battery Cable



Wires



Components and Systems in a Truck

Vehicle Body and Frame

Hood or Engine Enclosure



Cab



Seat



Seat Belt/Occupant Restraint



Components and Systems in a Truck

Vehicle Body and Frame

Fender/Mud Flap



Mirrors



Fuel Tank Door and Cap



Doors



Components and Systems in a Truck

Tires and Wheels

Tires



Wheel Hub



Rim



Wheel Fasteners



Components and Systems in a Truck

Coupling System

Fifth Wheel



Trailer Kingpin



Landing Gear



Components and Systems in a Truck

Gauges

Ammeter



Water Temperature



Fuel



Air Brake Pressure



Components and Systems in a Truck

Gauges

Speedometer



Odometer



Tachometer



Pyrometer



Components and Systems in a Truck

Gauges (continued)

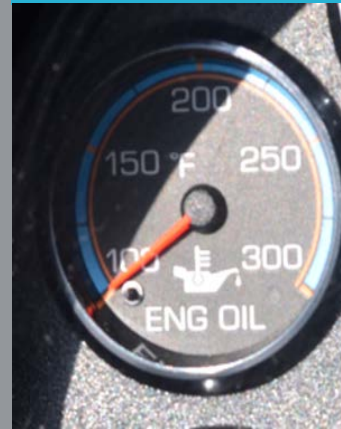
Voltmeter



Fuel Filter



Engine Oil Temperature



Engine Oil Pressure



Components and Systems in a Truck

Gauges (continued)

Air Cleaner/Filter Restriction Indicator



Front and Rear Axle Temperature



Transmission Temperature



Diesel Exhaust Fluid (DEF)



Components and Systems in a Truck

Switches

Ignition Switch



Door Control

This controls the opening, closing and locking of the doors.

Signal Controls



Light Controls and Adjustments



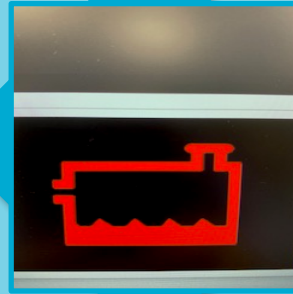
Note: The position of the components may vary with truck models

Warning Lights & Indicator Symbols



Oil Pressure

Low Oil Level



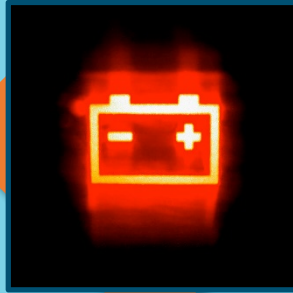
Low Coolant Level

Service Brake



Warning Lights & Indicator Symbols

Battery Light



Low Fuel



Alternator/Generator

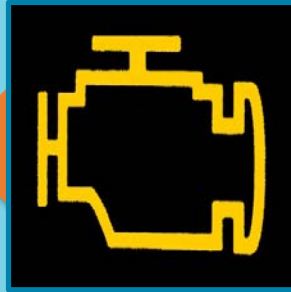


Water Temperature



Warning Lights & Indicator Symbols

Check Engine



Fasten Seat Belt



Park Brake

Anti-Lock Brake
System (tractor)

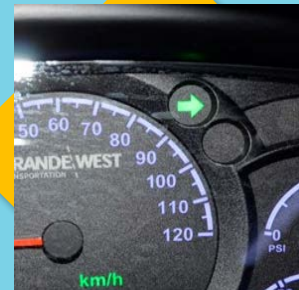


Warning Lights & Indicator Symbols

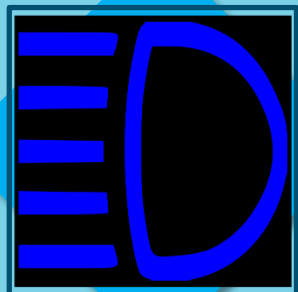
Hazard Signal



Right Turn Signal



High Beams



Left Turn Signal



Warning Lights & Indicator Symbols

Cruise control



High Exhaust System Temperature (HEST)



Stop engine



Diesel Particulate Filter (DPF)



Fifth Wheel Slide Unlocked



In-Yard Evaluation Check list

1. Primary Vehicle Controls
2. Secondary Vehicle Controls
3. Engine
4. Lubrication system
5. Cooling system
6. Air intake/exhaust
7. Suspension system
8. Brake system
9. Auxiliary equipment
10. Electrical system
11. Vehicle body and frame
12. Tires and Wheels
13. Couplers and hitches
14. Gauges
15. Switches

Conclusion

Knowing your vehicle and all of its features is a key part of being a safe, professional operator.

Review

What are primary controls?

Review - Answer

Main components that allow the driver to move and control the vehicle.

Review

What are secondary controls?

Review - Answer

Components that do not affect
the movement of the vehicle
but contribute to safety.

Review

Why is the electrical system important?

Review- Answer

This system is important to start the engine, run the light or to utilize the vehicle instruments and gauges

Review

Where can you find information to determine the optimal function of the vehicles components or systems?

Review- Answer

The manufacturer's manual

Review

What does the fuel filter do?

Review- Answer

Keeps contaminants out of the fuel system by cleaning the fuel as it flows from the tank.

Review

What is the power steering system?

Review- Answer

The component of the engine that enhances easy movement of the steering wheel.

Review

What is the landing gear used for?

Review- Answer

Provides stationary support for the front of a trailer when it is not coupled to a tractor.

Review

What is the difference
between a yellow and a red
light on the dash?

Review- Answer

Yellow is a warning to service soon.

Red means there is something that needs to be serviced right now or before you take the vehicle out on the road.

Vehicle Inspection Check Points by Components

Under the hood inspection

Component	Inspection Points
Fluid levels	<ul style="list-style-type: none">• all fluids must be at a safe operating level including:<ul style="list-style-type: none">– engine oil– engine coolant (do not remove radiator cap)– power steering fluid– windshield washer fluid
Belts	<ul style="list-style-type: none">• check all drive belts for tension, wear, cracks and fraying <p>Note: never check the belts while the engine is running</p>
Hoses	<ul style="list-style-type: none">• check all hoses for leaks, fraying or poor connections
Electrical wiring and connections	<ul style="list-style-type: none">• check all wiring for bare wires or loose connections
Steering Components	<ul style="list-style-type: none">• The power steering drive belt must not be missing, cut, frayed or badly worn• Steering linkage system components are not loose or damaged and no excessive free play• Bolts, nuts, clamps are not missing or badly worn

Vehicle Inspection Check Points by Components

Exterior Inspection

Component	Inspection Points
Hood	<ul style="list-style-type: none">• Hood latch is not missing or damaged and the hood is secure
Bumper, Fender	<ul style="list-style-type: none">• Is not missing• Is securely mounted• Is not broken, bent or corroded or have sharp edges
Mirrors	<ul style="list-style-type: none">• Should be securely mounted and adjusted to the appropriate setting for the driver• Clean and clear to ensure proper visibility• Check for damage that affects the proper functioning of the mirror
Windows	<ul style="list-style-type: none">• Cracks, discolouration, exposed sharp edges, or missing parts• Cracks that extend more than 50 mm into the area swept by the wipers or extend from one edge to another must be fixed• Chips in any area swept by the wipers must not be greater than 25 mm in diameter• Cracks or chips must not go through both layers of laminated glass• Clean, clear and unobstructed to ensure proper visibility• Driver's window can be opened from the inside
Doors	<ul style="list-style-type: none">• Must function and seal properly from both the inside and outside of the vehicle• Securely fastened to the vehicle and is not damaged

Vehicle Inspection Check Points by Components

Exterior Inspection continued

Component	Inspection Points
Inspection decals	<ul style="list-style-type: none">• Properly affixed and valid
Frame (body, chassis, sliding sub frame, cross members)	<ul style="list-style-type: none">• Cracks, corrosion, structural damage, deformation, missing or loose fastener
Underbody	<ul style="list-style-type: none">• Structural damage, deformations, perforations, or presence of openings not designed by the manufacturer
Drive Shaft	<ul style="list-style-type: none">• Missing, loose or damaged parts• Excessive wear• Universal Joints must not show evidence of free play
Brakes	<ul style="list-style-type: none">• No cracks (other than heat crack)• Damage to drum or disc• Excessive wear on discs or inside drum must not exceed manufacturer's wear limit

Vehicle Inspection Check Points by Components

Exterior Inspection continued

Component	Inspection Points
Suspension	<ul style="list-style-type: none">• Excessive play for ball joints, control arm pivots, wheel and axle bearings• Front and rear springs, shackles, U-bolts, centre-bolts, radius rods, control arms, torque arms, equalizers, sway-bars, stabilizers and their supports and attachments must not be loose, bent, cracked, broken, disconnected, displaced, perforated by corrosion or missing• Shock absorbers must not be loose, bent, disconnected, missing or damaged, or show evidence of active fluid leakage• Air bags must not be damaged or deflated
Batteries	<ul style="list-style-type: none">• Securely mounted, must not be loose, missing or have hold downs missing, battery cover is on and secure• Check for corrosion or leaks• Make sure battery cables are attached and secure
Lights	<ul style="list-style-type: none">• All lights must operate properly: headlights, hazard lights, signal lights, clearance, marker and identification lights, tail lights, and brake lights• Components must not be damaged, discoloured, or be missing in whole or part• Lamps must not be covered or modified in a manner that reduces the effective area of the lens or reduces the brightness of the light

Vehicle Inspection Check Points by Components

Exterior Inspection continued

Component	Inspection Points
Trailer electrical cord	<ul style="list-style-type: none">• Properly secured, not loose so as to contact moving parts, rubbed through the insulation, peeled, cut or deteriorated
Air lines	<ul style="list-style-type: none">• Properly secured, not dragging or rubbing, no leaks• Service and supply lines secure, properly connected to the trailer, not leaking
Reflective tape	<ul style="list-style-type: none">• Must be properly affixed and not damaged where required
Tires	<ul style="list-style-type: none">• Tire pressure is maintained in accordance with manufacturer's specifications• Excessive tread wear, tread separation, exposed cord, abnormal bumps, bulges or knots• Cuts or snags that affect the safety of the tires
Wheels	<ul style="list-style-type: none">• Wheel stud, bolt, clamp, nut, and lug must not be loose, missing, damaged, broken or mismatched• Wheel assembly does not have any visible cracks, or bent in a way that affects the safe operation of the vehicle• Hub must not be cracked, bent, distorted, worn, missing or leaking

Vehicle Inspection Check Points by Components

Exterior Inspection continued

Component	Inspection Points
Mud Guards/Flaps	<ul style="list-style-type: none">• Secure, not damaged or missing
Exhaust System	<ul style="list-style-type: none">• Missing, perforated, patched or insecure components• Leaks• No part of the exhaust system must be closer than 50 millimetres to wiring, any part of a fuel or brake component or any combustible material that is not protected by a shield
Fuel System	<ul style="list-style-type: none">• Fuel tank is securely mounted/attached, fuel lines are present and secure and there are no leaks• Filler cap is not missing and is secure• Leaks
Fifth Wheel Coupling Device	<ul style="list-style-type: none">• Fifth wheel is secured to vehicle frame and positive stops prevent the fifth wheel from shifting on the frame• Jaw closure and locking mechanism is in good working order, not cracked or broken• Jaw closure is not worn beyond 6.4 millimetres• Slider mechanisms (if equipped) are locked securely, do not show signs of failure or excessive wear, are equipped with stops• Saddle bushings must not be worn in excess of manufacturer's specifications• Upper plate is not loose, cracked or warped• King pin is not loose, cracked, deformed or have wear in excess of 3.2 millimetres

Vehicle Inspection Check Points by Components

Exterior Inspection continued

Component	Inspection Points
Landing Gear	<ul style="list-style-type: none">• Raised, secure, no cracks, bends or missing parts• Handle must operate smoothly and easily and be properly stowed
Load or Cargo	<ul style="list-style-type: none">• Properly secured as per regulations
Tailgate/Cargo Doors	<ul style="list-style-type: none">• Closed and properly secured• No structural damage or damage to hinges and latches
Rear Impact Guard/Bumper	<ul style="list-style-type: none">• Must not be missing, bent or broken, or have cracked welds• Must be securely mounted

Vehicle Inspection Check Points by Components

Interior Inspection

Component	Inspection Points
Heating and Defrosting Systems	<ul style="list-style-type: none">• Visible portions of the hoses and piping for the interior heaters routed within the occupant compartment must not be rubbed, cracked or leaking• Windshield defroster system must deliver heated air to the windshield and, where fitted, to the side windows to the left and right of the driver• System must switch between heater and defroster positions and fan must blow sufficiently at each speed
Windshield Wipers and Washers	<p>Windshield washer system must function in accordance with the manufacturer's specifications</p> <ul style="list-style-type: none">• Each wiper arm and blade assembly must sweep the area specified by the manufacturer and provide effective clearing of the windshield
Instrument Panel	<ul style="list-style-type: none">• No warning lights present after the start up cycle has completed• Indicator lights must work for signals, hazards, and high beams• Gauges and switches must be in normal operating ranges and/or positions
Horns	<ul style="list-style-type: none">• Proper operation of both the air and electric horn

Vehicle Inspection Check Points by Components

Interior Inspection continued

Component	Inspection Points
Brake Pedal	<ul style="list-style-type: none">• Brake pedal pad or anti-skid surface is secure and does not have excessive wear (where equipped)• Moderate foot force is maintained when pedal is depressed for 10 seconds• Total pedal travel does not exceed 80% of the total available travel when heavy force is applied• The brake releases immediately when pressure is released from the pedal
Accelerator Pedal	<ul style="list-style-type: none">• With engine idling, depress the pedal and release, should be no binding or sticking
Clutch Pedal	<ul style="list-style-type: none">• Check for free play and the amount of travel• Clutch brake engages when fully depressed

Vehicle Inspection Check Points by Components

Interior Inspection continued

Component	Inspection Points
Parking and Service Brakes	<ul style="list-style-type: none">• When fully applied and not held by foot or hand force or by air pressure, the parking brake must hold the vehicle stationary against the engine momentarily while the vehicle is operated in reverse gear and low forward gear at a light throttle setting• When service brakes are applied by either foot or hand force, it must stop the vehicle when the vehicle is operated in reverse gear and forward gear
Seats	<ul style="list-style-type: none">• Securely mounted and properly adjusted• Cushion or padding are not missing, torn or badly worn• Seatbelts fasten and unfasten properly, no rips or tears, and properly secured to vehicle
Emergency Equipment	<ul style="list-style-type: none">• Fire extinguisher must be present in commercial vehicles wider than 2,060 mm, within reach of the driver, secure and properly charged• Minimum of three flares/triangles must be present if vehicle is wider than 2,060 mm and is being operated outside corporate limits of an urban municipality

Schedule 1 – Truck, Tractor & Trailer

1. Air brake system
Defects <ul style="list-style-type: none"> audible air leak slow air pressure build-up rate
Major Defects <ul style="list-style-type: none"> pushrod stroke of any brake exceeds the adjustment limit air loss rate exceeds the prescribed limit inoperative towing vehicle (tractor) protection system low air warning system fails or system is activated inoperative service, parking or emergency brake
2. Cab
Defect <ul style="list-style-type: none"> occupant compartment door fails to open
Major Defect <ul style="list-style-type: none"> any cab or sleeper door fails to close securely
3. Cargo securement
Defect <ul style="list-style-type: none"> insecure or improper load covering (e.g. wrong type or flapping in the wind)
Major Defects <ul style="list-style-type: none"> insecure cargo absence, failure, malfunction or deterioration of required cargo securement device or load covering

4. Coupling devices
Defect <ul style="list-style-type: none"> coupler or mounting has loose or missing fastener
Major Defects <ul style="list-style-type: none"> coupler is insecure or movement exceeds prescribed limit defective, incorrect or missing safety chain/cable coupling or locking mechanism is damaged or fails to lock
5. Dangerous goods
Major Defect <ul style="list-style-type: none"> dangerous goods requirements not met
6. Driver controls
Defect <ul style="list-style-type: none"> accelerator pedal, clutch, gauges, audible and visual indicators or instruments fail to function properly air leak in air suspension system broken spring leaf c)suspension fastener is loose, missing or broken
Major defects <ul style="list-style-type: none"> damaged or deflated air bag [patched, cut, bruised, cracked to braid, mounted insecurely] cracked or broken main spring leaf or more than one broken spring leaf part of spring leaf or suspension is missing, shifted out of place or in contact with another vehicle component loose U-bolt

7. Driver seat
Defect <ul style="list-style-type: none"> seat is damaged or fails to remain in set position
Major defect <ul style="list-style-type: none"> seatbelt or tether belt is insecure, missing or malfunctions
8. Electric brake system
Defect <ul style="list-style-type: none"> Loose or insecure wiring or electrical connection
Major Defects <ul style="list-style-type: none"> Inoperative breakaway device Inoperative brake
9. Emergency equipment and safety devices
Defect <ul style="list-style-type: none"> emergency equipment is missing, damaged or defective or expired
10. Exhaust system
Defect <ul style="list-style-type: none"> exhaust leak
Major Defect <ul style="list-style-type: none"> leak that causes exhaust gas to enter the occupant compartment
11. Frame and cargo body
Defect <ul style="list-style-type: none"> Damaged frame or cargo body.
Major Defect <ul style="list-style-type: none"> Visibly shifted, cracked, collapsing or sagging frame member(s).

Schedule 1 – Truck, Tractor & Trailer

12. Fuel system
Defect <ul style="list-style-type: none"> missing fuel tank cap
Major Defects <ul style="list-style-type: none"> insecure fuel tank dripping fuel leak
13. General
Major defect <ul style="list-style-type: none"> serious damage or deterioration that is noticeable and may affect the vehicle's safe operation
14. Glass and mirrors
Defects <ul style="list-style-type: none"> required mirror or window glass fails to provide the required view to the driver as a result of being cracked, broken, damaged, missing or maladjusted required mirror or glass has broken or damaged attachments onto vehicle body
15. Heater/defroster
Defect <ul style="list-style-type: none"> control or system failure
Major Defect: <ul style="list-style-type: none"> defroster fails to provide unobstructed view through the windshield
16. Horn
Defect <ul style="list-style-type: none"> vehicle has no operative horn

17. Hydraulic brake system
Defect <ul style="list-style-type: none"> Brake fluid level is below indicated minimum level.
Major Defects <ul style="list-style-type: none"> Parking brake is inoperative Brake boost or power assist is inoperative. Brake fluid leak. Brake pedal fade or insufficient brake pedal reserve. Activated (other than ABS) warning device. Brake fluid reservoir is less than ¼ full.
18. Lamps and reflectors
Defect <ul style="list-style-type: none"> Required lamp does not function as intended. Required reflector is missing or partially missing.
Major Defects – When use of lamp is required <ul style="list-style-type: none"> failure of both low-beam headlamps failure of both rearmost tail lamps
Major Defects - at all times <ul style="list-style-type: none"> failure of a rearmost turn-indicator lamp failure of both rearmost brake lamps
19. Steering
Defect <ul style="list-style-type: none"> steering wheel lash (free-play) is greater than normal

Major Defects <ul style="list-style-type: none"> steering wheel is insecure, or does not respond normally steering wheel lash (free-play)
20. Suspension system
Defects <ul style="list-style-type: none"> air leak in air suspension system broken spring leaf c)suspension fastener is loose, missing or broken
Major defects <ul style="list-style-type: none"> damaged or deflated air bag [patched, cut, bruised, cracked to braid, mounted insecurely] cracked or broken main spring leaf or more than one broken spring leaf part of spring leaf or suspension is missing, shifted out of place or in contact with another vehicle component loose U-bolt
21. Tires
Defects <ul style="list-style-type: none"> damaged tread or sidewall of tire tire leaking (if leak can be felt or heard, tire is to be treated as flat)
Major defects <ul style="list-style-type: none"> flat tire tire tread depth is less than wear limit tire is in contact with another tire or any vehicle component other than mud-flap tire is marked "Not for highway use" tire has exposed cords in the tread or outer side wall area

Schedule 1 – Truck, Tractor & Trailer

22. Wheels, hubs and fasteners
Defects <ul style="list-style-type: none"> • hub oil below minimum level (When fitted with sight glass) • leaking wheel seal
Major Defects <ul style="list-style-type: none"> • wheel has loose, missing or ineffective fastener • damaged, cracked or broken wheel, rim or attaching part • evidence of imminent wheel, hub or bearing failure
23. Windshield wiper/washer
Defects <ul style="list-style-type: none"> • control or system malfunction • wiper blade damaged, missing or fails to adequately clear driver's field of vision
Major Defects (when necessary for prevailing weather conditions): <ul style="list-style-type: none"> • wiper or washer fails to adequately clear driver's field of vision in area swept by driver's side wiper

SAMPLE TRUCK/TRAILER TRIP INSPECTION REPORT				
Time:		Date:		
Carrier Name (as on registration):				
Plate Number(s) and Jurisdiction(s)				
Truck:		Lead Trailer:		
Rear Trailer:		Other:		
Location of Inspection (municipality or location on highway):				
<input type="checkbox"/> Odometer Reading:		OR	<input type="checkbox"/> Hubometer Reading:	
I performed an inspection of the vehicle noted above using the criteria set out in Schedule 1 of Part 2, NSC Standard 13 and as per sections 10(4) and 10(10) of Alberta's <i>Commercial Vehicle Safety Regulation</i> , AR 121/2009 and report the following:				
<input type="checkbox"/> No defects were found.				
Defects were detected (check applicable):				
Inspected	Defect	Major Defect	Vehicle Plate	Details of Defect (if any)
Air Brake System	<input type="checkbox"/>	<input type="checkbox"/>		
Cab	<input type="checkbox"/>	<input type="checkbox"/>		
Cargo Securement	<input type="checkbox"/>	<input type="checkbox"/>		
Coupling Device	<input type="checkbox"/>	<input type="checkbox"/>		
Dangerous Goods	<input type="checkbox"/>	<input type="checkbox"/>		
Driver Controls	<input type="checkbox"/>	<input type="checkbox"/>		
Driver Seat	<input type="checkbox"/>	<input type="checkbox"/>		
Electric Brake System	<input type="checkbox"/>	<input type="checkbox"/>		
Emergency Equipment and Safety Devices	<input type="checkbox"/>	<input type="checkbox"/>		
Exhaust System	<input type="checkbox"/>	<input type="checkbox"/>		
Frame and Cargo Body	<input type="checkbox"/>	<input type="checkbox"/>		
Fuel System	<input type="checkbox"/>	<input type="checkbox"/>		
General	<input type="checkbox"/>	<input type="checkbox"/>		

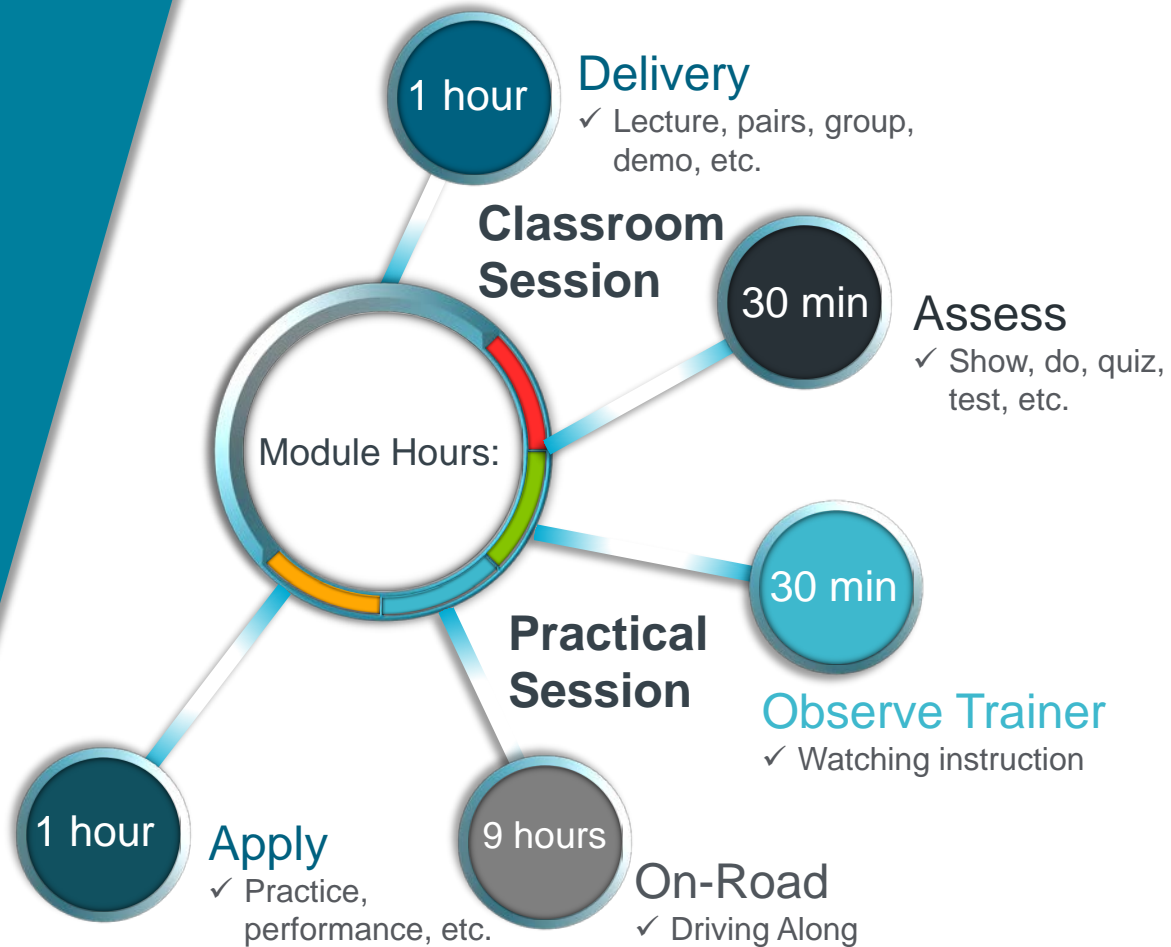
Complete the
Trip Inspection
Report



Purpose

Module 3:

- ✓ Understand safe and effective tractor-trailer manoeuvring procedures.
- ✓ Recognize the importance of following all manoeuvring procedures in order to ensure safety
- ✓ Communicate the importance of journey management in ensuring a safe and low-stress trip.



Proper Warm Up Procedures

A driver's first responsibility is to ensure that everything regarding their vehicle is in order.

- It is important that you are fully alert and not impaired by anything that may affect your judgement
- Complete an overall visual inspection of the truck.
- Confirm valid Vehicle Inspection certificate/sticker.
- Conduct the 'Under the Hood' portion of the pre-trip inspection.

Start Up and Warm Up Procedures

Entering and exiting the cab



Entering the cab

- Always check steps and handles for grease, fuel, oil, mud, ice.
- Clean off all residue before entering cab. Keep steps as clean as possible to eliminate slipping and injury.
- Wear appropriate footwear and high-visibility clothing
- Maintain a minimum of three points of contact.
- Focus on your entry, always facing the tractor.
- Place one foot on the step while keeping the other foot securely on the ground.
- Grip the handle on the inside of the door with one hand and the handle on the exterior cab frame with the other.
- Notice the three points of contact:
- TWO HANDS AND ONE FOOT

Start Up and Warm Up Procedures

Entering and exiting the cab



Entering the cab

- Move your lower foot to the top step, pulling your body with your arms if necessary.
- There are still three points of contact.
- Bring your rear foot to the top step. Both feet are now on the top step so you may release one handle and still maintain three points of contact.
- Slide or step into the cab and release the remaining handle.
- You are now safely inside

Start Up and Warm Up Procedures

Entering and exiting the cab



Exiting the cab

To exit the cab safely, use the following steps:

- Exit the truck by climbing out backward
- Maintain three points of contact at all times

Never jump out of the cab!

Start Up and Warm Up Procedures

Engine Warm-up



Engine Warm-up

Engine warm up prepares the engine to do its job by:

- Circulating oil
- Lubricating parts
- Building pressure to proper levels.

Start Up and Warm Up Procedures

Documentation



Documentation

- Vehicle registration
- Insurance
- Safety Fitness Certificate (if applicable)
- Permits (if applicable)
- Hours of Service records (if applicable)
- Trip Inspection Report
- Bills of Lading (if applicable)
- Dangerous Goods shipping document /training certificate (if applicable)

Start Up and Warm Up Procedures



Seat Adjustment

Correct Seat Adjustment

- Correct seat adjustment must be made before the vehicle is moved.
- This is essential for a safe vehicle operation.
- To maintain the greatest control, keep both hands on the steering wheel.

Start Up and Warm Up Procedures

Seat Belt Usage



Proper
Seatbelt
Use

- Is the LAW
- Reduces chance of being killed or injured by 55 per cent if you are involved in a collision

Start Up and Warm Up Procedures

Mirror Adjustment



Mirror Adjustment

- Correct mirror adjustments are essential for the safe operation of a commercial vehicle.
- Allow better view your blind spots (no zones) and “danger zone”.

Start Up and Warm Up Procedures

Mirror Adjustment - Types of Mirror

Convex Mirrors

- Located below the outside flat mirrors.
- Used to monitor the left and right sides at a wide angle.
- Provide a view of traffic and clearances at the side of the vehicle.

Start Up and Warm Up Procedures

Mirror Adjustment - Types of Mirror

Flat Mirrors

- Mounted on the left and right at the front of the windshield.
- Used to monitor traffic and check clearances on the sides and to the rear of the vehicle.
- There is a blind spot immediately below and behind each mirror, directly in front of the vehicle, and directly in back of the rear bumper

Start Up and Warm Up Procedures

Mirror Adjustment - Types of Mirror

Flat Mirror - Left side

Ensure that the left mirror is properly adjusted so you can see:

- 60 metres or four vehicle lengths behind the vehicle
- The top of the vehicle.
- A small portion of the sides of the vehicle.
- The rear tires touching the ground.

Section 1 - Start Up and Warm Up Procedures

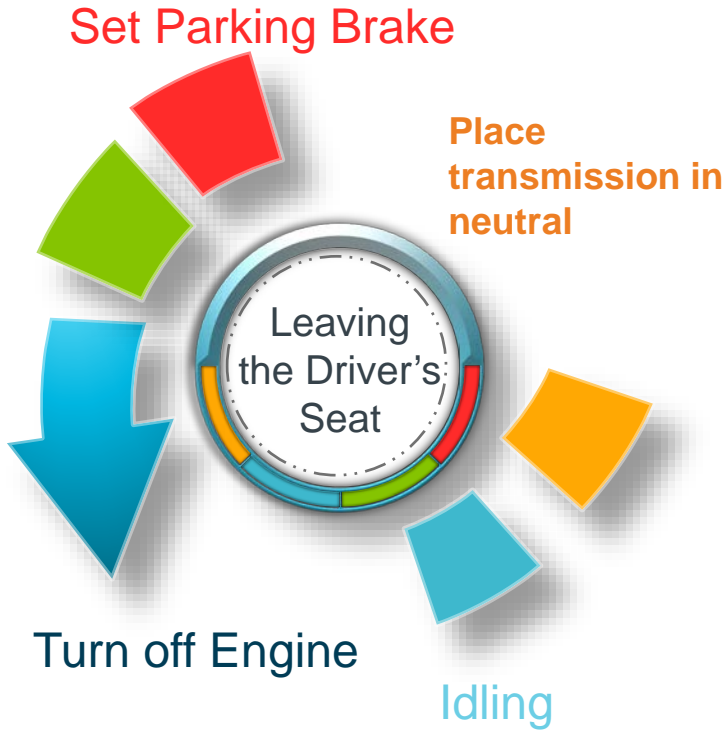
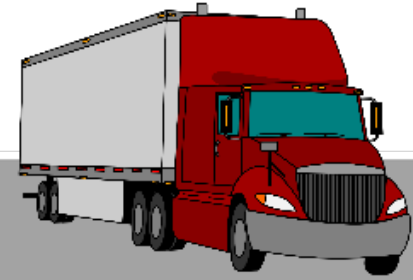
Mirror Adjustment - Types of Mirror

Flat Mirror - Right side

Adjust the right mirror so that the right side of the vehicle is visible along the left, inside edge of the mirror.

- The horizon line is seen three quarters of the way up the mirror.
- Both mirrors need to be adjusted the same way.
- Mirrors will not be helpful if they are not adjusted properly.

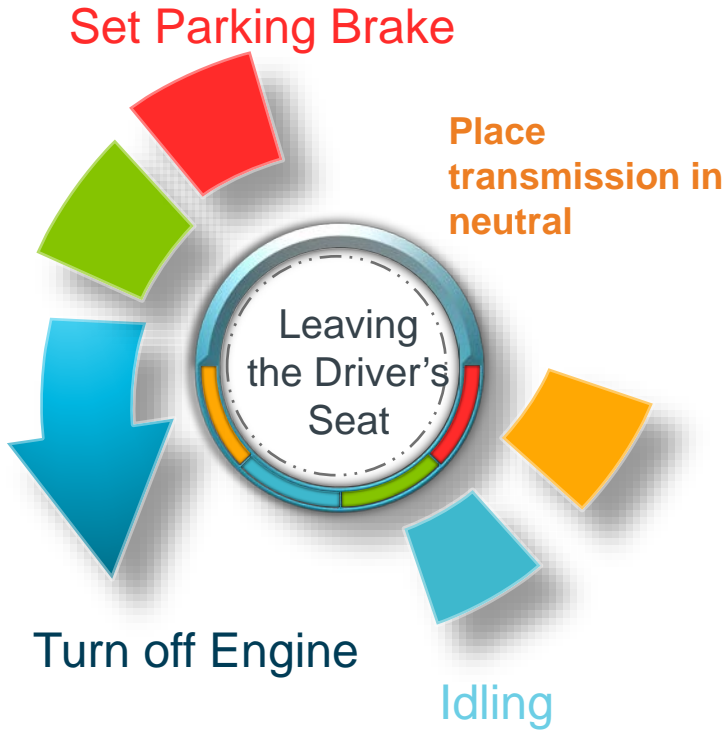
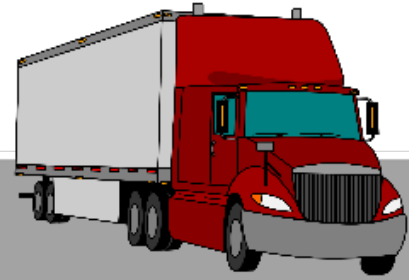
Leaving the Driver's Seat



Parking Brake

- The parking brake is set when the vehicle is to remain in position for some period of time.
- When the Driver is not at the controls.
- Turn off the engine to prevent idling.
 - Chock-blocks should be used in addition to the parking brake.
- Properly release the emergency brake by making a full application of the service brake before moving the truck.

Leaving the Driver's Seat



Wheel Chocks

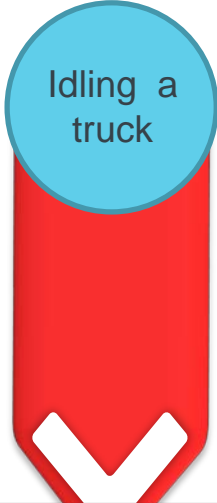
- Always ensure the chock is centered and squared with the tire.
- Always use wheel chocks in pairs.
- Wheel chocks must be positioned downhill and below the vehicle's center of gravity.
 - On a downhill grade - in front of the front wheels.
 - On an uphill grade - behind the rear wheels.
- On a level grade - position the chocks on the front and back of a single wheel.

Fuel Efficient Driving

A blue circle containing the text "Smart driving practices" is positioned above a large red arrow pointing downwards. The arrow has a white chevron at its base.

Smart driving practices

- ✓ Proper warming of the Vehicle
- ✓ Do not pump the accelerator when the vehicle is warming
- ✓ Use of cruise control
- ✓ Driving at average speed
- ✓ Smoothly changing of gears
- ✓ Run the engine in the highest gear range to keep it in a low rev range.

A blue circle containing the text "Idling a truck" is positioned above a large red arrow pointing downwards. The arrow has a white chevron at its base.

Idling a truck

- ✓ Ten seconds of idling uses more fuel than restarting your engine.
- ✓ Engine oil life can be reduced by as much as 75% leading to more frequent and expensive oil changes.
- ✓ Engine wear is increased. One hour of idling is equivalent of 11 kilometres of driving

Vehicle Size and Clearance



Vehicle Size and Clearance

Having knowledge of your vehicle height, width and weight is important in ensuring smooth trip.

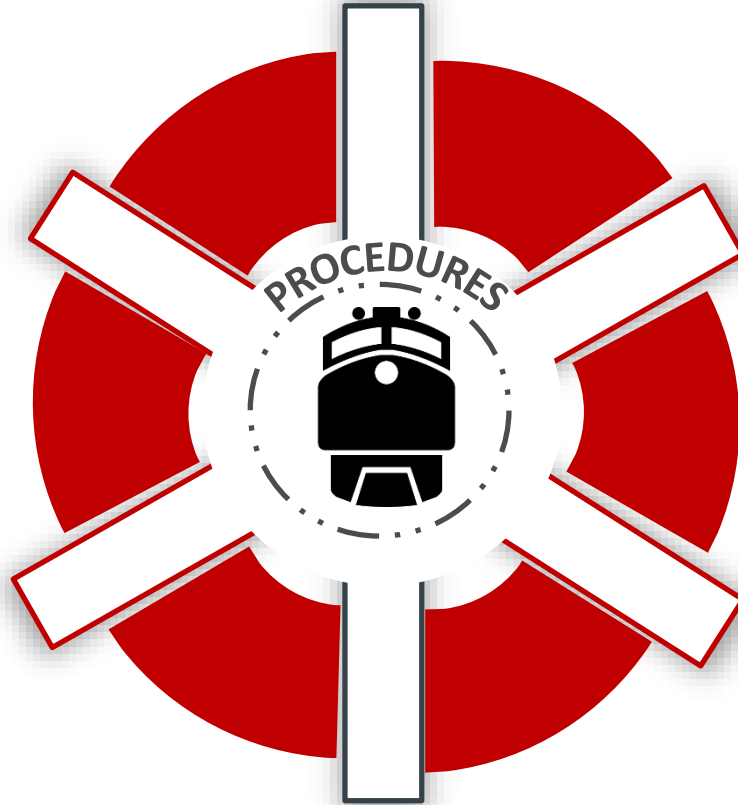
- Height
- Width
- Length
- Weight

Railroad Crossings

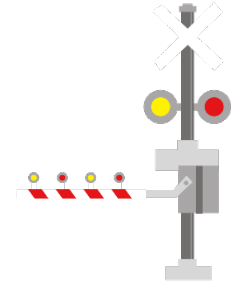
Approaching Train



Resuming Travel



Obstructed Railroad Crossing



Multi-Track Crossings

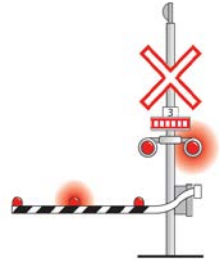
Railroad Crossings

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

- Longer vehicles need to travel further.
- Need more time to clear a crossing.
- Heavier vehicles take more time.
- Need more room to stop before a crossing.
- Larger vehicles are more likely to derail a train if there is a collision.

Railroad Crossings

Controlled crossing - is one with a flag person, stop sign, crossing gate or an electric or mechanical signalling device



Uncontrolled crossing - Vehicles required by law to stop at all uncontrolled railway crossings are:

- School buses.
- Vehicles carrying explosives as a cargo or part of their cargo .
- Vehicles designated for carrying flammable liquids or gas, whether the vehicle is loaded or empty.



Railroad Crossings

Railroad Crossing Procedure when a Train is Approaching

- Slow down, shift to a lower gear.
- Test your brakes.
- Obey the traffic signs, signals, and gates.
- Check for traffic behind you and then stop.
- Stop no closer than 5 metres (about 16 feet) and no further than 15 metres (about 49 feet) from the nearest rail.
- Look carefully in each direction for approaching trains.
- Put on your park brakes.



Railroad Crossings

Resuming Travel

- Make sure there is enough room on the other side of the track for the whole unit to clear, including the vehicle's overhang.
- Be aware that a train will be a metre wider than the rails on both sides.

Railroad Crossings

Other considerations

- Vehicle stalled or stuck on the tracks - get out of the vehicle immediately.
- Scan the tracks at a crossing - Do not attempt to cross the tracks unless you can see far enough in both directions to be sure that no train is approaching.
- Railway crossings at rural roads
 - Pay extra attention when you cross railway tracks in rural areas because why?

Railroad Crossings

10 Tips to Save Your Life at a Railway Crossing

1. Be prepared to stop at all highway/railway crossings
2. Look for the cross-buck symbol of a highway/railway crossing.
3. Listen for warning bells and whistles.
4. Always obey the signals.
5. If a police officer or railway personnel are directing traffic at the crossing, obey their directions.
6. If one train passes, make sure that a second train isn't approaching on another track.

Railroad Crossings

7. Cross the tracks in low gear. Never attempt to change gears while crossing.
8. If your vehicle stalls on the tracks, get out quickly and away from the vehicle and the tracks.
9. If your view is obstructed for 300 metres in either direction, do not attempt to cross the tracks until you are certain that no train is approaching.
10. Walking or playing on train tracks is extremely dangerous and illegal.

Railroad Crossings

**What are some common
driver errors at railway
crossings?**

Awareness on the Road

Vehicle Behavior

Monitoring your vehicle's behaviour while driving will help prevent encountering dangerous and costly mechanical breakdowns.

- Brakes
- Transmission
- Clutch
- Engine
- Steering
- Suspension

Awareness on the Road

Manner of Driving

- Forward Driving
- Other Vehicles
- Pedestrians
- Cyclists

Shifting Gears, Accelerating and Decelerating

- A skilled driver can utilize a combination of transmission and engine retarder to slow their vehicle while only using their brake at the last moment to come to a complete stop
- The objective is to try to minimize speed changes by being in harmony with the traffic tempo and, in urban areas, in sync with traffic lights.

Shifting Gears

Standard Transmission

- Check for the gear pattern.
- Depress the clutch pedal and turn the ignition on.
- Shift into the appropriate gear.
- Depress the foot brake.
- Release the park brake.
- Release the clutch to the friction point.
- Remove foot from the brake pedal, and accelerate gradually.

Shifting Gears (cont.)

- Remove your foot from the clutch slowly completely and place it on the floor while continuing to accelerate.
- Do not ride the clutch!
- Accelerate the tractor-trailer to the proper engine speed before attempting to shift .
- When appropriate to shift gears, first depress the clutch pedal and release accelerator at the same time.
- Shift into the next gear.
- Smoothly release the clutch and continue to accelerate gradually.

Downshifting

When downshifting from cruising speed, reduce speed, then:

- Depress the clutch and release the accelerator.
- Shift to the next lower gear.
- Release the clutch smoothly and use the accelerator to provide engine power appropriate to the terrain you are travelling on.
- Repeat these steps to continue downshifting as the proper engine speeds are reached.

Downshifting

- To bring the tractor-trailer to a complete stop apply the brake.
- Gradually increasing pressure, and depress the clutch after reducing speed to between 8-16 km/h.
- If you are parking the tractor-trailer to leave it: set the parking brake
- Follow the shutdown procedures, select the appropriate gear, and secure the truck.

Double Clutching

- Depress the clutch pedal just past the friction point.
- Release it and depress it again while shifting gears.
- Double-clutching lets you speed up or slow down the input shaft while it's in neutral and not engaged to any gear.

Double Clutching

Upshifting by Double Clutching

1. Depress clutch pedal and release accelerator simultaneously.
2. Shift gear lever to neutral position.
3. Release clutch pedal momentarily.
4. Depress clutch pedal and shift to next higher gear.
5. Release clutch pedal and accelerate engine at the same time.

Double Clutching

Downshift by Double Clutching

1. Depress the clutch pedal.
2. Move the gearshift lever into neutral.
3. Release the clutch pedal.
4. Accelerate the engine speed until engine rpm and road speed “match”.
5. Depress the clutch pedal and quickly move the gearshift lever to the next gear position. (Do not engage the clutch brake)
6. Release the clutch pedal and press the accelerator at the same time.

Basic Driving Techniques



Tractor Trailer Manoeuvres

- Entering Traffic/Merging
- Exiting a Major Roadway
- Weave Zones
- Lane Positioning
 - Off-Tracking
- Steering and Turning
- Driving long a curve
- Crossing intersections
- Observation techniques and monitoring of road conditions

Tractor Trailer Manoeuvres

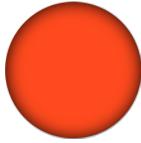
Entering Traffic/Merging



- Merging is a shared responsibility between the vehicles joining the roadway and the vehicles already on the roadway.
- Signal at least four flashes in advance
- Check mirrors and windows to ensure clear path
- When merging from an alley, side street, driveway or terminal come to a complete stop before entering a cross street and remain in the lane nearest to the curb until reaching appropriate speed
- When entering highways, freeways or other restricted access roads stay in the right lane until matching the speed of other traffic

Tractor Trailer Manoeuvres

Lane Positioning



- Position vehicle within the centre of the lane
- Keep proper space cushion around pedestrians and other vehicles
- On a multiple lane highway, always maintain a minimum four second following distance.
- Once you are in the desired lane, cancel turn signal after completion

Tractor Trailer Manoeuvres

Off-tracking

- Low speed off-tracking -In low or moderate speed turns, the rear tires are pulled inward of the steering path
- High speed Off-tracking - is the effect of centrifugal (outward) force
 - It is seen when a vehicle travels at higher speeds, and the rear tires pull outward from the steering path during a turn

Tractor Trailer Manoeuvres



Steering and Turning

Steering

- Hand-over-hand steering method is the best to use
- One hand pushes the steering wheel up, across and down, while the other hand reaches up to the top of the wheel and pulls down



Tractor Trailer Manoeuvres

Making Turns

- Signal and mirror check.
- Reduce speed and downshift to the proper gear.
- Check for clear right-of-way.
- Be aware of other road users.
- Execute the turn.

Tractor Trailer Manoeuvres

Left Turns

- Avoid if possible as they are high risk manoeuvres. When required, make sure you follow the steps below:
 - If not in the legal turning lane, mirror and shoulder check.
 - Reduce your speed one half-block back.
 - Ensure that you shift into a proper gear for the turn.
 - Signal left at least one third of a block (30 meters) from the intersection.

Tractor Trailer Manoeuvres

Left Turns

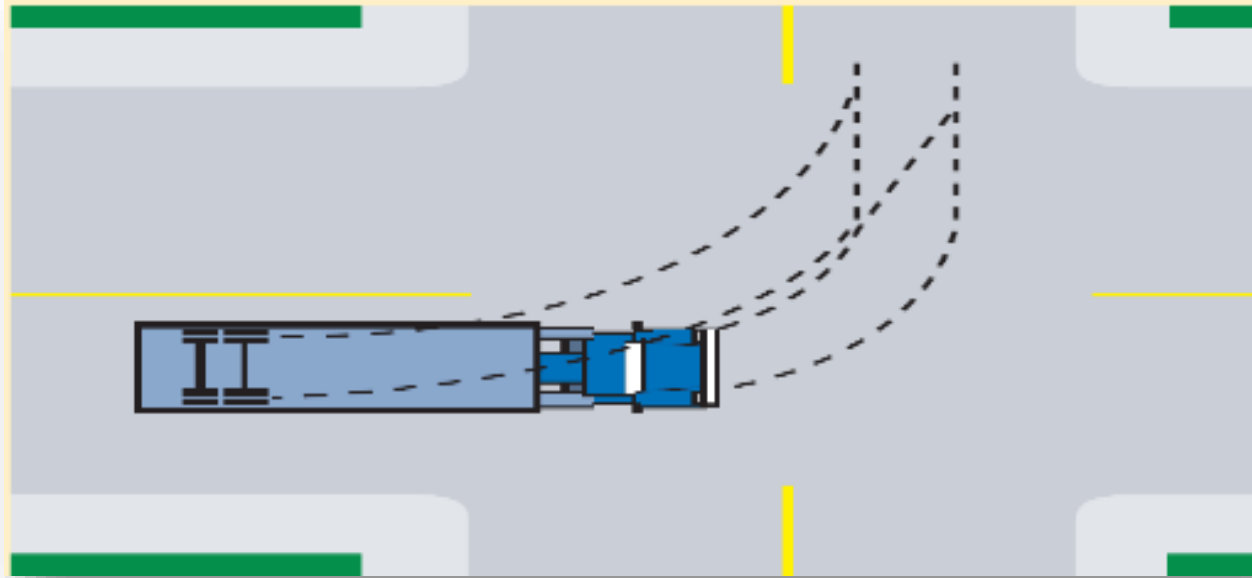
- Scan the intersection for traffic control devices.
- Check left, center, right and left again for traffic and pedestrians.
- Travel straight into the intersection to within approximately 3 meters.
- Keep front wheels straight and yield to approaching traffic and/or pedestrians.

Tractor Trailer Manoeuvres

Left Turns

- Look well along the intended lane of travel, accelerate, and begin the turn when safe to do so.
- Stay only as far to the right side as necessary to avoid the rear wheels running over obstacles or other vehicles.
- Start to recover steering by using the hand-over-hand method.
- Accelerate, cancel the turn signal and look up at least 12 seconds ahead or one block ahead.

Tractor Trailer Manoeuvres



Left Turns

Tractor Trailer Manoeuvres

Right Turns

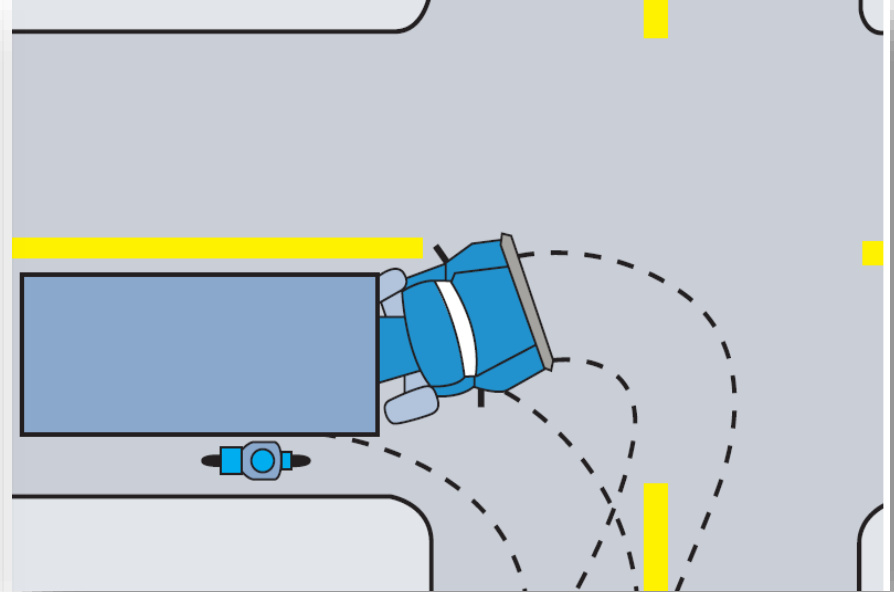
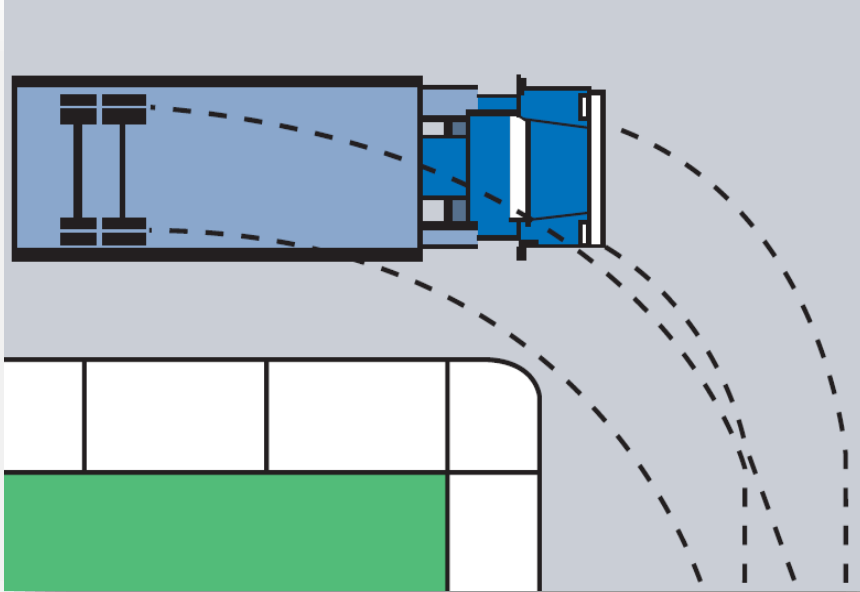
- Take the right-most lane available.
- Signal to the right.
- Scan the intersection for traffic control devices.
- Check left mirror for vehicles attempting to pass.
- Check if the intended lane of travel is free.
- Check left, center, right for traffic and pedestrians.
- Proceed with the turning procedure using hand over hand steering.

Tractor Trailer Manoeuvres

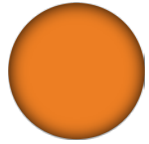
Right Turns

- Be aware that you might need to go over the centre line of the street you are entering or into the second traffic lane.
- Return to curb lane immediately after the rear wheels clear the curb.
- Maintain a safe and controlled speed.
- Look well up the driving path at least one block.
- Accelerating as necessary.

Tractor Trailer Manoeuvres

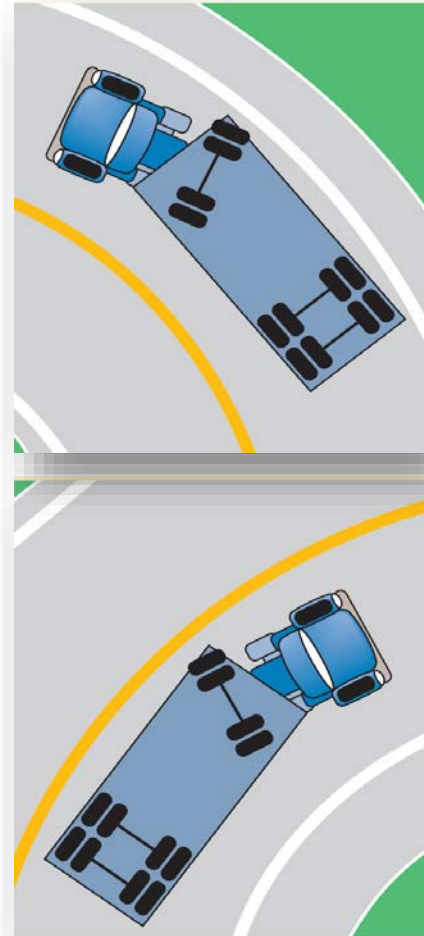


Tractor Trailer Manoeuvres



Curves

- When large vehicles enter a curve the rear wheels do not follow the same path as the front because they do not pivot;
- The rear wheel will “off-track” closer to the curb than the front wheels.
- To mitigate this off-tracking, you must lead your turning arc of the front wheels according to how sharp the curve is and the vehicle’s off-track.



Tractor Trailer Manoeuvres



Lane Changes

- Only change lanes when necessary.
- Always check for clearance by looking out of the windows.
- Use both mirrors to be sure that there are no vehicles beside or behind the truck.

Tractor Trailer Manoeuvres



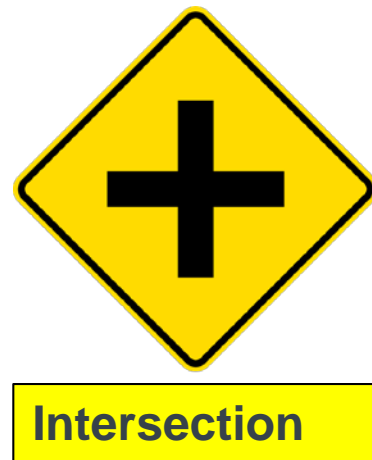
Lane Changes

- Give special consideration for the speed vehicles are travelling behind you to ensure they will not overtake you once the lane change has begun.
- Always signal intent with at least four flashes of the turn signal before beginning the lane change.
- If the lane change involves passing another vehicle, when on a multiple lane highway, always maintain a minimum four second following distance.

Tractor Trailer Manoeuvres

Negotiating Intersections

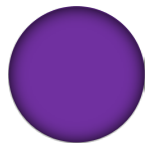
- **KNOW**
 - Expect the unexpected.
- **SHOW**
 - Communicate with other drivers.
- **GO**
 - Proceed with caution.



At all intersections

Never assume the other driver will yield to you!

Tractor Trailer Manoeuvres



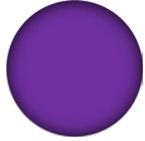
Crossing Intersections

- Depending on visibility, take your foot off the accelerator, check mirrors, check left then right for traffic indicators and controls, pedestrians and other vehicles, then proceed through the intersection when safe.
- Scan the area to determine the point-of-no-return;
 - Speed of the vehicle.
 - Road conditions.
 - Traffic volume to the front, rear and side.
 - Visibility.



T intersection

Tractor Trailer Manoeuvres



Crossing Intersections

- Watch for traffic changing lanes or entering your lane from alleys or driveways.
- Once past the intersection check mirrors again for any change in traffic patterns behind you.
- If you plan to turn at the next intersection, position yourself so you are ready to turn.
- Look for pedestrians that may be crossing ahead.
- With any intersection, if your visibility is obstructed for any reason, you may be required to stop prior to proceeding.

Mountain Driving and Grades

Driving Up Grades

- Move to the right and maintain a safe speed.
- When shifting becomes necessary, shift one shift range at a time to maintain a safe speed.
- Observe the engine temperature more frequently under these conditions to detect dragging, pulling and overheating
- **Never** pass a vehicle on a downgrade or an upgrade on a two lane highway.

Mountain Driving and Grades

Driving Down Grades

- Before proceeding down a grade, check the system air pressure and cover the brake.
- Select the appropriate gear to descend the hill, this is usually a lower gear than required to go up the hill.
- Stay to the right while proceeding down the grade, maintaining a safe vehicle speed as required to be in control without overheating the brakes or depleting the air pressure.

Mountain Driving and Grades

Snub Method Downhill Braking

- Apply the brakes hard enough to feel a definite slowdown.
- When speed has dropped to 5 KPH below safe or posted speed, release the brakes.
- When speed increases above the safe or posted speed, repeat the first two (2) steps.



Hill

Mountain Driving and Grades

Stopping and Parking on Hills

- Check for following traffic using side mirrors and signal to pull over to the curb or edge of the road.
- Downshift, if necessary, to reduce speed in preparation to stop.
- Apply brakes lightly at first and then apply firm, even pressure for a smooth stop.

Stopping and Parking on Hills

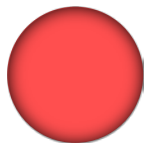
- Depress the clutch as you are near a stop
- Shift to low gear.
- Allow extra room between vehicles for safety.
- Turn wheels into the curb on a downgrade.
- Away from curb on an upgrade.
- Ensure front tire makes gentle contact with the curb.
- For parking downhill, with or without a curb, the front wheels should always be turned to the right.
- For parking uphill with a curb, the front wheels should always be turned to the left.
- For parking uphill without a curb, tractor-trailer units with one articulation point should always have the front wheels turned to the left.
- Set the park brake and turn off the ignition.

Stopping and Parking on Hills

Starting on a Hill

- When stopped on a hill the parking brake should already be engaged.
- Depress the clutch and shift into the appropriate gear.
- Release the parking brake.
- Release the clutch slowly to the friction point while gradually depressing the accelerator.

Tractor Trailer Manoeuvres

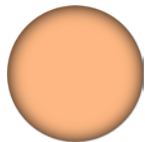


Exiting Roadway

Tips on How to Exit a major Roadway or Highway Safely

- Plan ahead
- Turn on signal well in advance
- Move into deceleration lane as soon as possible
- Use the deceleration lane as much as possible to slow the vehicle down
- If you miss your exit continue to next exit. Do not stop or reverse on a roadway

Tractor Trailer Manoeuvres



Weave Zones

- **Weave zones** are places where the highway entrance and exit use the same lane
- Be courteous with other vehicles merging in or exiting
- Control the speed and timing of your lane change with traffic

Review

Whose responsibility is it to ensure everything regarding the vehicle is in proper working order?

Review

THE DRIVER

Review

To prevent falls or injuries driver's must maintain _____ contact when entering or exiting the cab.

Review

3-Point

Review

You should never _____ out of the cab.

Review

Jump

Review

Engine warm up prepares the engine to do its job by:

Review

Circulating oil, lubricating parts and building pressure to proper levels.

Review

True or False – A driver is required to carry the vehicle registration for both the truck and trailer?

Review

TRUE

Review

Proper mirror adjustments allow for what?

Review

Better view of the “no zones” and
“danger zones”.

Review

Where would you place the wheel chocks on an uphill grade?

Review

Behind the rear wheels

Review

Railway crossings can be especially hazardous for large vehicles, what should you avoid on a railway crossing?

Review

Shifting Gears

Review

What is a controlled intersection?

Review

Where there is traffic signals, signs or a police officer directing traffic.

Module 4

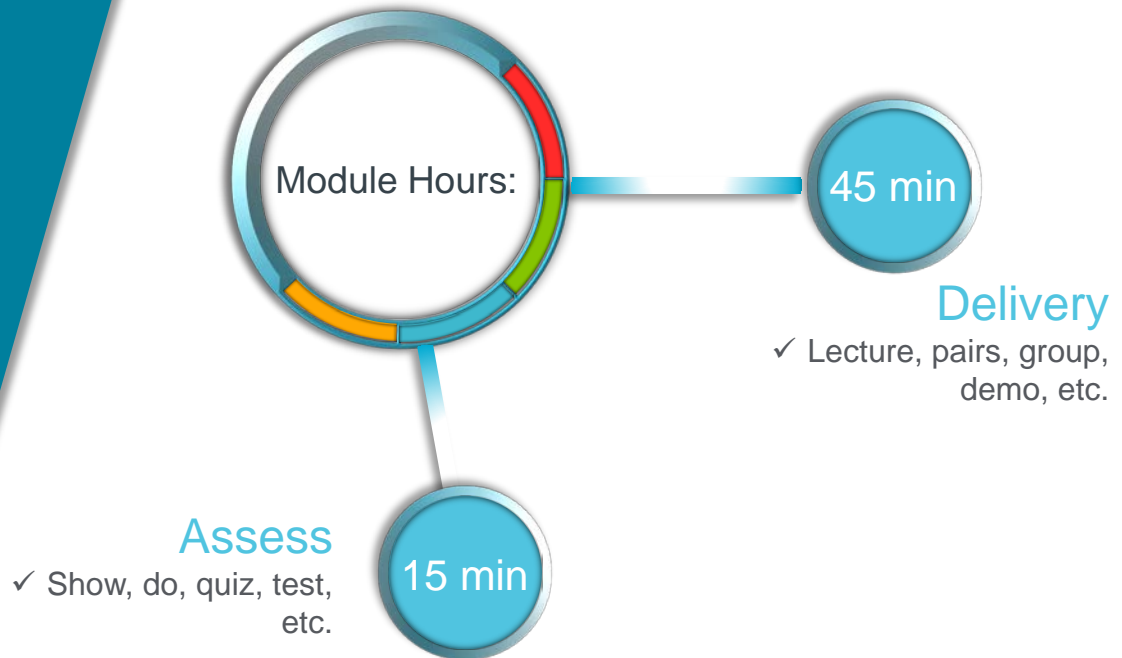


Professional Driving Habits

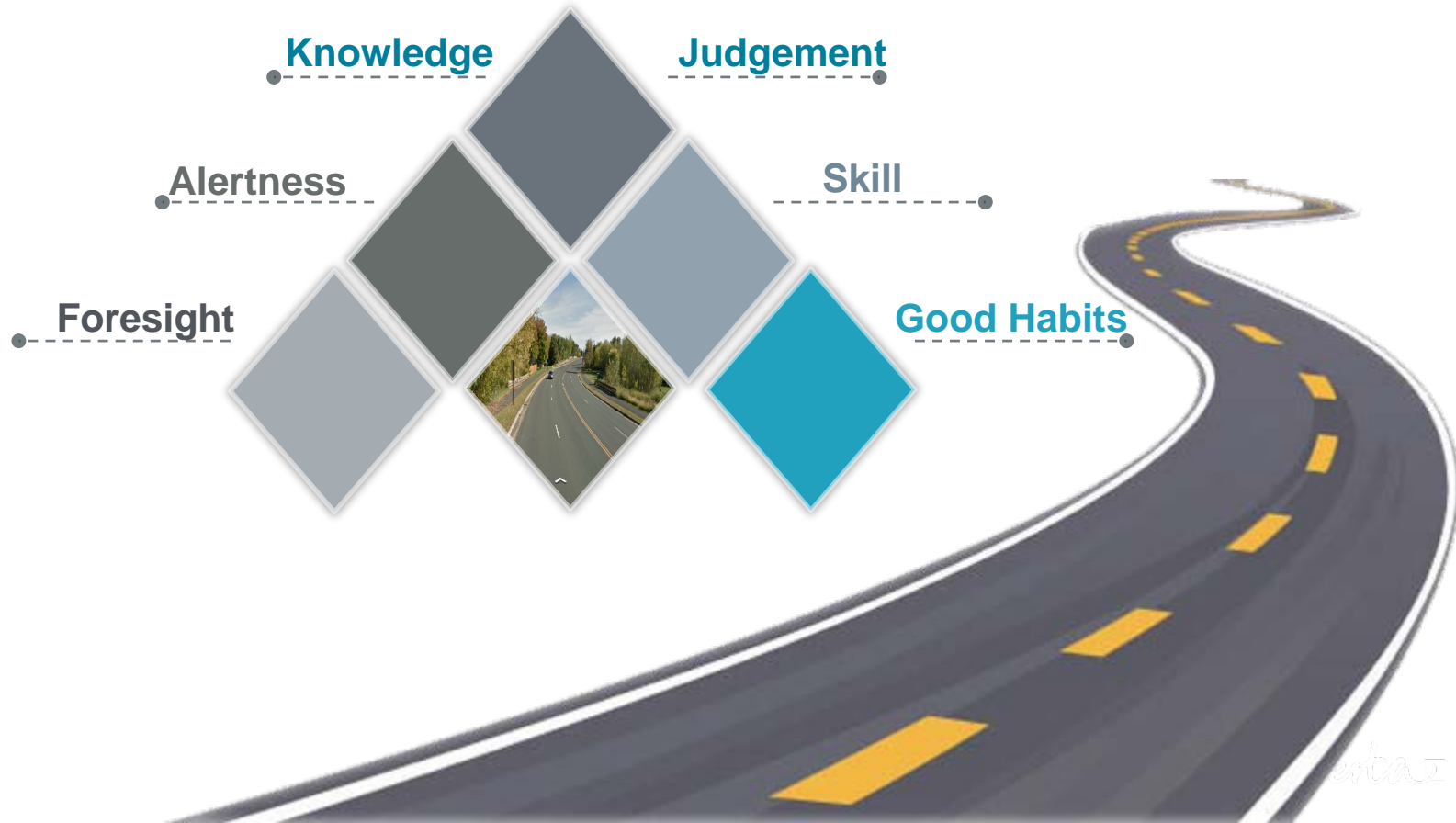
Purpose

Module 4:

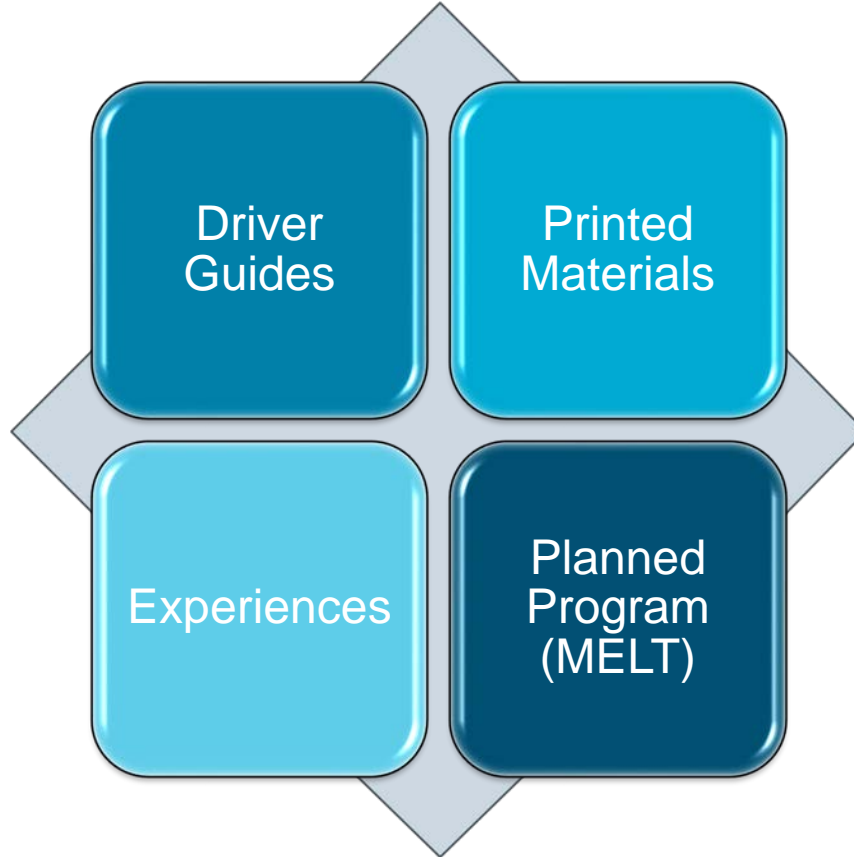
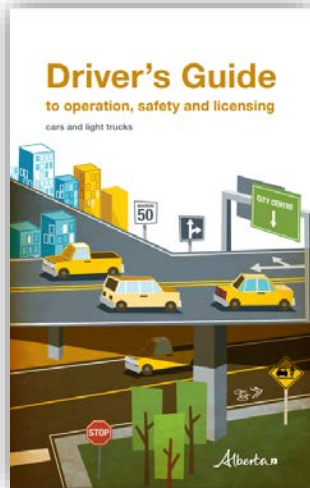
- ✓ Understand basic defensive driving principles
- ✓ Recognize common situations that lead to collisions
- ✓ Understand that personal attitudes and defensive driving habits are key to preventing collisions



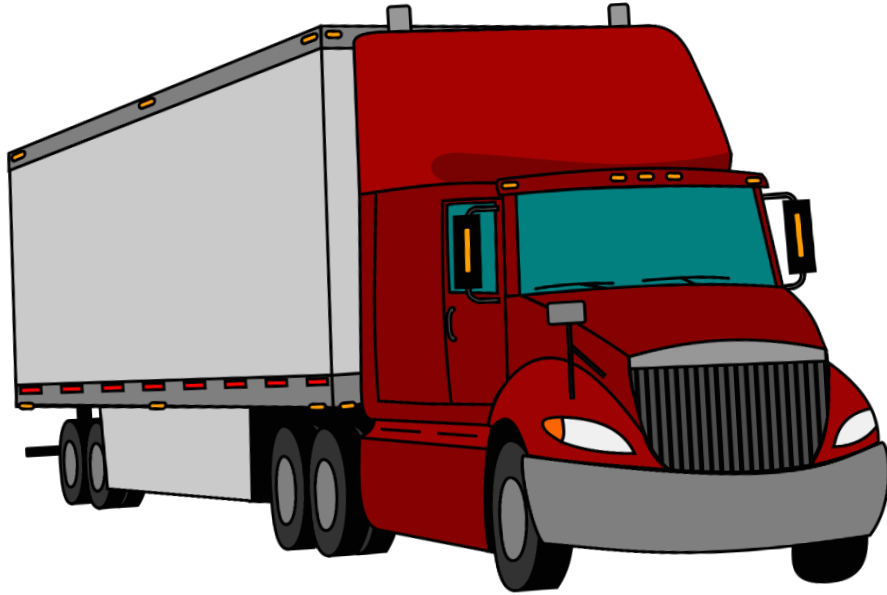
Elements of Defensive Driving



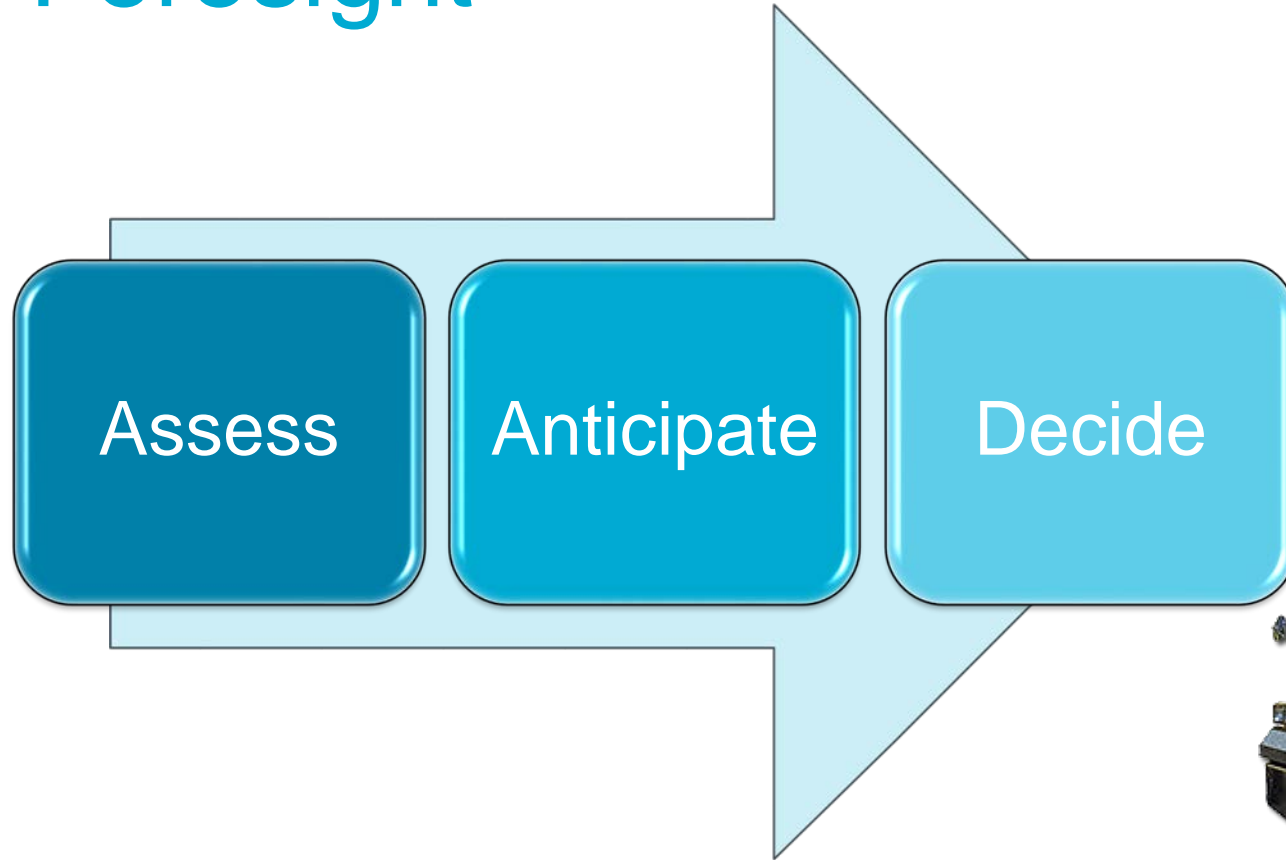
Knowledge



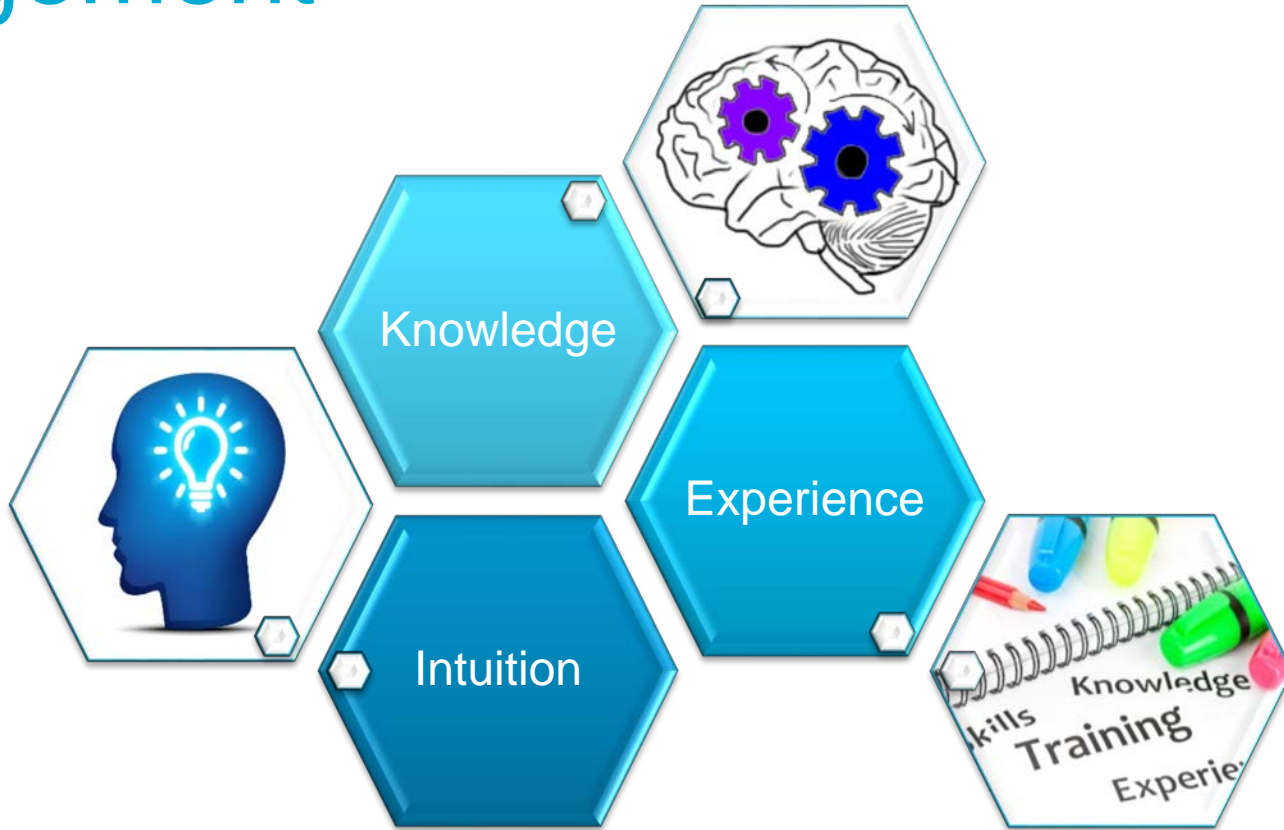
Alertness



Foresight



Judgement



Skill



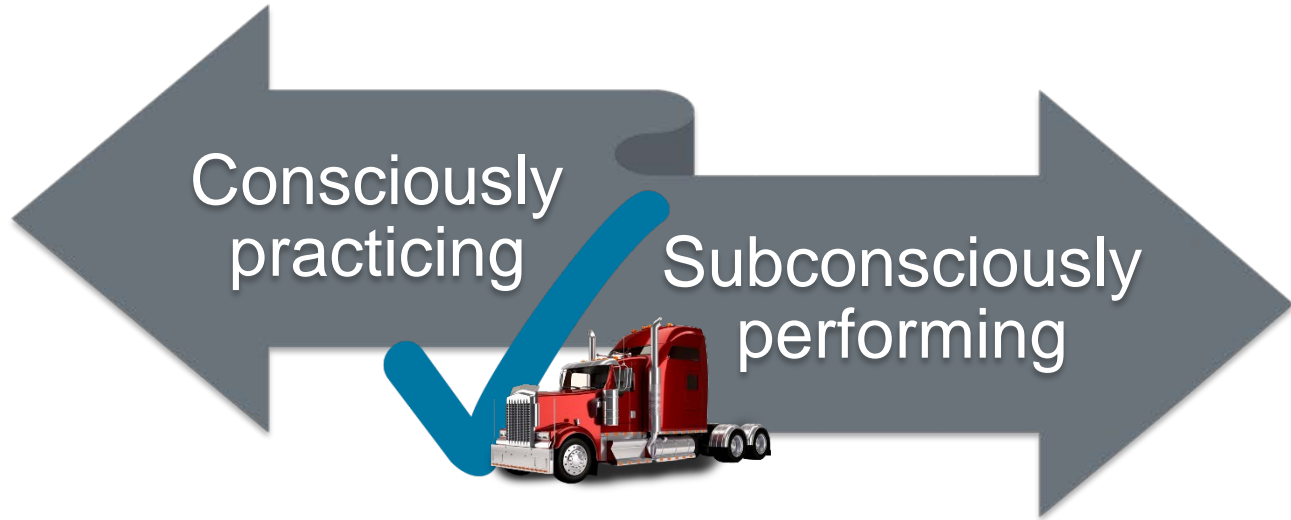
Learning
how to do
the right
skills



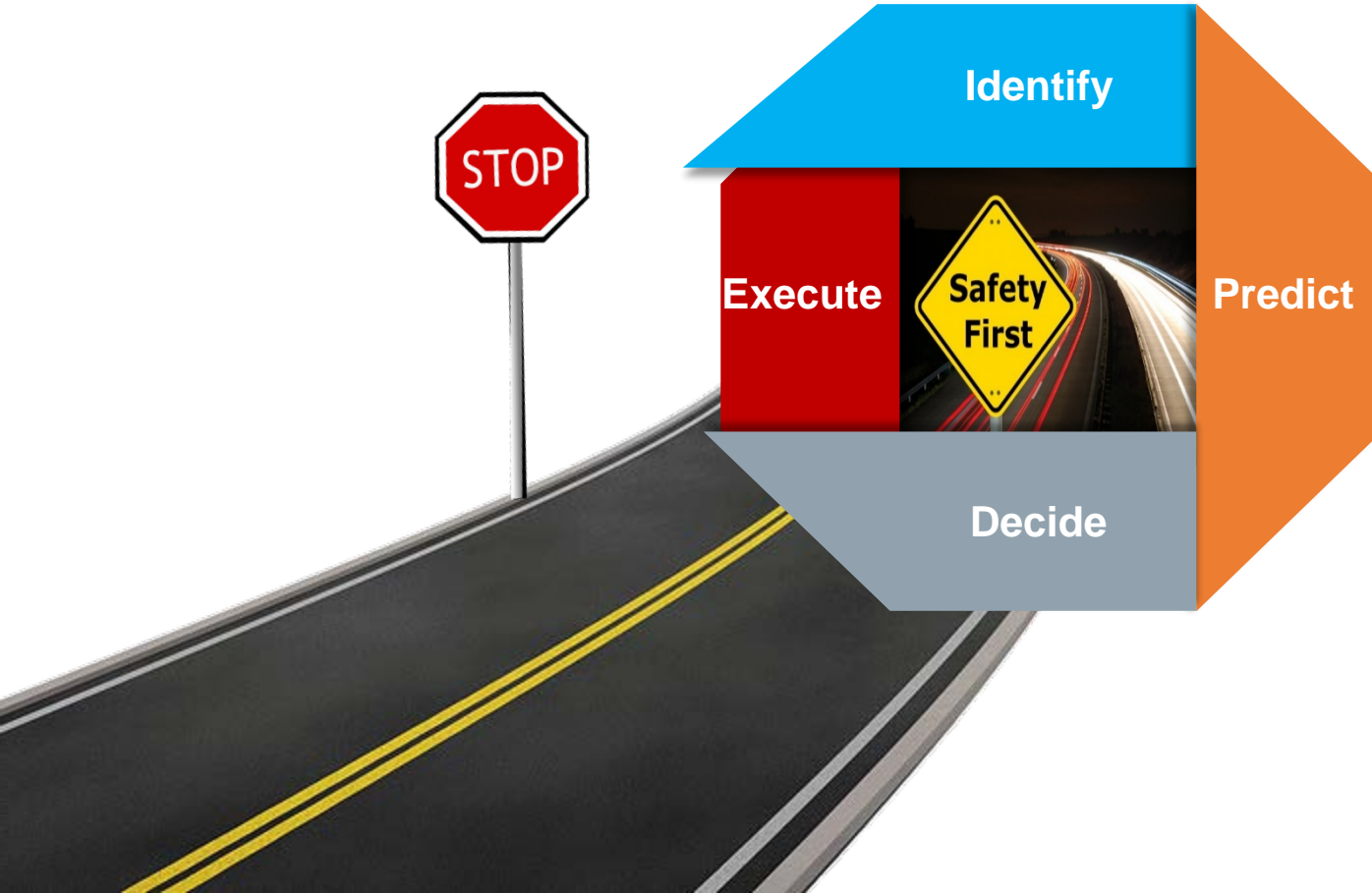
Perform
the right
skills
every time

Skill

Good Habits



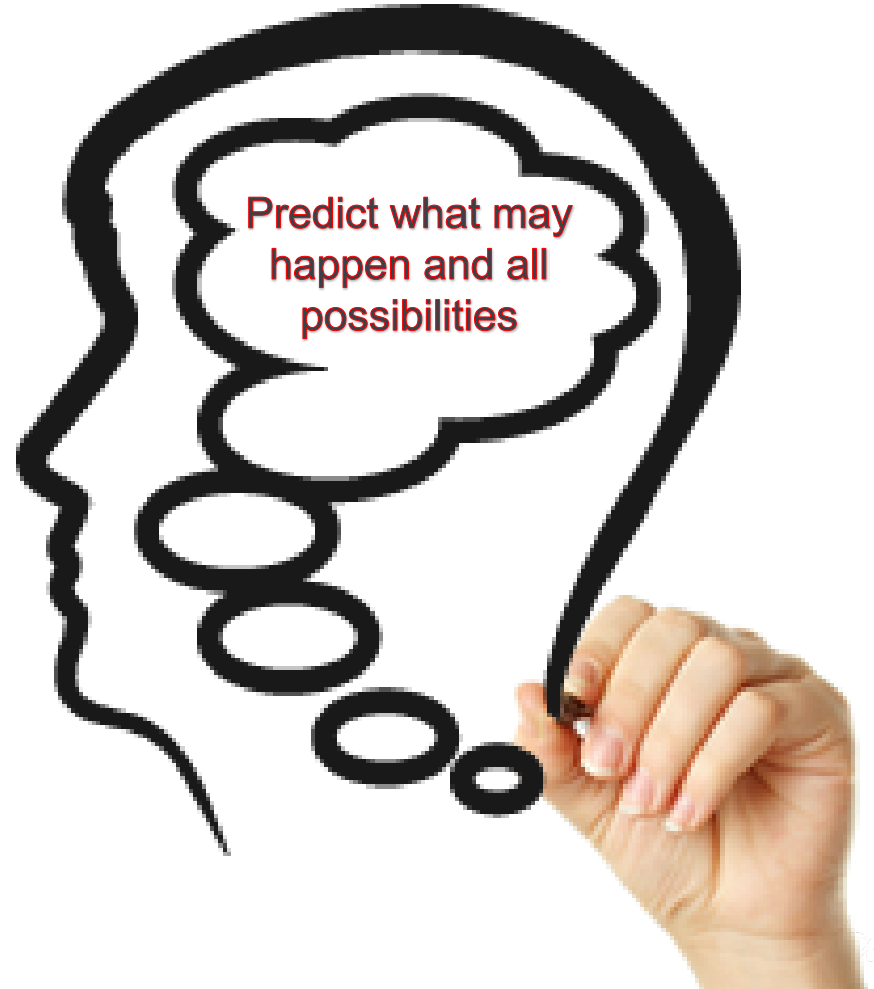
Steps for Avoiding Hazards



Step 1: Identify



Step 2: Predict



Step 3: Decide



Step 4: Execute



Put into
action

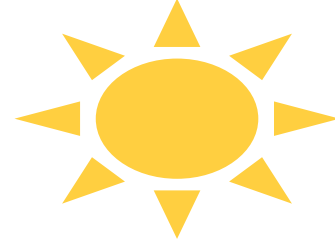
Six Conditions Affecting Driving



Six Conditions Affecting Driving



- Overdriving headlights at night or during poor weather conditions is dangerous
- Glare from the sun, snow, reflections, and the lights of other vehicles can affect vision in the daytime or at night.
- Smoke and fog may cause reduced visibility. Turn on hazards and slow down or pull over in a safe location if conditions become too dangerous to continue.



Alberta

Six Conditions Affecting Driving

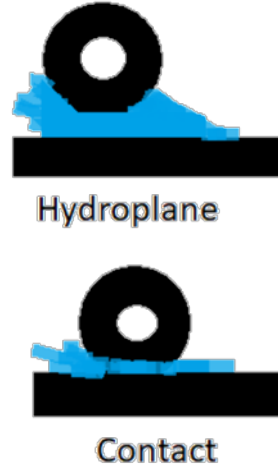


- **Reducing speed is the key to safe driving in poor weather conditions**
- Allow more time and distance for stopping
- Ensure windows and windshield are kept clear
- Keep emergency supplies in the vehicle

Six Conditions Affecting Driving



- When road conditions are poor allow more time for the trip, increase following distance, reduce speed and maintain a space cushion.
- **Wet Roads:** Tires may lose contact with the road surface during wet conditions. This is called *hydroplaning*.
- **Ice & Snow:**
 - Black ice is caused by moisture freezing on the road surface and is often hard to spot.
 - Intersections are prone to being slick in the winter because snow may melt and re-freeze from vehicle exhaust or engine heat.



Tire Chains

- Improve traction when driving in snow and ice
- May be a requirement by law for driving on roads during certain parts of the year in the United States and some Canadian jurisdictions
- Before you begin your trip check that you are carrying the correct number of chains and the chains are in proper working order (no broken fasteners, condition of cross-links, side chains are not bent or broken).

Tire Chains

Prior to Installing Chains:

- Ensure the vehicle is in a safe location, away from traffic
- Check that the vehicle is parked on a stable and level surface
- Use caution when walking around the vehicle, as the ground may be slippery from snow and ice
- Wear proper Personal Protective Equipment (PPE) such as gloves and high-visibility PPE during adverse weather conditions
- Place a chain on the left rear trailer tire to help stabilize the trailer on the highway

Tire Chains

Installing Chains (Single Drive Axle):

- Engage the emergency brake and secure the vehicle.
- Check tire pressure.
- Place chains flat (check that there are no twists or tangles) on the ground, with the traction part of the crosslink facing the ground.
- Wrap chains over the top of each tire. Ensure the fastener is on the outside and the traction part is facing up away from the tire. Side chains and fastener hooks should not be under the tire.
- Place excess crosslinks under the tire.
- First hook the centre hook followed by the inside hook as tight as possible; the outside fasteners are then hooked on last.
- Release the emergency brake and move vehicle forward or backwards at idling speed until the hooks are approximately axle high.
- Re-apply emergency brake and secure the vehicle.
- Hook the inner chain first as tight as possible, with a bit of room to hook the outer fastener.
- Tighten the tightening device (d-cam tightener) if equipped. If chains do not have a tightening device, bungee cords can be used for extra security.

Six Conditions Affecting Driving

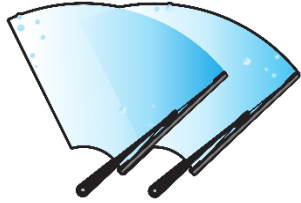


- Number of vehicles
- Type of Vehicles
- Pedestrians
- Time of Day - Time of Year
- Traffic Volume

- Location
- Urban vs Highway
- Residential vs City Centre
- School Zone – Play ground

Six Conditions Affecting Driving

Vehicle



- Proper maintenance
- Tires - properly inflated, proper tread depth
- Windshield
- Major vs minor defects
- Season ready
- Wear and tear



Six Conditions Affecting Driving



Driver

- Mental and physical sharpness/ health
- Zero impairment
- Zero Distractions
- Proper fatigue management
- Skill level: inexperienced vs experienced
- Knowledge
- Confidence



Six Conditions Affecting Driving

Driver

Recognition Errors

- Distraction (psychological, environmental, situational)
- General inattention
- Failing to identify changing conditions
- Improper visual search patterns (fixation)

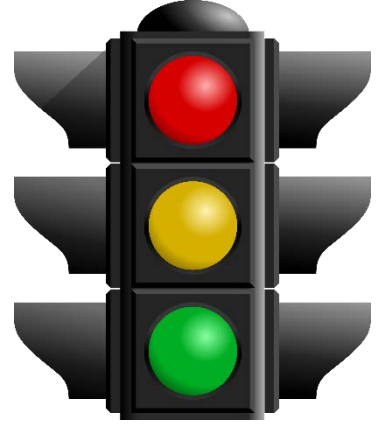


Six Conditions Affecting Driving



Decision Errors

- Speed
- Risk taking
- Failing to adapt to changing conditions
- Failing to obey traffic control indicators



Six Conditions Affecting Driving



Circumstances of Recognition Errors

- Stress that diminishes a drivers capacity to operate a vehicle
- Health problems
- Money or Family issues
- Time pressures
- Distractions from in and out of the vehicle

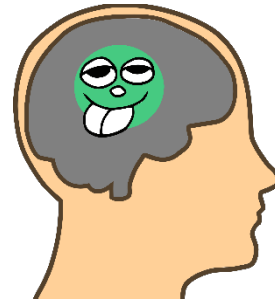


Six Conditions Affecting Driving



Circumstances of Decision Errors

- Inattention
- Environmental distractions
- Conscious choices to disregarding laws
- Over confidence – violate laws and rules of driving
- Unconscious decision errors – not identifying potential hazards
- Time management



Impaired Driving



Drugs



Alcohol

Legal Consequences of Impaired Driving

Immediate Roadside Sanctions (IRS) Program

- Alberta has one comprehensive impaired driving program called the Immediate Roadside Sanctions (IRS) Program.
- The IRS Program includes a multi-tiered escalating approach to deter impaired driving.
- The IRS Program includes:
 - IRS 24-Hour;
 - IRS ZERO: Novice;
 - IRS ZERO: Commercial;
 - IRS WARN; and
 - IRS FAIL.

Legal Consequences of Impaired Driving

Immediate Roadside Sanction (IRS) 24-Hour

Sanction	Offence	Penalty
Immediate Roadside Sanction (IRS) 24-Hour	<ul style="list-style-type: none">- applies to drivers suspected of being impaired by alcohol, drugs or a physical or medical condition that affects their ability to safely operate a vehicle are subject to a 24-hour licence suspension.	<ul style="list-style-type: none">- immediate 24-hour licence suspension

Legal Consequences of Impaired Driving

Immediate Roadside Sanction (IRS) ZERO: Novice

Sanction	Offence	Penalty
Immediate Roadside Sanction (IRS) ZERO: Novice	<ul style="list-style-type: none">- applies when a law enforcement officer has reasonable grounds to believe that a driver has operated a motor vehicle with any alcohol or drug in their body while they were a novice driver as a class 7 learner's licence or class 5 Graduated Driver's Licence (GDL) holder.	<ul style="list-style-type: none">• an immediate 30-day driver's licence suspension• a seven-day vehicle seizure• \$200 fine plus victim fine surcharge of 20 percent

Legal Consequences of Impaired Driving

Immediate Roadside Sanction (IRS) ZERO: Commercial

Sanction	Offence	Penalty
Immediate Roadside Sanction (IRS) ZERO: Commercial	<ul style="list-style-type: none">- program applies when a law enforcement officer has reasonable grounds to believe that a commercial driver has operated a commercial vehicle in a commercial capacity with any alcohol or drug in their body.	<p>1st occurrence</p> <ul style="list-style-type: none">• 3-days immediate driver's licence suspension and \$300 fine plus victim fine surcharge of 20 percent. <p>2nd occurrence</p> <ul style="list-style-type: none">• 15-days immediate driver's licence suspension and \$600 fine plus victim fine surcharge of 20 percent. <p>3rd occurrence</p> <ul style="list-style-type: none">• 30-days immediate driver's licence suspension and \$1,200 fine plus victim fine surcharge of 20 percent.

Legal Consequences of Impaired Driving

Immediate Roadside Sanction (IRS) WARN

Sanction	Offence	Penalty
Immediate Roadside Sanction (IRS) WARN	<ul style="list-style-type: none">- applies when a law enforcement officer has reasonable grounds to believe that a driver has operated a motor vehicle with a blood alcohol concentration that is equal to or exceeds 50 milligrams of alcohol in 100 milliliters of blood.	<p>1st occurrence</p> <ul style="list-style-type: none">• 3-days immediate driver's licence suspension, 3-days vehicle seizure, and \$300 fine plus victim fine surcharge of 20 percent. <p>2nd occurrence</p> <ul style="list-style-type: none">• 15-days immediate driver's licence suspension, 7-days vehicle seizure, requirement to complete the Crossroads course (or the Planning Ahead course may be used as an equivalent) and \$600 fine plus victim fine surcharge of 20 percent. <p>3rd occurrence</p> <ul style="list-style-type: none">• 30-days immediate driver's licence suspension, 7-days vehicle seizure, requirement to complete the IMPACT Program, and \$1,200 fine plus victim fine surcharge of 20 percent.

Legal Consequences of Impaired Driving

Immediate Roadside Sanction (IRS) FAIL

Sanction	Offence	Penalty
Immediate Roadside Sanction (IRS) FAIL	<ul style="list-style-type: none">- impaired to any degree by alcohol or a drug or by a combination of alcohol and a drug- blood alcohol concentration that was equal to or exceeds 80 milligrams of alcohol in 100 milliliters of blood- blood drug concentration that is equal to or exceeds any blood drug concentration for the drug that is prescribed by regulation under the Criminal Code (Canada)- blood alcohol concentration and a blood drug concentration that is equal to or exceeds the blood alcohol concentration and the blood drug concentration for the drug that is prescribed by regulation under the Criminal Code (Canada)- knowing a demand had been made, the driver failed or refused, without a reasonable excuse, to comply with a demand made under the Criminal Code (Canada)	<p>1st occurrence - The administrative penalties are imposed with or without a criminal charge. A criminal conviction will result in additional penalties.</p> <ul style="list-style-type: none">• 90-day suspension, followed by a mandatory 12 months participation in the Alberta Ignition Interlock Program• Education: Planning Ahead course (full day)• 30-day vehicle seizure

Legal Consequences of Impaired Driving

Immediate Roadside Sanction (IRS) FAIL

Sanction	Offence	Penalty
Immediate Roadside Sanction (IRS) FAIL	<ul style="list-style-type: none">- impaired to any degree by alcohol or a drug or by a combination of alcohol and a drug- blood alcohol concentration that was equal to or exceeds 80 milligrams of alcohol in 100 milliliters of blood- blood drug concentration that is equal to or exceeds any blood drug concentration for the drug that is prescribed by regulation under the Criminal Code (Canada)- blood alcohol concentration and a blood drug concentration that is equal to or exceeds the blood alcohol concentration and the blood drug concentration for the drug that is prescribed by regulation under the Criminal Code (Canada)- knowing a demand had been made, the driver failed or refused, without a reasonable excuse, to comply with a demand made under the Criminal Code (Canada)	<p>2nd occurrence - The administrative penalties are imposed with or without a criminal charge. A criminal conviction will result in additional penalties.</p> <ul style="list-style-type: none">• 90-day suspension followed by a 36-month mandatory participation in the Alberta Ignition Interlock Program• Education: IMPACT Course (two days)• 30-day vehicle seizure

Legal Consequences of Impaired Driving

Immediate Roadside Sanction (IRS) FAIL

Sanction	Offence	Penalty
Immediate Roadside Sanction (IRS) FAIL	<ul style="list-style-type: none">- impaired to any degree by alcohol or a drug or by a combination of alcohol and a drug- blood alcohol concentration that was equal to or exceeds 80 milligrams of alcohol in 100 milliliters of blood- blood drug concentration that is equal to or exceeds any blood drug concentration for the drug that is prescribed by regulation under the Criminal Code (Canada)- blood alcohol concentration and a blood drug concentration that is equal to or exceeds the blood alcohol concentration and the blood drug concentration for the drug that is prescribed by regulation under the Criminal Code (Canada)- knowing a demand had been made, the driver failed or refused, without a reasonable excuse, to comply with a demand made under the Criminal Code (Canada)	<p>3rd (and subsequent) occurrence - The administrative penalties are imposed with or without a criminal charge. A criminal conviction will result in additional penalties.</p> <ul style="list-style-type: none">• 90-day suspension followed by mandatory lifetime participation in the Alberta Ignition Interlock Program• 30-day vehicle seizure• \$2,000 fine plus 20% victim fine surcharge

Effects of Alcohol

The only way for alcohol to leave your system is **TIME**.

There are no fast tracks to sobering up

Time	Activity	Sample BAC
Midnight	goes to bed	.25
1 a.m.	sleeps*	.235
2 a.m.	sleeps*	.22
3 a.m.	sleeps*	.205
4 a.m.	sleeps*	.19
5 a.m.	sleeps*	.175
6 a.m.	sleeps*	.16
7 a.m.	gets up for work	.145
8 a.m.	feels dry mouth	.13
9 a.m.	at work	.115
10 a.m.	still legally intoxicated	.1
11 a.m.	spills coffee	.085
Noon	still feels tired	.07
1 p.m.	mind feels foggy	.055
2 p.m.	feeling irritable	.04
3 p.m.	starting to feel better	.025
4 p.m.	head clearing	.01
5 p.m.	goes home	.00

Effects of Drugs Other than Alcohol on the Driving Task

- Perception
- Judgment
- Coordination
- Vision
- Mood

Effects of Cannabis

- Loss of tracking ability
- Distance judgment
- Vigilance
- Divided attention

Criminal Code Convictions

Blood concentration level	<u>Federal criminal penalty</u> *
2 nanograms (ng) per millilitre (ml) but less than 5 ng/ml THC	Maximum \$1,000 fine (summary conviction)
5 ng/ml or more THC **	1st offence: Minimum \$1,000 fine
OR	2nd offence: Mandatory 30 days imprisonment
2.5 ng/ml or more THC combined with 50 mg/100ml or more alcohol	3rd offence: Mandatory 120 days imprisonment

<https://www.alberta.ca/criminal-level-impaired-driving.aspx>

Drugs and Driving

Driving High is a DUI

- Over the counter medication
- Tylenol, Advil, Nyquil, Sudafed, Gravol

Prescription medication

- Morphine, Valium, Ritalin, Prozac

Illegal Drugs

- Marijuana, Ecstasy, Cocaine, Heroin, Opium, Crystal Meth, Amphetamine, LSD, Speed, Inhalants, PCP

Synergistic Effect

Mixing Alcohol and Drugs Together

1 + 1 = More than 2

Number of Drinks	Combined With	Equivalent to Number of Drinks
2	Antihistamine (Cold Remedy)	- 4 to 5
2	Marijuana (1 joint)	- 5 to 6
2	Tranquilizer (Valium – normal dose)	- Approximately 6
2	Gravol	- Approximately 6

Alcohol and Drugs Review

1. What Does BAC stand for?

- Blood Alcohol Content

2. What can lower BAC levels?

- Time

3. At what rate does alcohol leave the body?

- 0.015% per hour

Alcohol and Drugs Review – Cont.

4. What Is it called when you mix Drugs and Alcohol?

- Synergistic Effect

5. What are the 3 categories of Drugs?

- Prescription, Over the counter, Illegal

6. What BAC limit will result in a Criminal Code Conviction?

- .08%

10 Impairing Effects of Alcohol

1. Reasoning/Judgment
2. Inhibitions
3. Memory
4. Vision
5. Speech
6. Hearing
7. Muscular Coordination
8. Consciousness
9. Automatic Processes
10. Death

Reasoning/ Judgment

Your reasoning/ judgment is affected by first drink.

- This effect may not be noticeable
- Inability to think clearly/rationally
- Inability to make good decisions
- Impulsive or acting without thinking a situation is common

Inhibitions

Inhibitions are a mental process imposing restraint upon behavior or another mental process.

When our inhibitions are impaired we may partake or demonstrate behaviors not typical to our personality.

- Overconfident
- Relaxed
- More outgoing
- Over emotional
- Dangerous, risky, impulsive behavior

Memory

- Repetitive
- Forgetful
- Unable to store/recall memories
- Blackouts

Vision

- Visual acuity reduced (blurred vision)
- Reduced ability to control eye movement
- Reduced Peripheral Vision = Tunnel Vision
- Lack of depth perception
- Reduced ability to track moving objects
- Limited night vision & color distinction

Speech

- Words slurred or run together
- Too loud for situation
- Volume fluctuates for no reason
- Slow or rapid
- Using wrong words or no words at all

Hearing

- Auditory acuity is reduced
- Sounds are muffled
- Tolerance for loud noise increases
- Unable to determine the direction of sounds
- Excessive alcohol consumption can cause long term permanent hearing loss.

Muscle Coordination

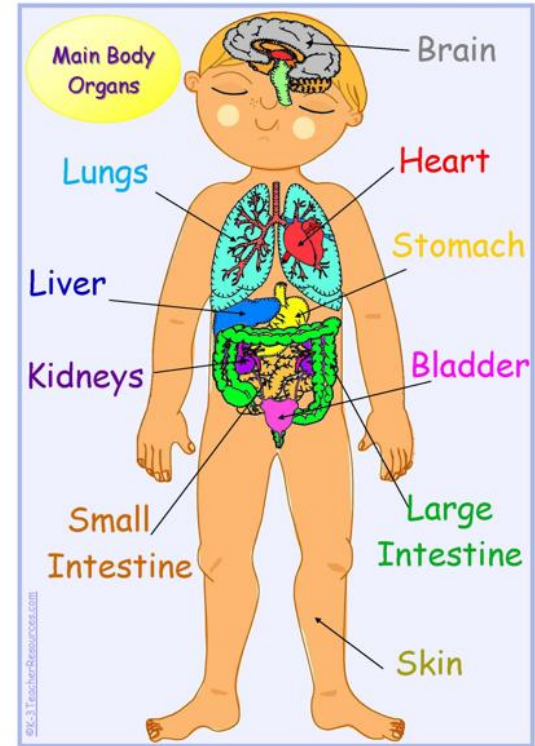
- Fine Motor Skills affected
 - Hand – eye coordination
 - Overall clumsiness
 - Putting key into ignition
- Gross Motor Skills affected
 - Legs weaken
 - Loss of balance
 - Bumping into things
- Slower reaction time or NO reaction time

Consciousness

- Alcohol induced sleepiness
- Brain impaired beyond ability to function
- Loss of consciousness – Pass out
- Coma

Automatic Processes

- Heart Rate
- Breathing
- Body Temperature
- Liver
- Kidneys
- Bladder
- Digestion



Death

- Can occur during any of the previous stages
- Brain activity surges and then stops
- Body temperature drops
- Muscles tense – Rigor Mortis
- When Muscles relax all bodily fluids are released

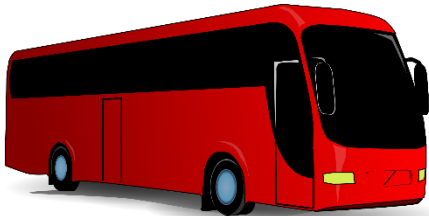
Effects of alcohol on Space Management

- Searching
- Eye Focus
- Double Vision
- Distance Judgment
- Side Vision
- Visual Acuity
- Color Distinction
- Night Vision
- Slowed Response Time
- Impaired Motor Skills
- Judging Distance

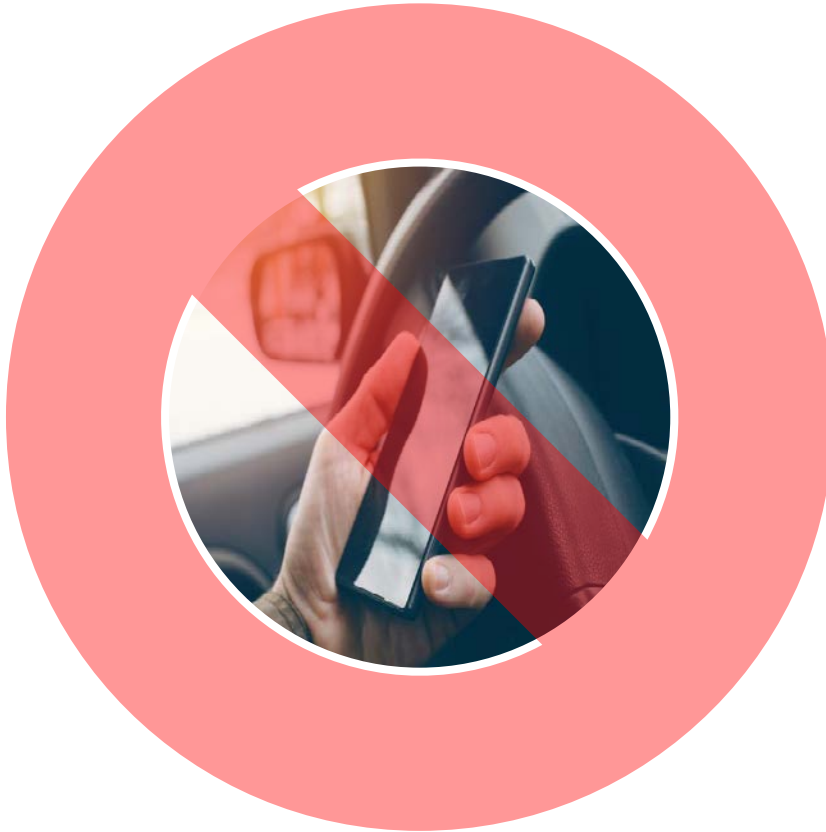
Driver Fatigue



Managing Emotions and Distractions



Distracted Driving

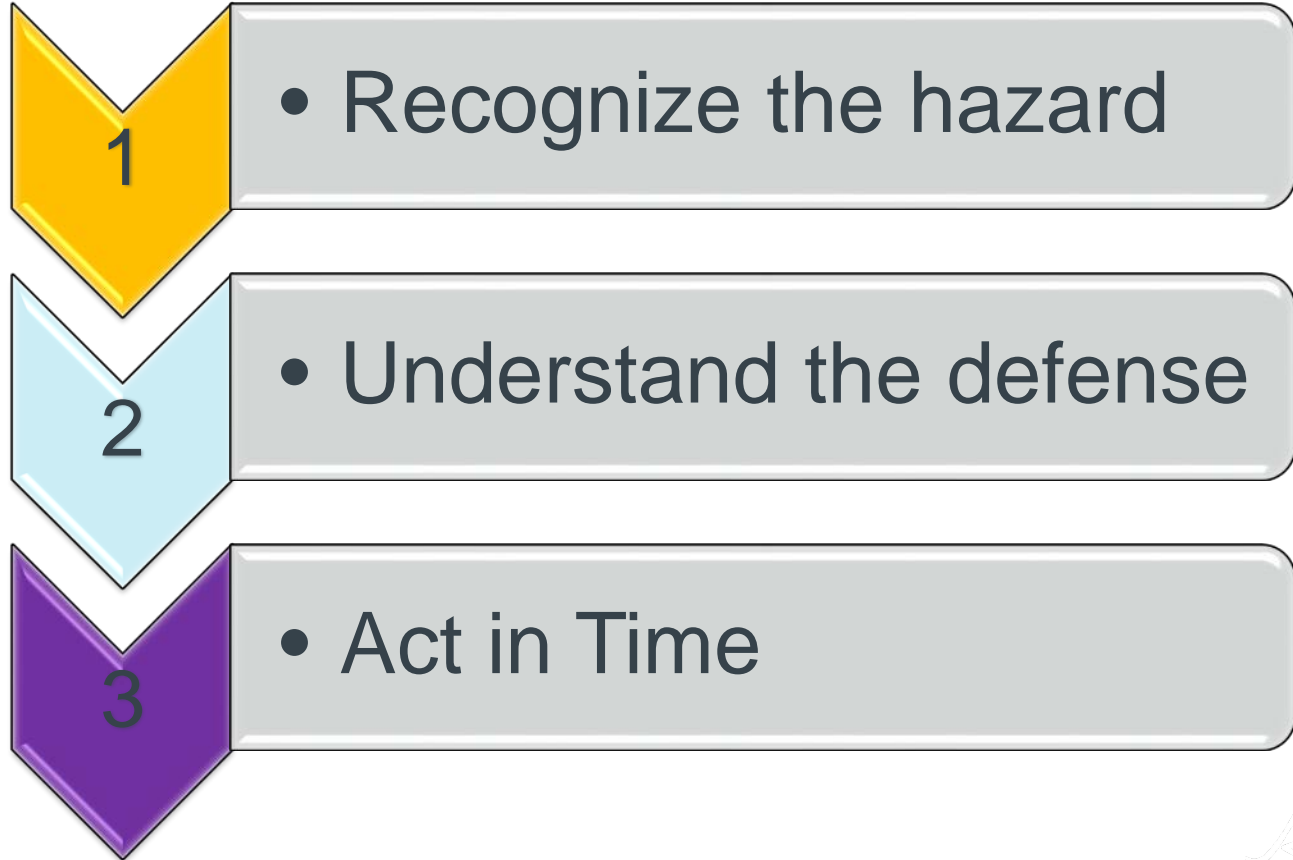


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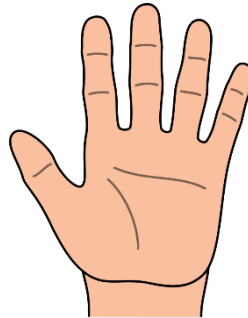
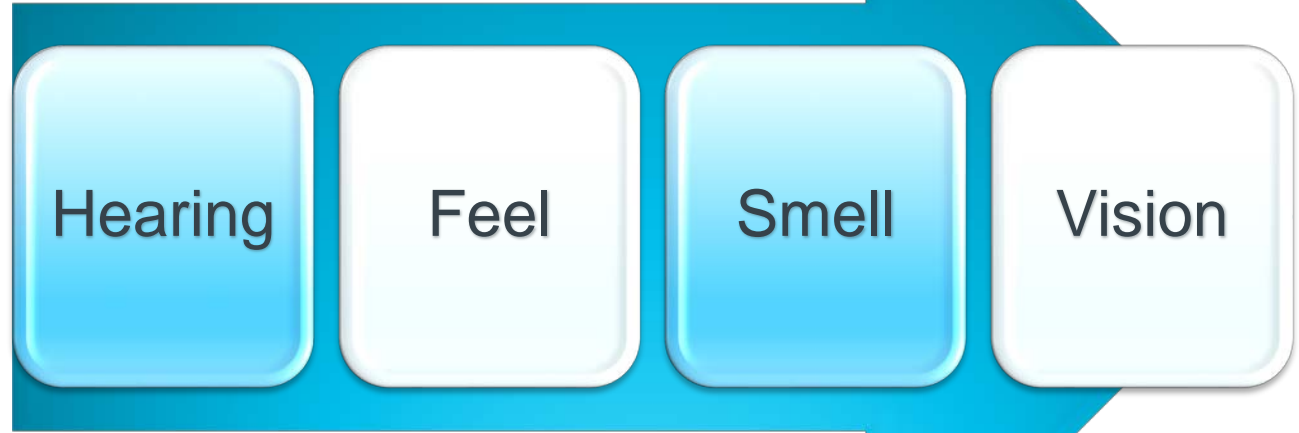
- ☒ Use of cellular phones
- ☒ Reading printed materials
- ☒ Writing, printing, sketching
- ☒ Personal grooming
- ☒ Use of electronic devices



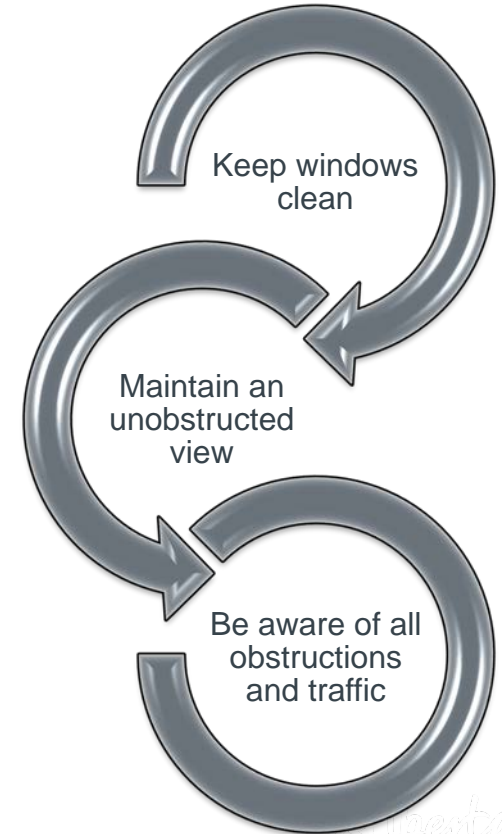
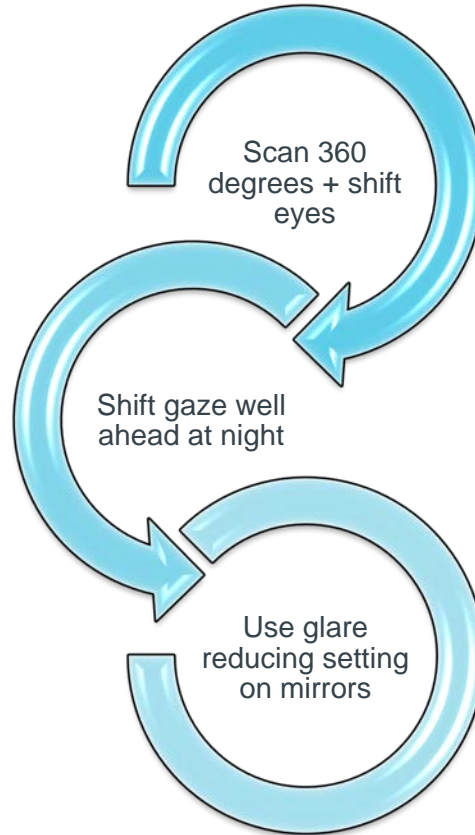
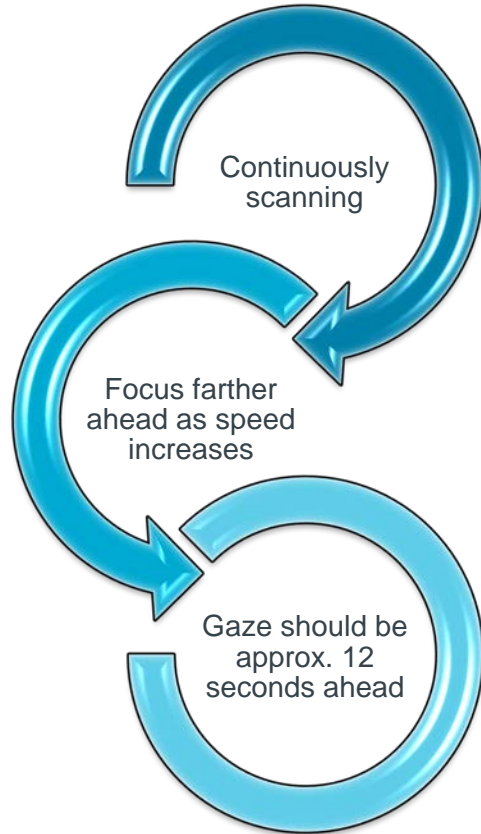
Basic Collision Formula



Zone Awareness



Developing Good Visual Habits



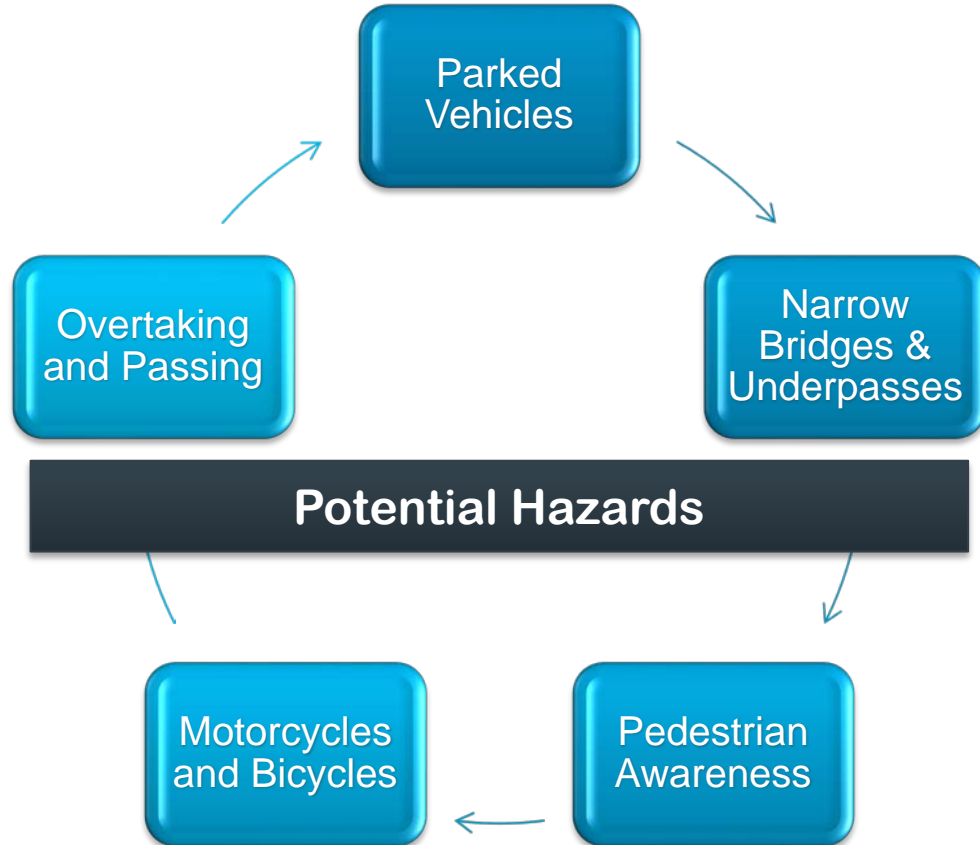
Blind Spots

The areas around your vehicle you cannot see using your mirrors.

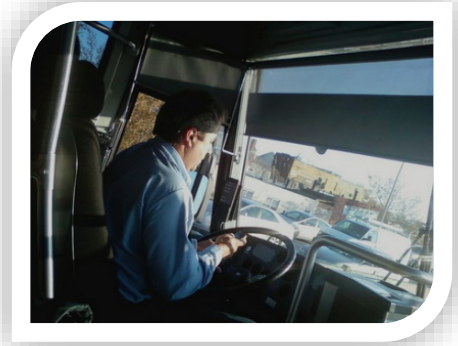
- The bigger the vehicle – The bigger the blind spot
- The smaller the vehicle – the easier it is to lose them in a blind spot.



Detecting and Interpreting Clues



Commentary Driving

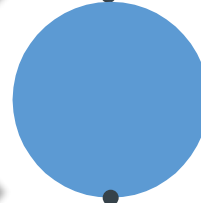


Verbalize main
observations and
interpretations

Real observation
will become habit
with regular practice

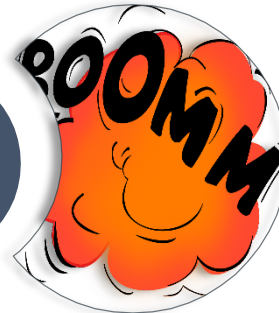
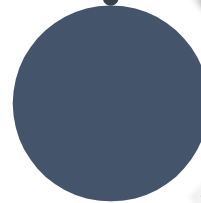
Collision Avoidance

Collisions with the Vehicle Ahead



Collisions with the Vehicle Behind

Collisions with a Vehicle on the Side



Collisions with the Vehicle Ahead

Why do they happen?

- Following too close

How can we avoid them?

- Maintain a safe following distance

Collisions with the Vehicle Behind



Collisions with a Vehicle on the Side

Why do they happen?

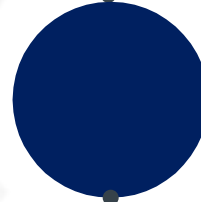
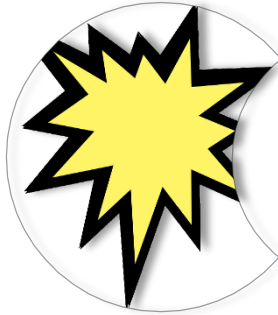
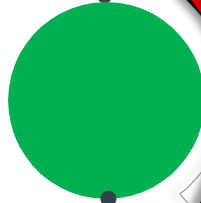
- Reduction in space due to driving a large vehicle

How can we avoid them?

- Manage space around the truck

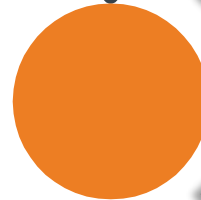
Collision Avoidance

Collisions with an Oncoming Vehicle



Avoiding Collisions Head-On

Intersection or Angle Collision



Collisions with an Oncoming Vehicle

Why do they happen?

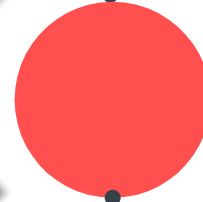
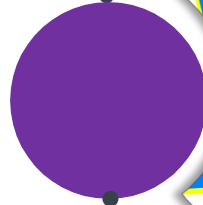
- Problem in their lane
- Faulty driving manoeuvres
- Centrifugal force on curves
- Loss of Control

How can we avoid them?

- Read the Road Ahead
- Ride to the Right
- Reduce Sped
- Ride Right off the Road

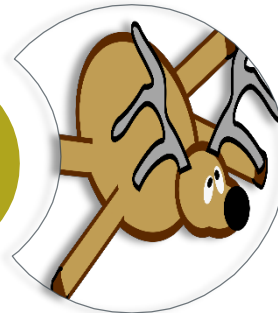
Collision Avoidance

Collisions caused by a Passing Vehicle



Collisions caused by you Passing a Vehicle

Collisions with animals



Collisions Caused by Vehicles Passing You

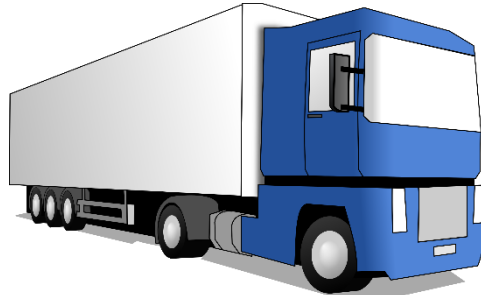
Why do they happen?

- Tailgating
- Following the leader

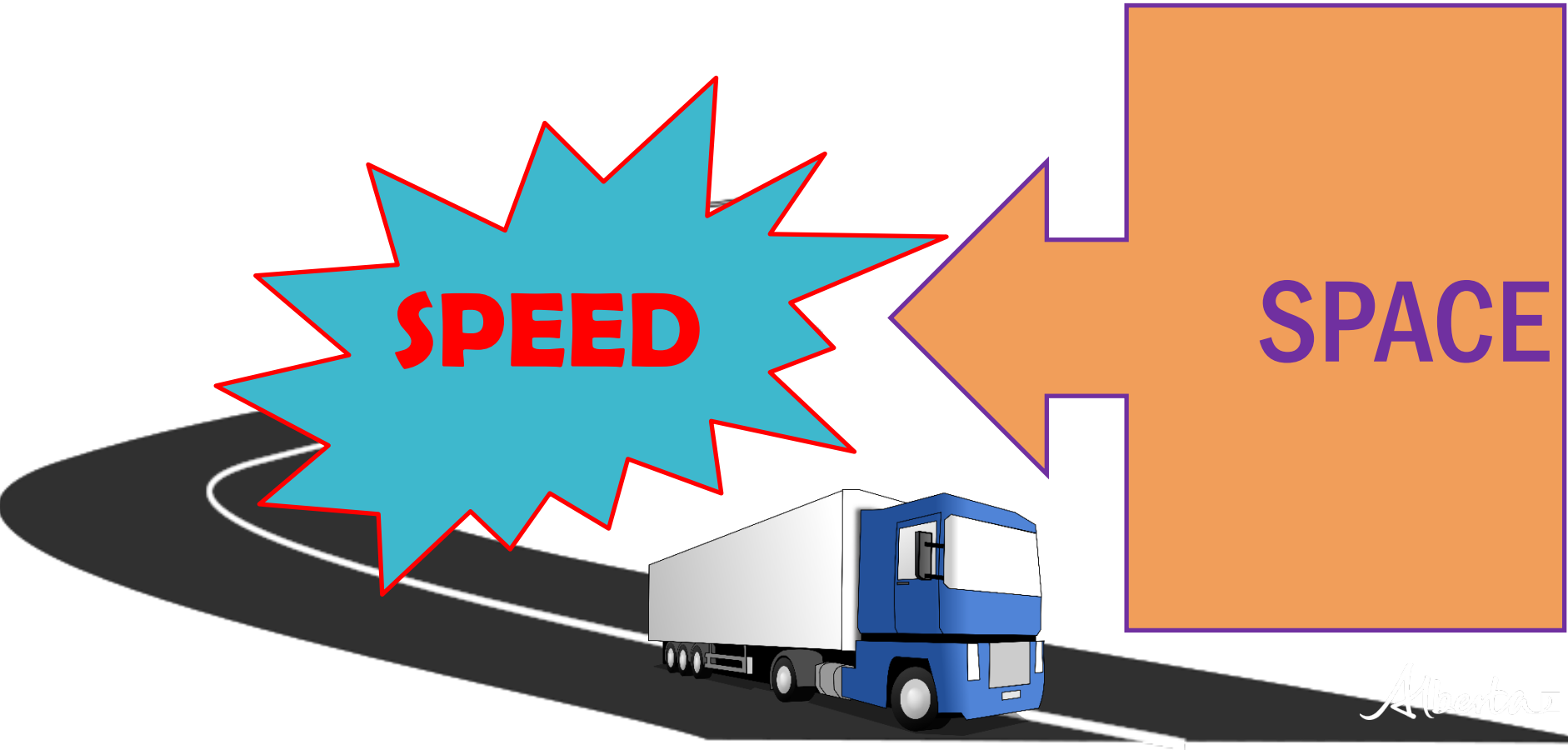
How can we avoid them?

- Maintain lane position
- Maintain or reduce speed
- Avoid accelerating

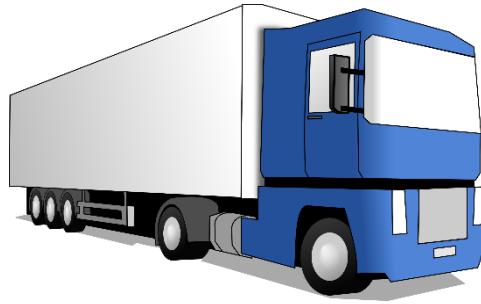
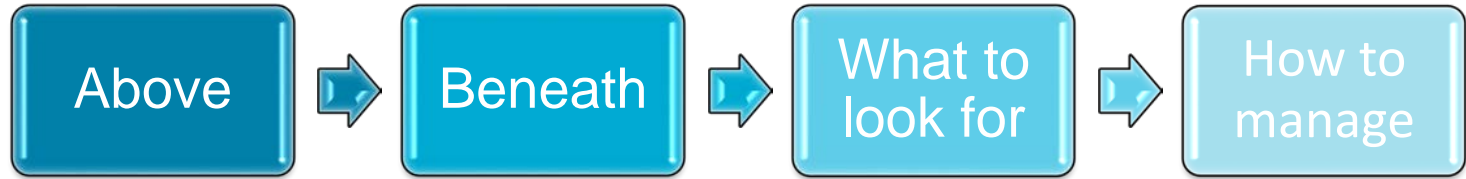
Collisions Caused by you Passing another Vehicle



Speed and Space Management



Space Management



Speed Management

What does speed affect?



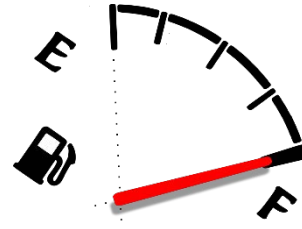
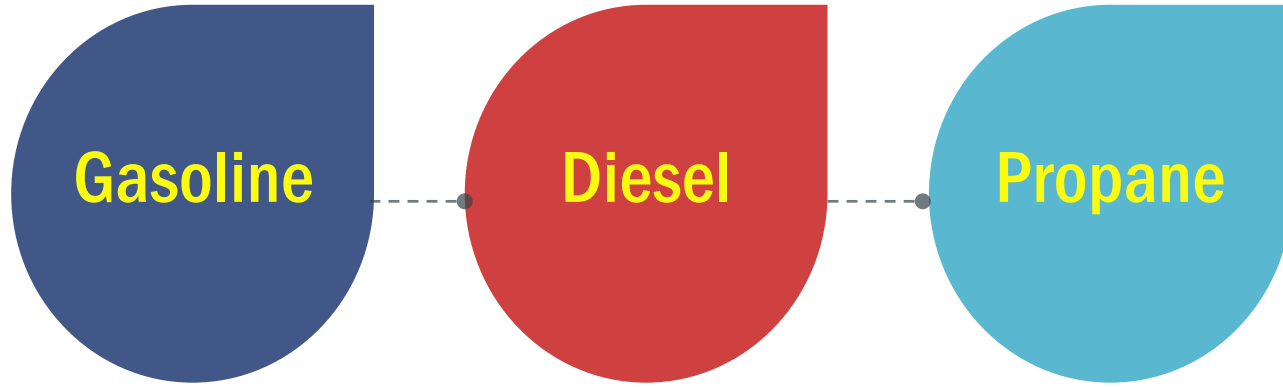
What is meant by Ideal Conditions?



Who is responsible to adjust the speed of the vehicle?



Safe Fueling Practices



Fuel Efficiency

Your driving habits can reduce the amount of fuel you burn.

Some tips for fuel efficient driving:

- Weather
- Preventative Maintenance
- Proper warm up
- Idling

Review

What are the steps for avoiding hazards?

Review- Answer

Identify

Predict

Decide

Execute

Review

What are the six conditions affecting driving?

Review- Answer

Light
Weather
Road
Traffic
Vehicle
Driver

Review

What are some conditions that can affect your fuel efficiency?

Review- Answer

WIND
SNOW COVERED ROADS

Review

What are some truck specific areas that create a less fuel efficient situation?

Review- Answer

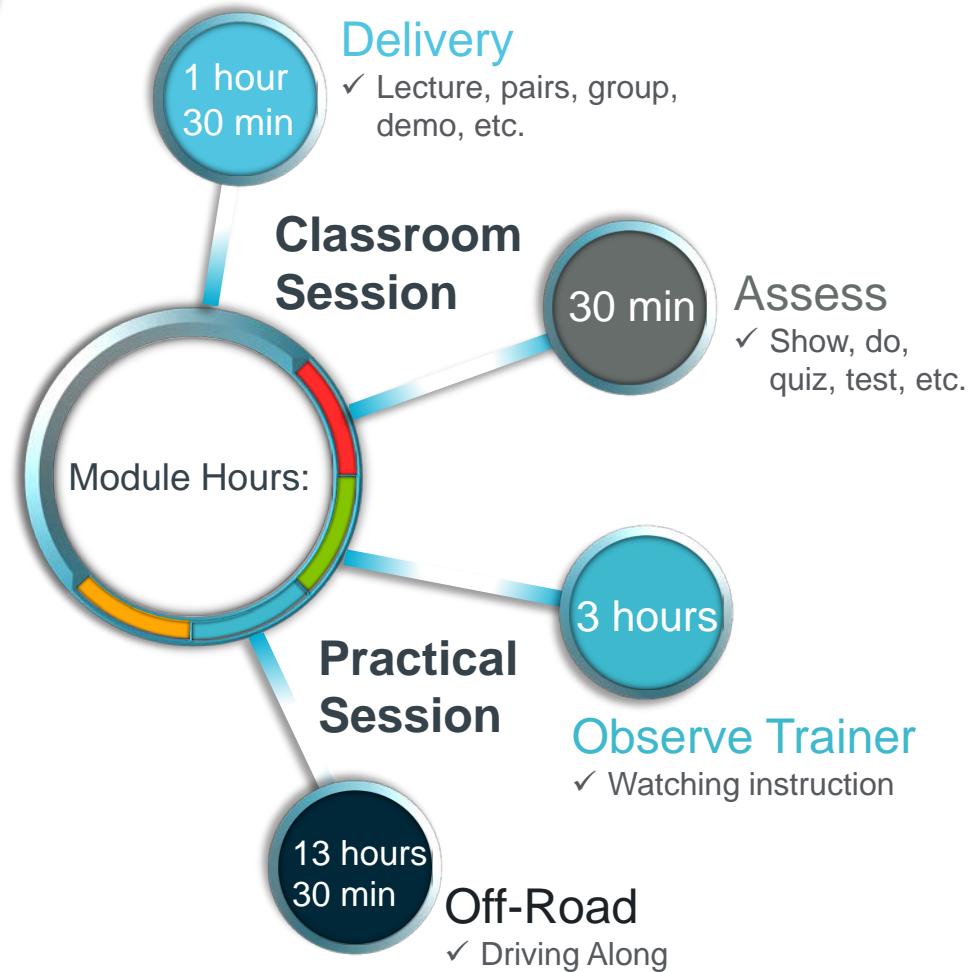
UNDER INFLATED TIRES
UNNECESSARY THROTTLE



Purpose

Module 5:

- ✓ Learn and Demonstrate proper backing procedures
- ✓ Understand the Theory of Straight, Left and Right Backing
- ✓ Recognize the importance of following backing procedures
- ✓ 90-degree Alley-Dock, Blind Side and parallel parking Maneuvers
- ✓ Coupling and Uncoupling with trailer combinations



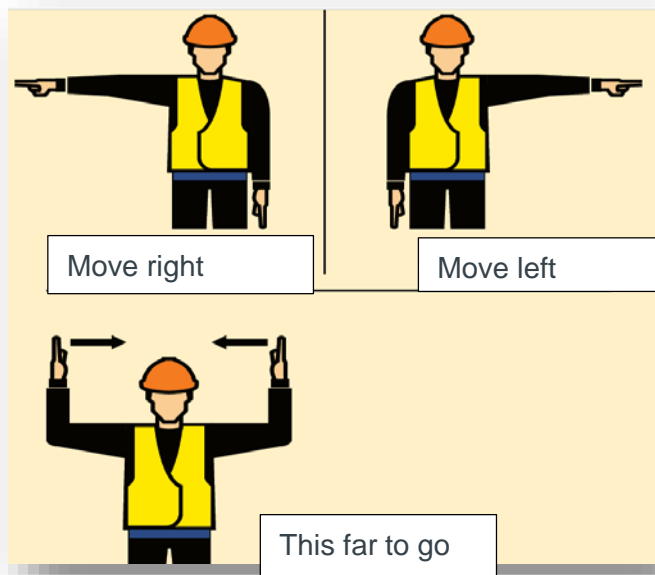
Reversing/Backing

- Hazards of Backing
- How to be safe



Reversing/Backing

Examples of hand signals

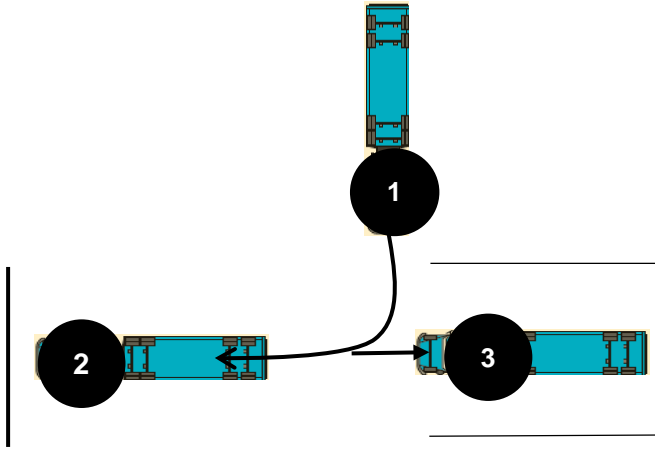


Backing Manoeuvres

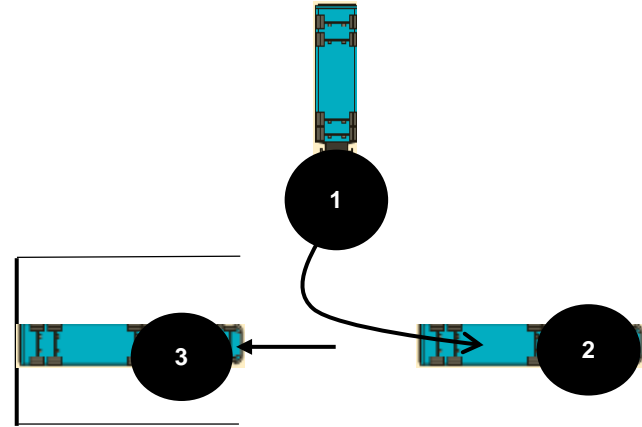
- Straight line
- 90-degree Alley-Dock (left and right)
- Parallel parking (left and right)

Straight Line Backing

- 4-way flashers and sound horn for all backing maneuvers



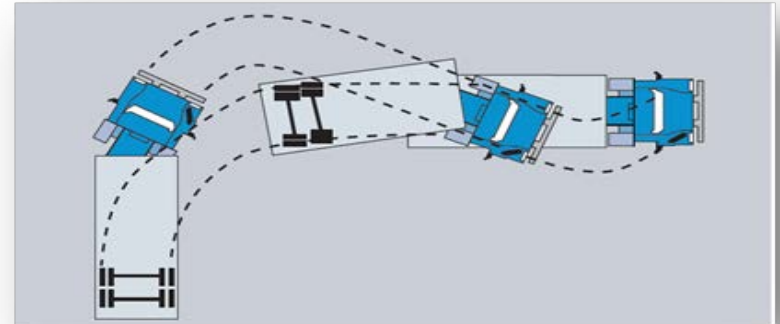
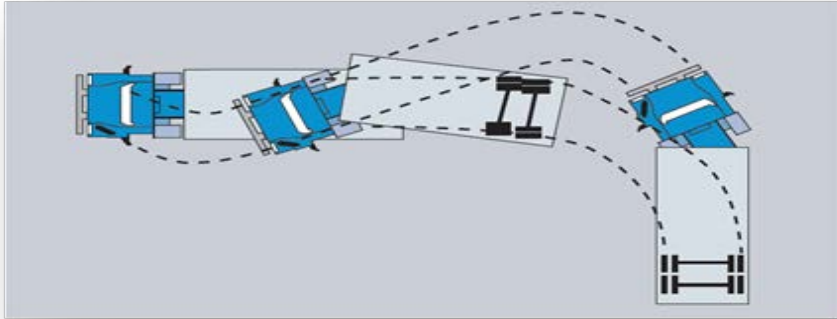
Straight backing. To space on left



Straight backing. To space on right

Alley-Dock Backing

- 90 Degree Reversing, Driver Side (Left Side)
- 90 Degree Reversing, Blind Side (Right Side)



- This type of reversing is the most difficult and also potentially the most dangerous. Avoid it if you can.

Parallel Parking (Adjacent Parking Lane) Procedure

- Parallel park a tractor-trailer to a left spot;
- Parallel park a tractor-trailer to a right spot
- Before backing a tractor-trailer, it is important to ask yourself the following questions:

➤ Is it **NECESSARY**?

➤ Is it **LEGAL**?

➤ Is it **SAFE**?

Reversing/Backing

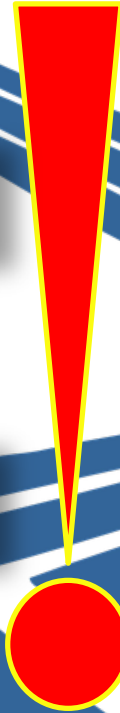
Reversing a tractor-trailer in a hazardous movement

Is it safe?

Should only be done when necessary

Is it legal?

Is it necessary?

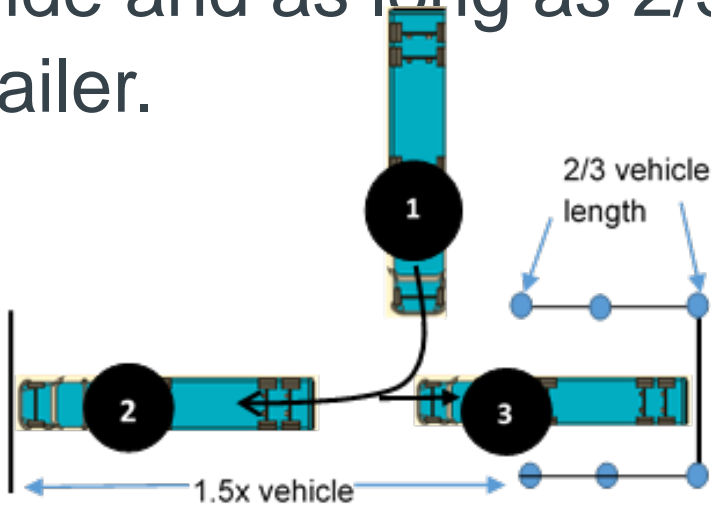


Practical Training Guide

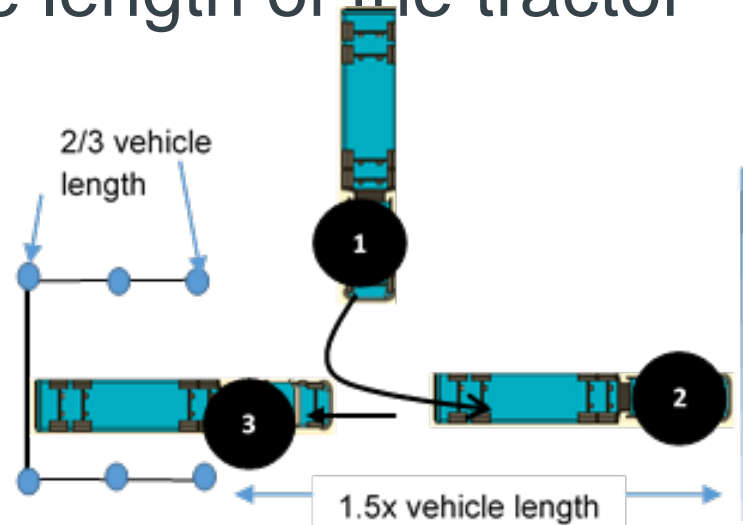
- A minimum of 11 hours and 30 minutes will be spent practicing these 3 backing maneuvers by each trainee.
- The instructor will spend about 40 minutes to demonstrate each backing maneuver and techniques to the trainee.

Practical Training – Straight Line

Manoeuvre Space: Straight-line backing manoeuvre will be in a space that is between 3.5 and 3.7 metres wide and as long as $\frac{2}{3}$ the length of the tractor-trailer.

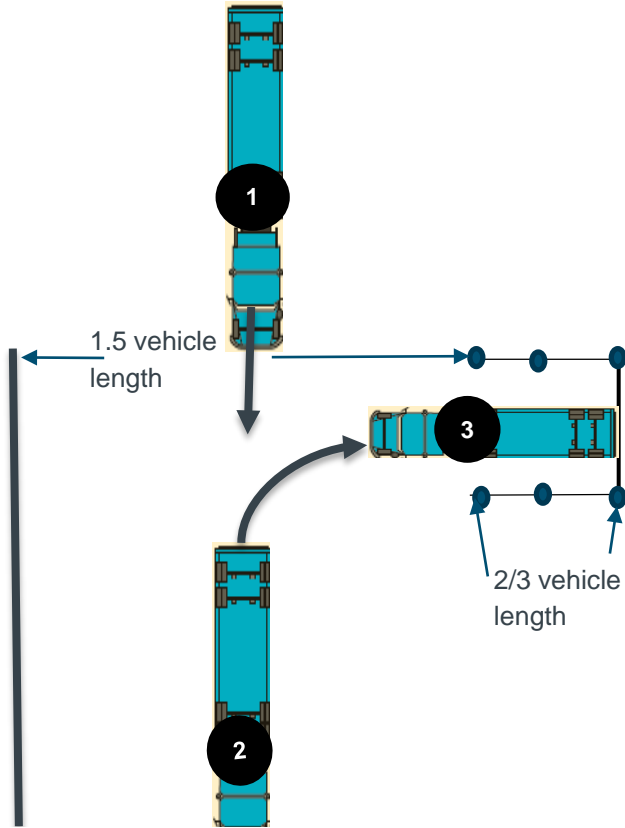


Straight-line backing. To space on left

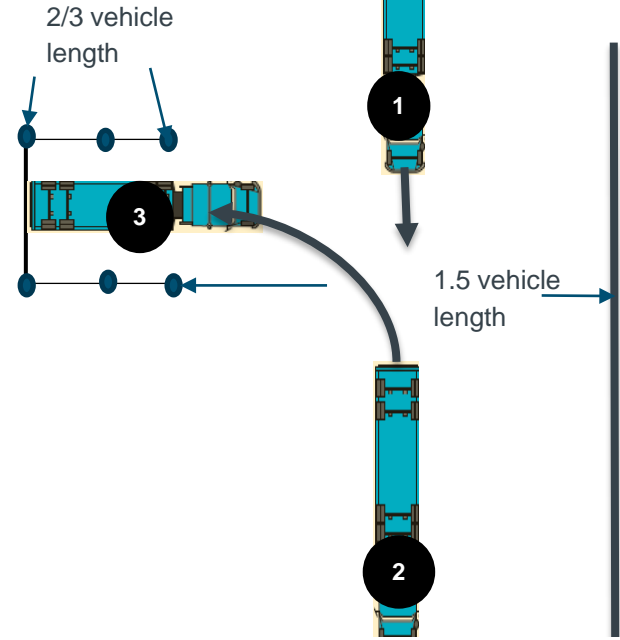


Straight-line backing. To space on right

Practical Training – Alley-Docking

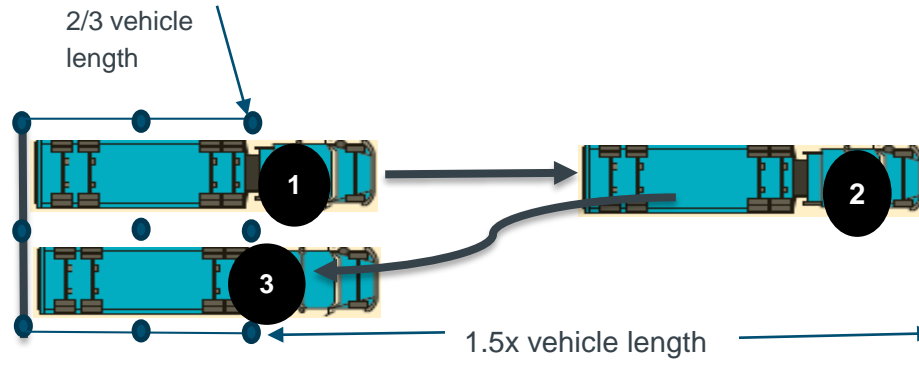
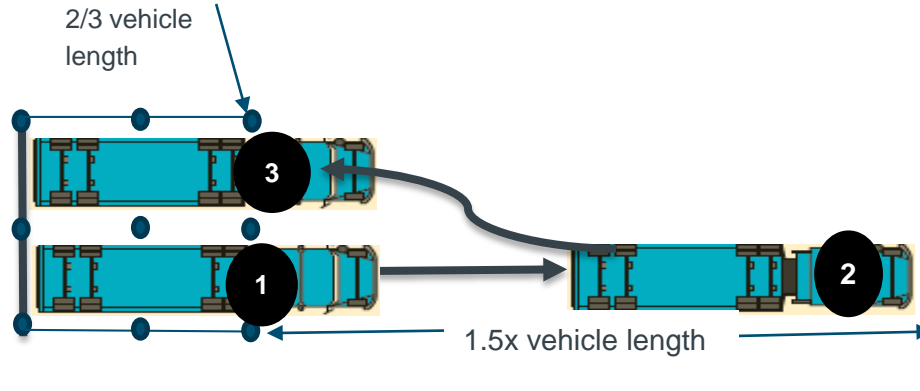


90-degree alley-dock backing - Clear side



90-degree alley-dock backing - Blind side

Practical Training – Parallel Parking



Coupling and Uncoupling

- Having the knowledge and skills to correctly connect and detach the trailer from the tractor is a major responsibility of every professional driver.
- 5th Wheel Position and its importance

Coupling and Uncoupling

5th Wheel Position and its importance

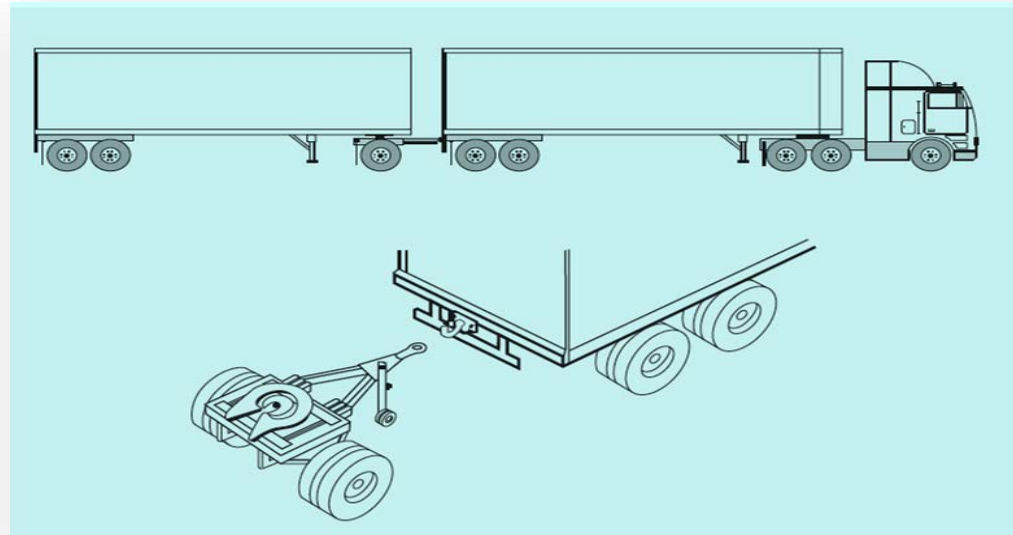
- May be stationary or adjustable
- Sliding the fifth wheel will change the weight distribution.
- Moved forward, more of load is shifted to the steering axle.
- When moved backwards, the weight shifts to the drive axles.
- Too much weight is shifted forward makes steering difficult and you may lose traction.

Coupling a Tractor-trailer

1. Inspection of the yard
2. Securing the vehicle
3. Inspection of the tractor
4. Inspection of the trailer
5. Align tractor and trailer
6. Latch 5th wheel
7. Tug Test
8. Confirm 5th wheel locked
9. Connect lines
10. Raise landing gear
11. Supply air check
12. Brake tests

Double Trailer Combination Types

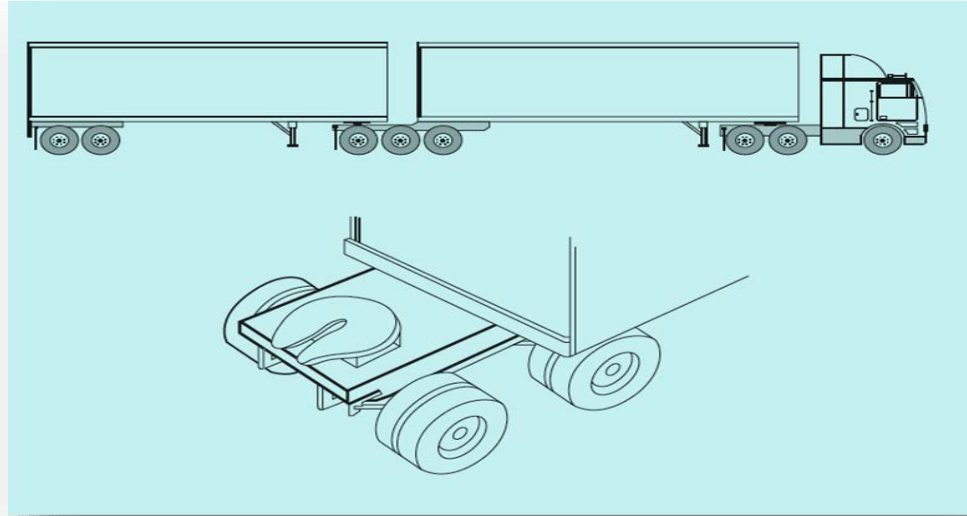
A Train



A train- example of a unit connected by a type A converter dolly

Double Trailer Combination Types

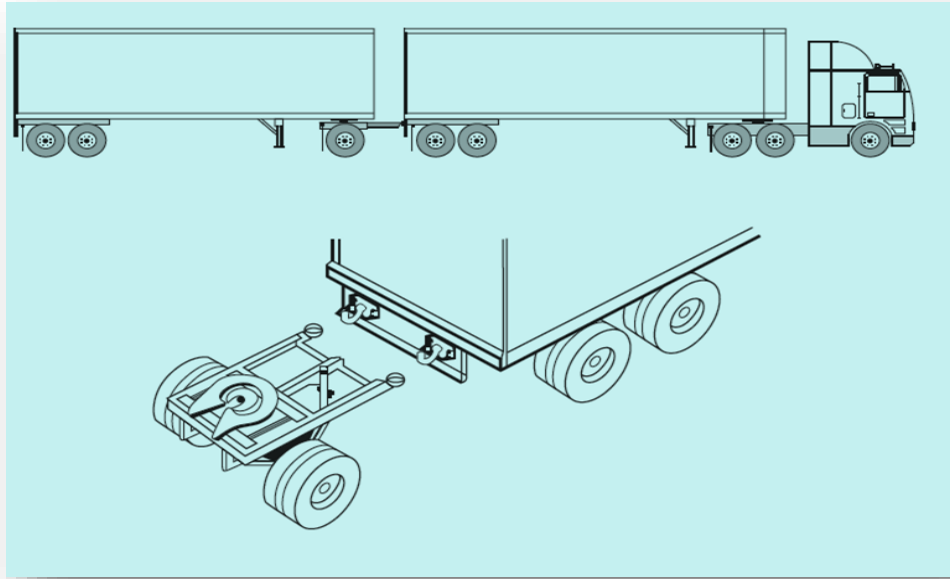
B Train



B train - example of a unit connected by a type B converter dolly.

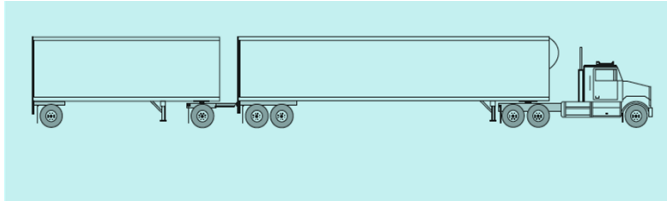
Double Trailer Combination Types

C Train

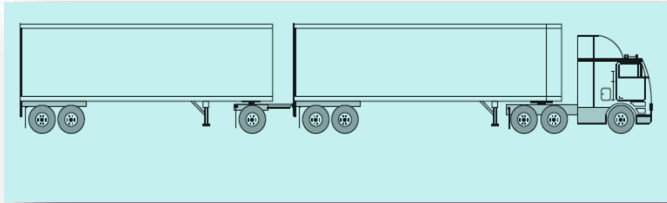


C train - example of a unit connected by a type C converter dolly.

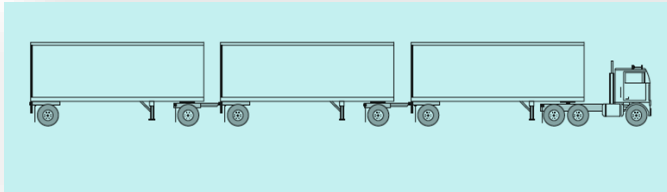
Link-up Arrangement



Rocky Mountain Double



Turnpike Double



Triple

Review

Prior to reversing, the driver should walk around the vehicle in a counter-clockwise direction and check for what?

Review - Answer

- Obstacles
- Hazards
- Clearance

Review

What are the 3 types of backing maneuvers you may encounter?

Review - Answer

- Parallel
- Alley-dock
- Straight

Review

When uncoupling a tractor-trailer, how should the trailer be parked?

Review - Answer

In a straight line

Review

When using a guide to help you back into a space, what are the most important things to remember?

Review - Answer

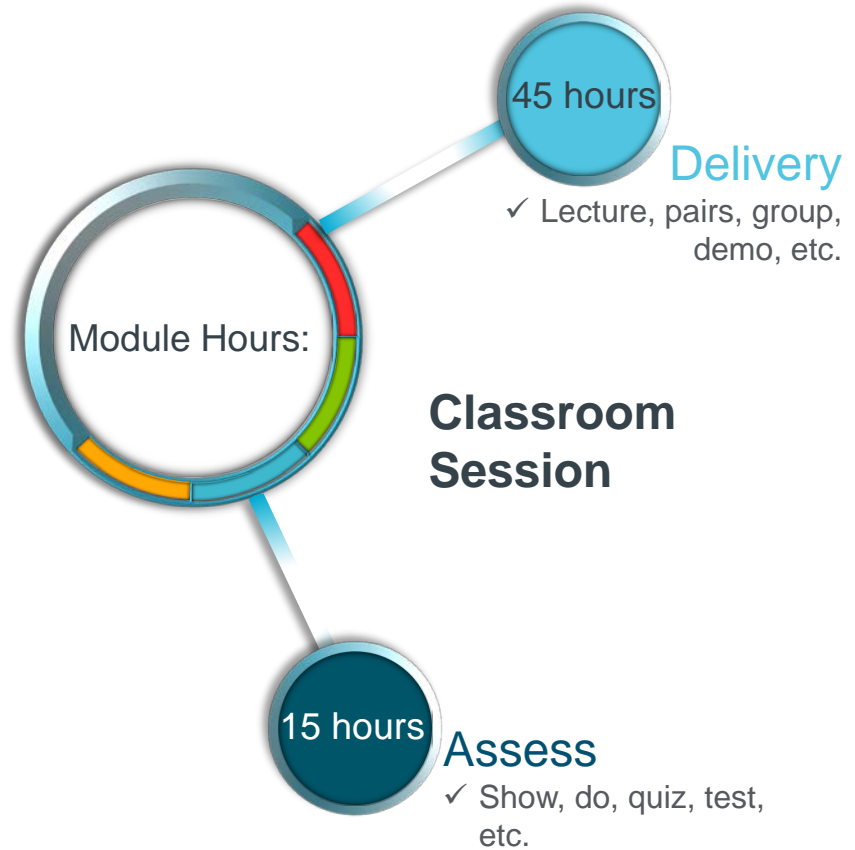
- You must know what each signal means.
- The guide must make eye contact at all times with the driver.



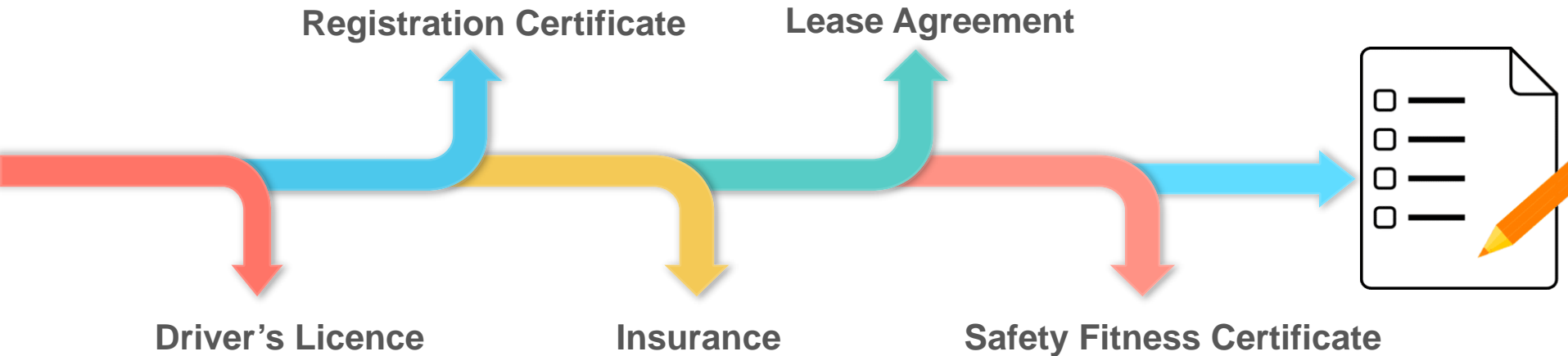
Purpose

Module 6:

- ✓ Administer written workplace documents and communicate effectively through written means
- ✓ Plan ahead, anticipate problems, and be familiar with regulations related to emergency equipment
- ✓ During this Module, Instructors will introduce the documentation requirements and work through the various forms that drivers may be required to complete. Trainees will also be required to plan several trips with different scenarios



Documentation Requirements



Driver's Licence



Class 1 Licence Holder Requirements:

- ✓ May operate any motor vehicle or combination of vehicles, other than a motorcycle
- ✓ Cannot operate a school bus without an 'S' endorsement

Registration and Licence



Class 1 Plates - Commercial vehicles which are used provincially, federally and internationally for :Transporting an owner's own goods or another person's goods for compensation;

-Passenger transportation services including school bus, charter truck and taxi operations.



Class 2 Plates - Commercial vehicles which perform special operations. Some operations include: Transporting goods within 10 km radius of the registered address; Operating provincially while conducting specific industry services. Refer to the regulations for more details.



Class 3 Plates -Commercial vehicles which transport goods owned by the owner of the vehicle. Commercial vehicles that are registered to and operated by governments, municipalities, hospitals, school boards or First Nations bands. A class 3 plate may NOT be used to transport other persons' goods for compensation.

Safety Fitness Certificate

		SAFETY FITNESS CERTIFICATE	
CERTIFICATE NUMBER XXXXXXXXXX		CERTIFICATE HOLDER	
ABC NUMBER ABXXX-XXXX		Example Transport (Alberta) Limited 4221 - 53 St. RED DEER AB T4N 2E1	
RSD NUMBER XXXX-XXXXX			
OPERATING STATUS Provincial		Carrier Identification and Operating Status	
EFFECTIVE JANUARY 01, 2014		EXPIRY (THE CERTIFICATE EXPIRES AS INDICATED BELOW UNLESS OTHERWISE SUSPENDED OR CANCELLED) Continuous	
<p>---</p> <p>This Carrier holds a SATISFACTORY UNAUDITED Safety Fitness Rating in the Province of Alberta.</p> <p>This Certificate is issued pursuant to the Traffic Safety Act. The holder of this Certificate may operate vehicles anywhere in Alberta that are registered for a gross weight of 11,794 kilograms or greater, or designed with a seating capacity of 11 or more persons including the driver. This Certificate is not valid when the carrier operates or intends to operate outside of Alberta.</p> <p>The original or a copy of this Certificate must be carried in vehicles operating under the authority of this certificate and produced on demand of a Peace Officer.</p> <p>This Certificate may be cancelled where the holder has not operated a vehicle authorized by this certificate for a 12 month period.</p> <p>This Certificate may be suspended or cancelled for failing to comply with transportation legislation.</p> <p>All carriers must read the conditions on their Safety Fitness Certificate. For example, this certificate states that carriers with a "Provincial" Operating Status may not operate vehicles outside of Alberta.</p>			
DIRECTOR, ALBERTA TRANSPORTATION			



Operating Status

Federal Status

A truck, tractor, or trailer or any combination of these vehicles registered for or weighing in excess of 4,500 kilograms

A commercial passenger vehicle with an original manufacturer's seating capacity of 11 or more persons including the driver

Provincial Status

A truck, tractor, or trailer or any combination of these vehicles registered for a weight of 11,794 kilograms or greater

A commercial passenger vehicle with an original manufacturer's seating capacity of 11 or more persons including the driver

International Registration Plan (IRP)



IRP Registration



Agreement between
Canada and the USA



Distribution of
registration fees



Federal Status



Cab Cards

It does NOT:



Exempt fuel tax



Exempt from certificates

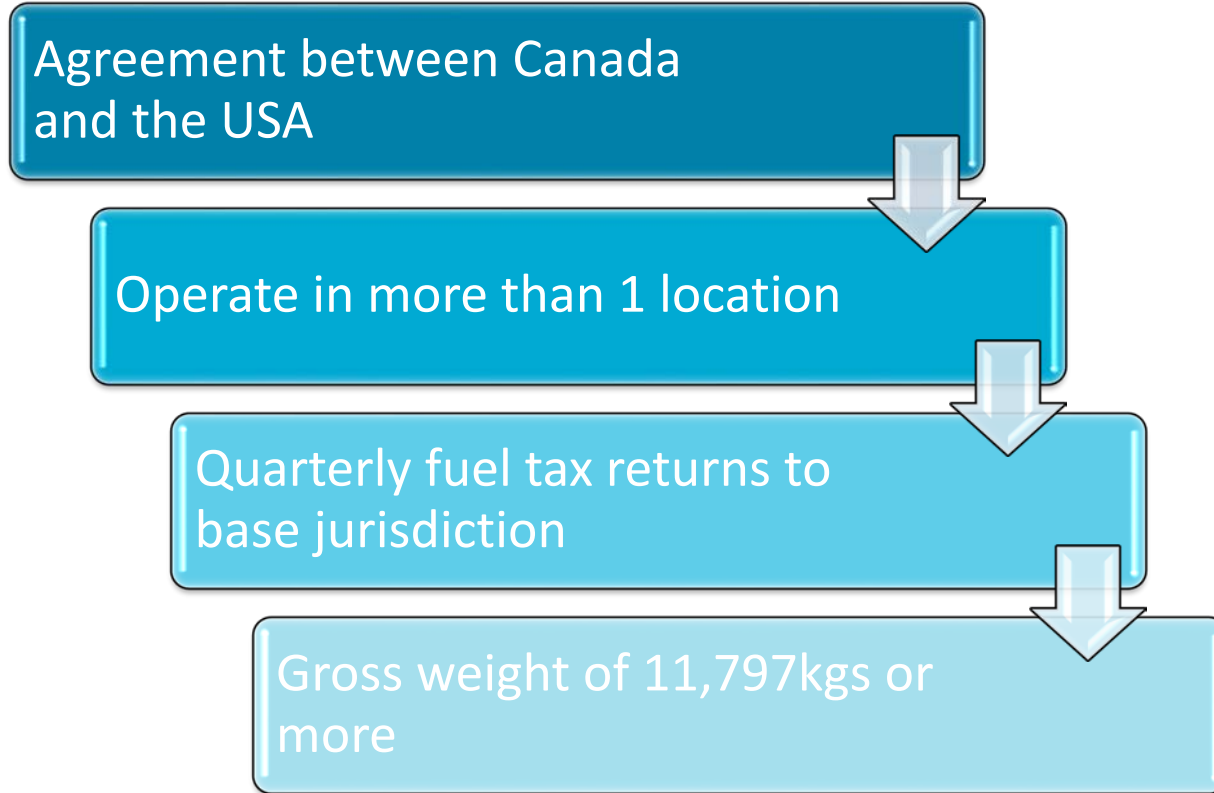


Permit operation
outside of Alberta

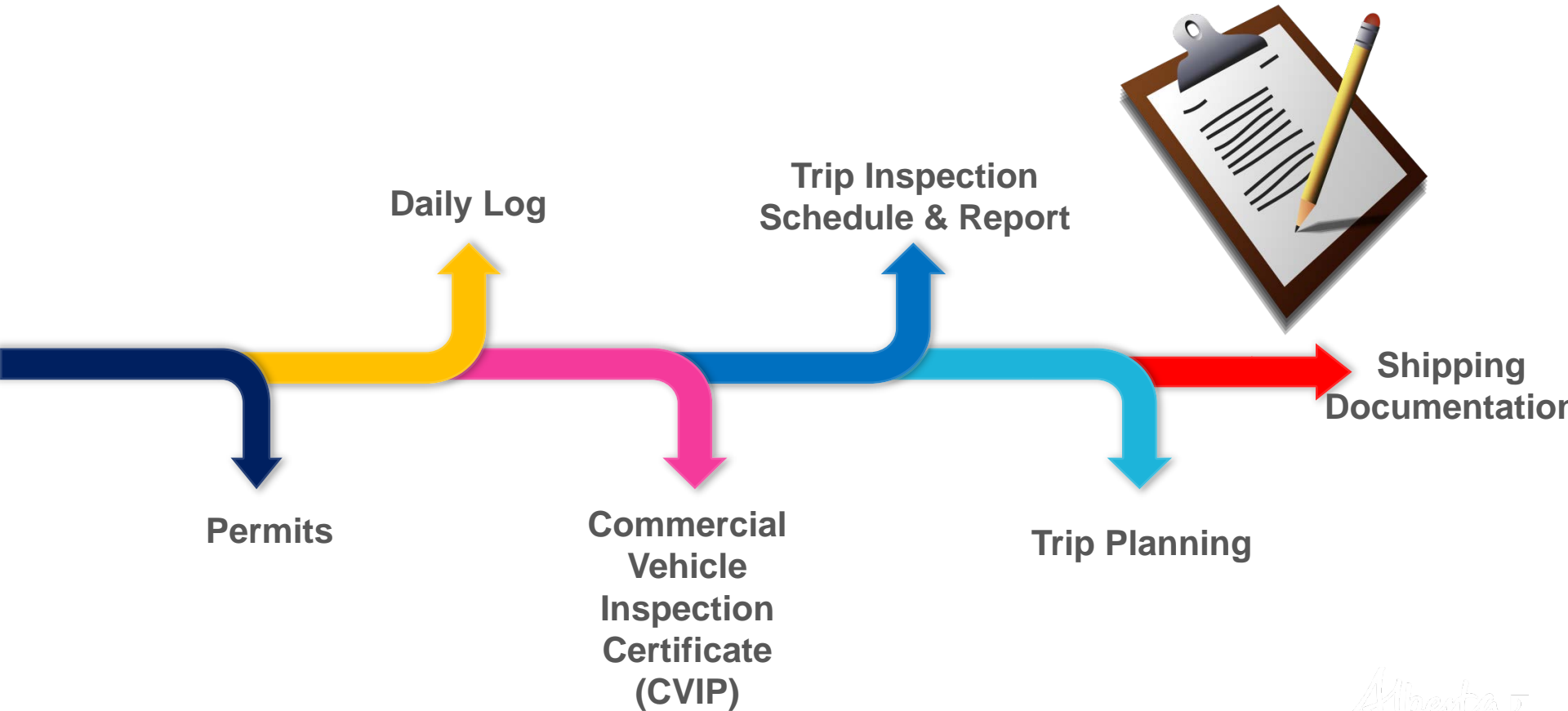


Exempt from
dimensions and weights

International Fuel Tax Agreement(IFTA)



Documentation Requirements



Commercial Vehicle Inspection Certificate

Commercial vehicles that are registered for a weight of 11,794 kg or more and a combination of vehicles which add up to a registered weight of 11,794 kg or more (including trailers) must be inspected under the CVIP once every **12 months**.

The driver of the vehicle must be able to produce the inspection certificate on the request of an investigator or peace officer

It is illegal for a commercial vehicle to be operated on a highway unless it has a valid inspection certificate and decal



Daily Trip Inspection Report

*Commercial Vehicle
Safety Regulation
Section 10 (AR
121/2009)*

Provincial & Federal:

Carriers must complete and keep a record of trip inspection reports

*Canadian Council Of
Motor Transportation
Administrators,
CCMTA, NSC
Standard 13*

Purpose:

Required to ensure early identification of vehicle problems and defects, and to prevent the operation of vehicles with conditions that are likely to cause or contribute to a collision or vehicle breakdown



Responsibilities:

The driver must forward the original report to the home terminal of the carrier within twenty days. The carrier is then responsible for storing this record in its principal place of business within thirty days of receiving the report.



IMPORTANT

Alberta

Shipping Documentation/Cargo Information

Types of shipping/cargo documents:

- Bills of lading
- Waybills
- Dangerous goods
- Weigh slips
- Cargo packaging
- Delivery instructions

Bill of Lading

Must include the following:

- Freight transporter
- Shipper
- Place
- Consignee
- Delivery location
- Manifest of contents
- Delivery instructions

Way Bills

- Particulars of goods
- Name and mailing address
- Destination
- Names of connecting carriers
- Charge options (prepaid or collect)
- Date of consignment

Transporting Dangerous Goods

Drivers who transport dangerous goods in Alberta must comply with both provincial and federal standards

- Alberta Provincial Dangerous Goods Transportation and Handling Act and Dangerous Goods Transportation and Handling Regulation as well as the Federal Transportation of Dangerous Goods Regulation (TDG).

Nine (9) hazard classes of dangerous goods



Class 1 Explosives



Class 2 Gases



Class 3 Flammable Liquids



Class 4 Flammable Solids, Substances Liable to Spontaneous Combustion, and Substances that Emit Flammable Gases on Contact with Water



Class 5 Oxidizing Substances and Organic Peroxides



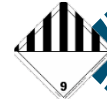
Class 6 Toxic Substances and Infectious Substances



Class 7 Radioactive Materials



Class 8 Corrosive Materials



Class 9 Miscellaneous Products or Substances

Transporting Dangerous Goods Cont.

- Training required to transport
- Certification requirements
- If you change employers

Dangerous Goods Shipping Documents

Dangerous Goods Shipping Document for Road Transport on CANADIAN SHIPMENTS						
CONSIGNOR Name: Address:			DESTINATION (City-Town) Name: Address:			
Name of Carrier		Prepaid <input type="checkbox"/>	Collect <input type="checkbox"/>	Transport Unit Number		
Point of Origin			Shipping Date		Shipper's No.	
REGULATED DANGEROUS GOODS						
UN Number	Shipping Name	Primary Class	Subsidiary Class	Packing Group	Quantity	Packages Requiring Labels
24-Hour Number: _____						
ERAP Reference _____ and Telephone Number _____						
Consignor's Certification I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, are properly classified and packaged, have dangerous goods safety marks properly affixed or displayed on them, and are in all respects in proper condition for transport according to The Transportation of Dangerous Goods Regulations. Name of Consignor: _____						
Special Instructions						
NON-REGULATED GOODS						
Packages	Description of Articles			Weight		
Received in apparent good order				Shipper's Signature		
Consignee's Signature				Driver's No.		
Received in Apparent Good Order		Driver's Signature		Driver's No.		
Please note that this sample shipping document contains some information that is not required in the TDG Regulations. The additional information reflects current industry practices.						

Dangerous Goods

Shipping documents must be carried:

- Within drivers reach
- When leaving the vehicle
- Leaks or collisions

Dangerous Goods

In the event of: leaks, unintentional release, near release, or collision:

- The local police;
- Alberta EDGE (Environmental and Dangerous Goods Emergencies) at 1-800-272-9600 (toll Free) or 780-422-9600 (Edmonton area);
- The owner of the vehicle;
- The employer.
- The person or company who owns the consignment of dangerous goods.

Placards



Example of a Placard for a Large Means of Containment GASOLINE, UN 1203, Class 3, Packing Group II	
Class 3 placards have a red background and a white flame symbol	

Example of Safety Marks for a Small Means of Containment In this case the product is compressed nitrogen	
Class 2.2 safety label is green with a white cylinder symbol	

Permits for Equivalent Level of Safety

- What is it?
- What does it do?
- Who is it issued to?
- When is it needed?

The image shows a sample of an Alberta Government application form. At the top left is the Alberta Government logo. To the right, contact information for 'Dangerous Goods, Rail Safety and 511 Alberta' is provided, including the address (4999 98 Avenue, Twin Atria Building, Edmonton, AB T6B 2X3), phone (780-422-9600), fax (780-427-1044), and email (TRANS.dangerousgoods@gov.ab.ca). Below this is a grey header box with the title 'Application for Exemption by Permit (Alberta Equivalent Level of Safety)' and the subtitle 'Dangerous Goods Transportation and Handling Act, Section 5(1)'. Underneath is a white box labeled 'Section A: Stakeholder Information'. The first field in this section is 'Company Name:' followed by a vertical line indicating a space for input.

Alberta Government

Dangerous Goods, Rail Safety and 511 Alberta
4999 98 Avenue, Twin Atria Building
Edmonton, AB T6B 2X3
P: 780-422-9600 | F: 780-427-1044 |
E: TRANS.dangerousgoods@gov.ab.ca

Application for Exemption by Permit (Alberta Equivalent Level of Safety)
Dangerous Goods Transportation and Handling Act, Section 5(1)

Section A: Stakeholder Information

Company Name: _____

For more information refer to the web site: www.transportation.alberta.ca and/or contact the Dangerous Goods Coordination and Information Centre at 1-800-272-9600 for further information on bulletins, permitting, and general information.

Weigh Slips

- What is it?
- What does it do?
- Who is it issued to?
- When is it needed?

Vehicle Weights and Dimensions

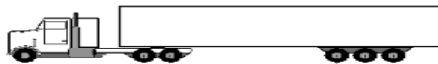
- Provinces and territories have laws that establish maximum vehicle weights.
- Drivers must be aware of weight restrictions that may apply to their vehicles
- Use the vehicle weight and dimension calculator
 - <http://www.transportation.alberta.ca/4779.htm>

Vehicle Weights and Dimensions

Maximum Allowable Weight for Tractor Semi-trailer

Maximum Allowable Weight for Tractor Semi-trailer

Sept. 13, 2018



Select information about vehicle

Interaxle spacing

5.5 m

Max. combined weight

Percentage axle limit 100 %

Axle Group	Number of axles	Tridem Spread	Number of tires	Tire size	Rated tire capacity	Allowable axle weight	Notes
Steering	1		2	11 in.	2750		
Drives	2	2.4-2.80 m	8	235 mm.	2200		
Trailer	3	3.0-3.10 m	12	235 mm.	2200		

Maximum Allowable Gross Weight

Calculate Weight

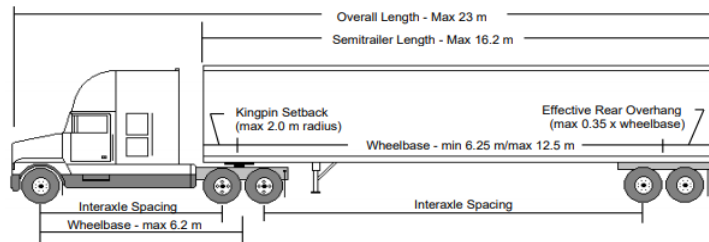
Reset

Minimum registered weight

1. This function calculates the maximum allowable weights as per the [Commercial Vehicle Dimension and Weight Regulation of the Traffic Safety Act](#). Where the information shown on this page is not in agreement with the regulation, the regulation shall prevail.
2. This function **does not** take into consideration the "gross axle weight rating" (GAWR) or the "gross vehicle weight rating" (GVWR) of the vehicle. The owner/operator of the vehicle should ensure that the weight carried is within the manufacturer's rated capacity specifications.
3. The "Rated Tire Capacity" is the rated capacity of one tire, based on either single or dual application, as stamped on the sidewall of the tire.
4. The steering axle weight for a truck tractor is capped at 6,000 kg.
5. When the interaxle spacing is less than the minimum specified in regulations, the combined axle weight for the combination is reduced by 500 kg for every 0.1 metre or portion thereof. This will also reduce the allowable GVW. Notwithstanding the requirements for the interaxle spacing, the trailers shall also conform to all other legal dimension requirements such as trailer wheelbase and overhang.
6. The maximum weight allowed on municipal roads is 17,000 kg on a tridem axle and 53,500 kg for the GVW. Permits may be available to exceed these weight limits, subject to municipal approval. Contact the Central Permit Office at 1-800-662-7138 (in North America) or 403-342-7138 for details.

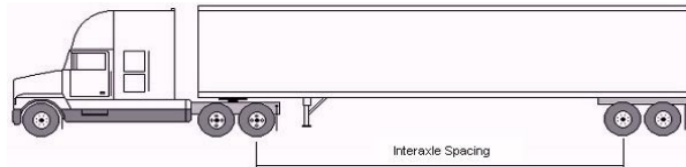
Data that matches selected information will appear after the user clicks "calculate weight"

Vehicle Weights and Dimensions



DIMENSION	LIMIT
Overall Length	Maximum 23 m
Overall Width	Maximum 2.6 m
Overall Height	Maximum 4.15 m
Tractor:	
Wheelbase	Maximum 6.2 m
Tandem Axle Spread	Minimum 1.2 m/Maximum 1.85 m
Semi-trailer	
Length	Maximum 16.2 m
Wheelbase	Minimum 6.25 m/Maximum 12.5 m
Kingpin Setback	Maximum 2.0 m radius
Effective Rear Overhang	Maximum 35% of wheelbase
Tandem Axle Spread	Minimum 1.2 m/Maximum 1.85 m
Tridem Axle Spread	Minimum 2.4 m/Maximum 3.7 m
Track Width	Minimum 2.5 m/Maximum 2.6 m
Interaxle Spacings	
Single Axle to Single, Tandem or Tridem Axle	Minimum 3.0 m
Tandem Axle to Tandem Axle	Minimum 5.0 m
Tandem Axle to Tridem Axle	Minimum 5.5 m

Maximum Dimensions



WEIGHT	LIMIT
Axle Weights:***	
Steering Axle	Maximum 6000 kg
Single Axle	
Single tires	Maximum 7300 kg
Super single tires	Maximum 7700 kg *
Dual tires	Maximum 9100 kg
Tandem Axle:	
Single tires	Maximum 13,600 kg
Super single tires	Maximum 15,400 kg *
Dual tires	Maximum 17,000 kg
Tridem Axle:	
Single and super single tires	Maximum 19,000 kg **
Dual tires with axle spread from 2.4 m to less than 3.0 m	Maximum 21,000 kg **
Dual tires with axle spread from 3.0 m to 3.7 m	Maximum 24,000 kg **
Gross Vehicle Weight Limits	
See Weight Calculator	Cannot exceed the sum of the maximum legal axle weights and is subject to minimum interaxle spacing.

* Super single tires require "New Generation, Wide Base" tires with a minimum tire width of 445 mm. Available by permit only. Super single tires do not apply to the steering axle.

** These weights for tridem axles apply to provincial highways only. The maximum weight for a tridem axle on a municipal road is 17,000 kg. Permits may be available to achieve heavier weights.

*** All axle weights are subject to minimum tire size. The maximum weight per tire shall not exceed the lesser of the tire manufacturer's weight rating or the width of the tire stamped on the sidewall multiplied by 10 kg/mm.

Legal Weight

- Maximum weight standards
- What impacts legal Weight?
- Signage for weight
- Permits

Over-Dimensional Safety Requirements

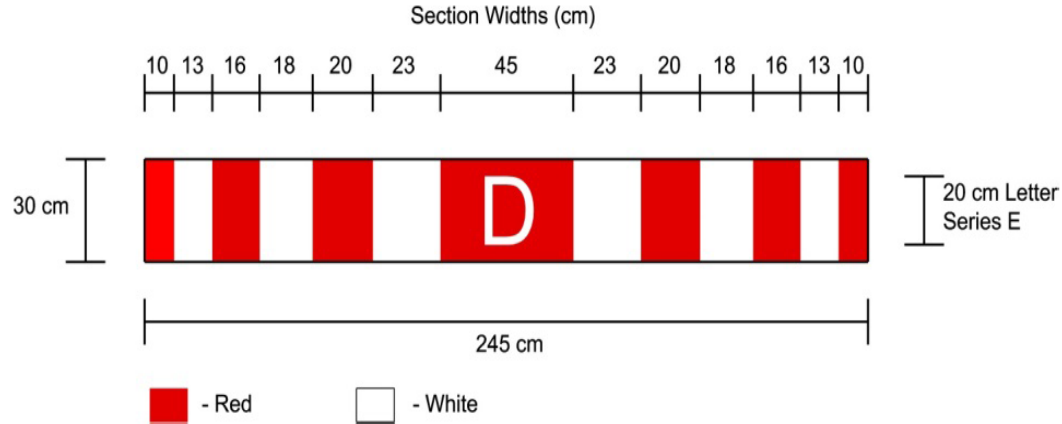
Over 2.60 metres wide (8' 6")	<ul style="list-style-type: none">• Vehicle equipped with warning flags by day;• Vehicle equipped with warning lights by night or during adverse weather conditions.
Over 3.05 metres wide (10')	<ul style="list-style-type: none">• As above PLUS 2-dimension signs at the front and back of the vehicle in a manner that is clearly visible to approaching traffic.
Over 3.35 metres wide (11')	<ul style="list-style-type: none">• As above PLUS 1 or more flashing lights.
Over 3.85 metres wide (12' 7")	<ul style="list-style-type: none">• As above PLUS 1 pilot vehicle behind when on 4-lane road or 1 pilot vehicle in front when on 2-lane road;• No movement after 3:00pm on a day preceding a weekend or stat holiday• No movement on a Sunday or a statutory holiday.



Over-Dimensional Safety Requirements (cont.)

Over 4.45 metres wide (14' 7")	<ul style="list-style-type: none">• Vehicle equipped with flags, signs, and flashing lights;• On 2-lane road, need 1 pilot and 1 trailing vehicle;• On 4-lane road, vehicles up to 5.5m wide (18') need 1trailing vehicle;• On 4-lane road, vehicles over 5.5m wide need 1 pilot and 1 trailing vehicle;• No movement after 3:00pm on a day preceding a weekend or stat holiday• No operation on highway on Sunday or a statutory holiday;• Travel during DAYLIGHT HOURS ONLY.
Over 5.5 metres wide (18')	<ul style="list-style-type: none">• As above PLUS other conditions as specified on the permit;• Stopping on provincial highways only permitted at designated tractor-trailer pull-outs (except for emergencies and power line lifting);• Travel during DAYLIGHT HOURS ONLY.
Over 5.3 metres high (17' 4")	<ul style="list-style-type: none">• Notify power and telephone companies;• Travel during DAYLIGHT HOURS ONLY

Over Dimension Signs



Road Restrictions and Bans

- Seasonal conditions
- Bridge maximum weights
- Over head structures
- Construction
- Up to date information on Road Restrictions and Bans, as well as information on Road Ban Permits, can be found on the Alberta Transportation website: <https://www.alberta.ca/road-restrictions-and-bans-overview.aspx>.
- Toll free road ban information for provincial highways can also be obtained by dialing 1-855-ROADBAN (1-855-762-3226).

Review

Who is responsible to ensure the driver has sufficient training on dangerous goods?

Answer

The Carrier

Review

How many classes of hazardous materials are there?

Answer

9 Classes

Review

When hauling dangerous goods, who should be notified when there is a leak or collision?

Answer

- The local police
- Alberta Environmental and Dangerous Goods
- The owner of the vehicle
- The employer
- The person or company who owns the consignment of dangerous goods

Review

When leaving the truck what should you do with the paperwork for the dangerous goods?

Answer

- Always within the driver's reach.
- If leaving the cab, place on the seat or in an obvious place.
- If leaving the shipment in a supervised area, leave a copy with the person in charge.

Review

Who is responsible for making sure the proper permits are obtained for the shipment?

Answer

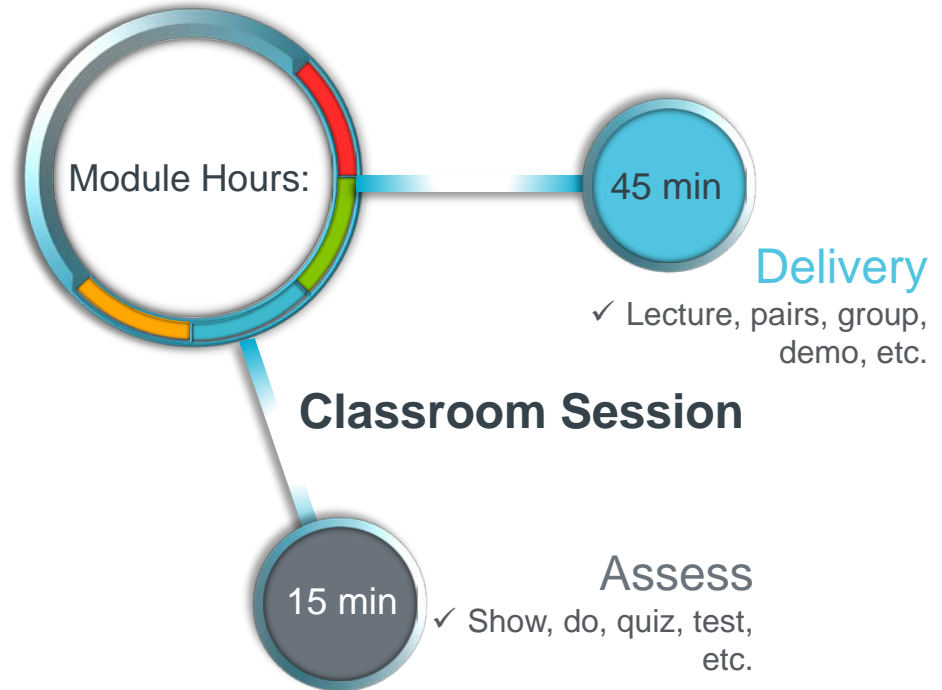
The carrier



Purpose

Module 7:

- ✓ Have a good understanding of the federal and provincial legislations for Hours of Service requirements.
- ✓ Be knowledgeable in how to record and maintain a daily log of their hours of driving.
- ✓ Understand driver and employer responsibilities regarding Hours of Service Regulations.



Provincial Legislation

ALBERTA LEGISLATION

**Applicable
to:**

Provincial Operating Status

A truck, tractor, or trailer or any combination of these vehicles registered for a weight of 11,794 kilograms or greater

A commercial passenger vehicle with an original manufacturer's seating capacity of 11 or more persons including the driver

**Not
applicable
to:**

Does Not Apply

- Passenger vehicles weighing less than 11,794kgs
- Emergency Vehicles
- Commercial vehicles transporting agricultural products
- Recreational vehicles
- Exempted vehicles per the Registrar
- Etc.

Daily Log

Must be Completed as follows:

- ✓ Enter required information accurately and legibly
- ✓ Maintain daily log current to the last change of duty status
- ✓ Keep copies of documents received during the trip
- ✓ Deliver the daily log to employer within 20 days
- ✓ Keep a copy of each daily log for at least 6 months

Start of the Day:

- ✓ Starting odometer reading
- ✓ Unit or licence plate number
- ✓ The name of the carrier for whom the driver worked during the work day
- ✓ The name of the driver and co-driver
- ✓ Time commencement
- ✓ Location commencement

During the Day:

- ✓ Completed on a graph grid
- ✓ At each duty status change:
 - ☐ Draw a continuous line between time markers
 - ☐ Record the location and province/state
 - ☐ Record the fueling location with amount

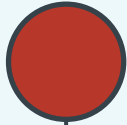
End of the Day:

- ✓ Total number of kilometers/miles driven
- ✓ Total number of hours vehicle has travelled (co-driver)
- ✓ Record the total number of hours of time off duty, driving time, and on-duty other than driving time
- ✓ Sign the log

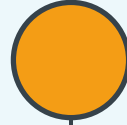
Daily Log: Duty Statuses



Off Duty, other
than time spent
in the sleeper
berth



Off-Duty
Times spent in
a sleeper
berth



Driving Time



On duty,
other than
driving time

On-Duty Status

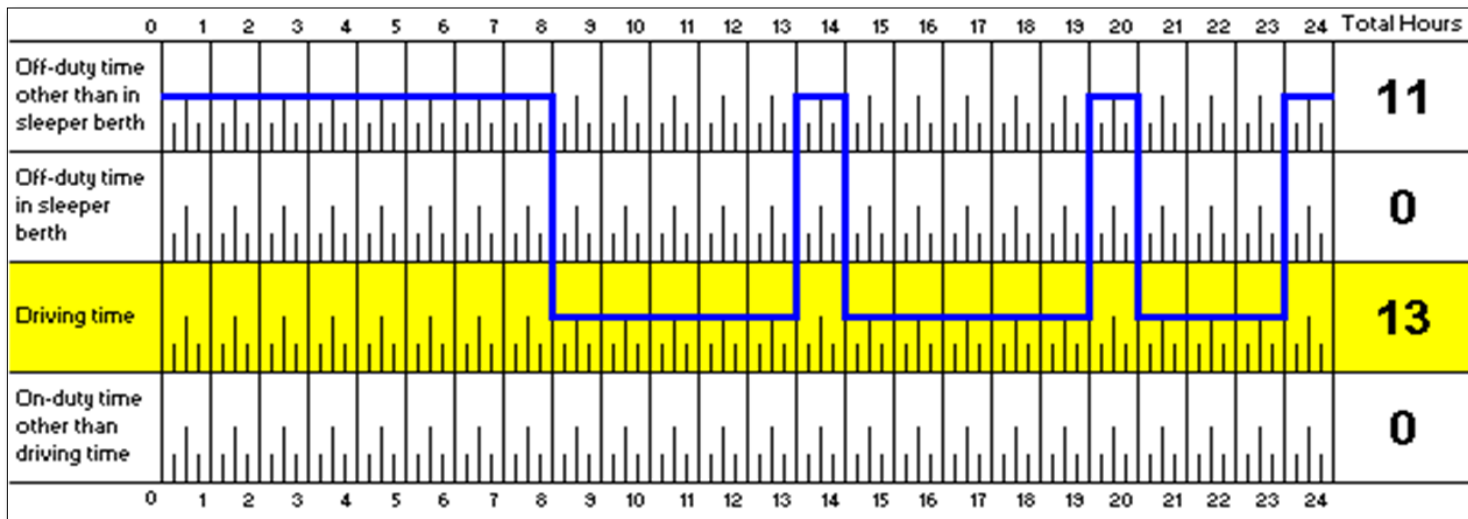
Work Shift



**No driving after 13
hours**

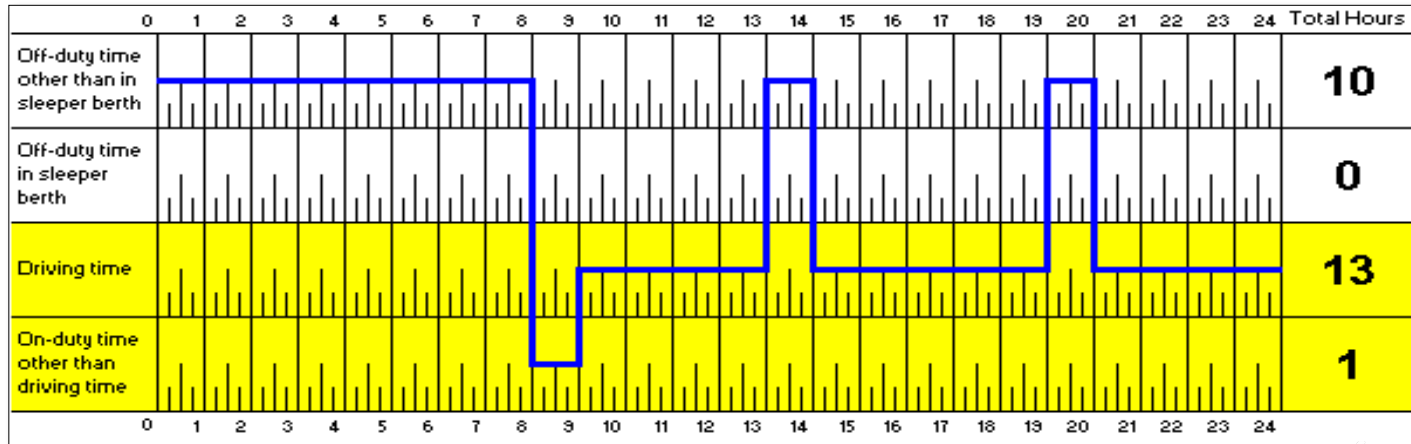


On-Duty: Work Shift



On-Duty: Work Shift

No driving after 15 hours on duty in a work shift



Time Breaks

4 hours

As long as the driver takes at least 10 minutes of non-driving time at the end of that period

OR

6 hours

As long as the driver takes at least 30 minutes of non-driving time at the end of that period

Daily Log: Exemptions

Adverse Driving Conditions



Adverse Conditions may include:

- Snow, sleet, fog or smoke obscuring a person's vision
- A highway covered with snow or ice
- Physical circumstances, other than snow or ice, that make the highway or driving unsafe

Emergency



Emergency cases may include:

- Sudden, unexpected situation that require immediate action
- Safety or security of people, goods, or vehicle is at risk
- **Does not** include shipper's demands, driver's desire to get home, loading/unloading delays or shortage of drivers

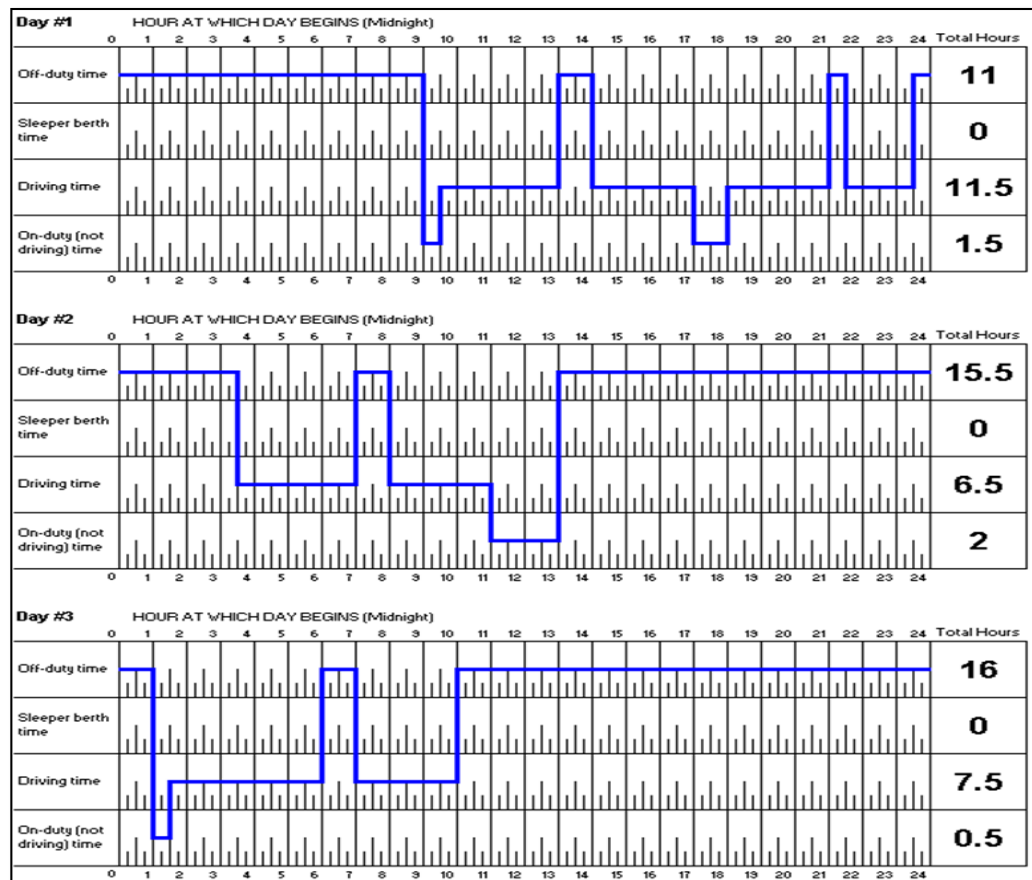
Radius Record Partial Exemption



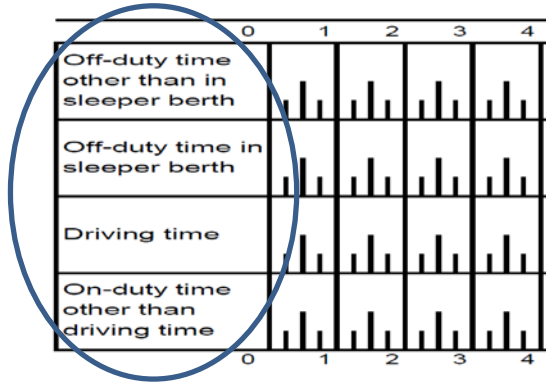
Not required to be done if ALL apply:

- The driver does not operate outside of a 160km radius from the home terminal.
- The driver starts and ends the work shift at the same place and does not exceed 15 hours
- Maintains time records showing the start and end of the driver's work shift for six months.

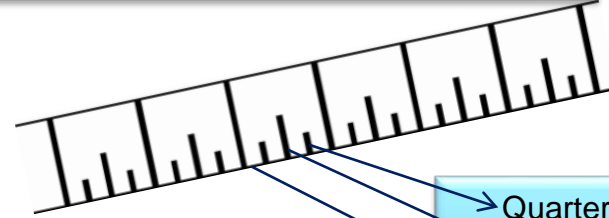
Off- Duty



Daily Log: Completing the log



Driver duty statuses are recorded on the grid. This is completed using a pen and ruler or a straight edge. Time marker on the grid is broken down as follows:

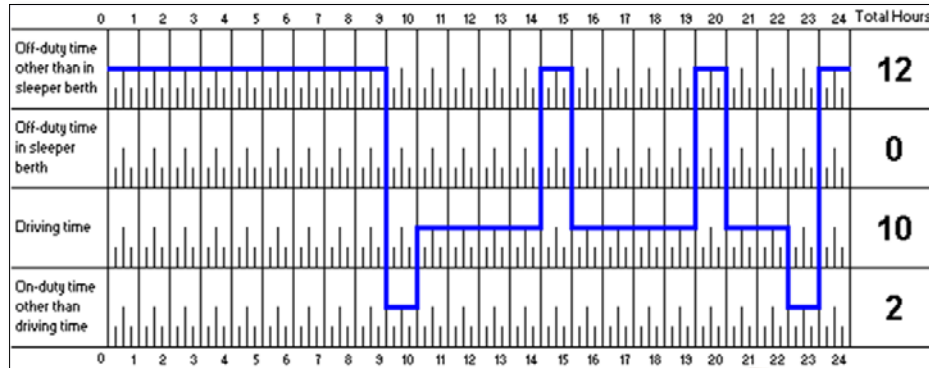


- Quarter hour (15 minutes)
- Half hour (30 minutes)
- Actual hour

These are the four types of duty status. Each duty status is demarcated into rows by horizontal lines. Time spent in each of the duty is recorded on each horizontal row

Time is recorded by drawing a horizontal line that corresponds to the actual time up to the nearest Half-hour (30 minutes) or quarter-hour (15 minutes)

Daily Log: Example



Time	Driver Activity	Duty Status
Midnight to 9:00a.m.	Sleep and eating breakfast	Off-duty time other than time spent in a sleeper berth
9:00a.m. to 10:00a.m.	Inspection and loading of vehicle	On-duty, other than driving time
10:00a.m. to 2:00p.m.	Drive	Driving time
2:00p.m. to 3:00p.m.	Lunch break	Off-duty time other than time spent in a sleeper berth
3:00p.m. to 7:00p.m.	Drive	Driving time
7:00p.m. to 8:00p.m.	Dinner break	Off-duty time other than time spent in a sleeper berth
8:00p.m. to 10:00p.m.	Drive	Driving Time
10:00p.m. to 11:00p.m.	Unloading of vehicle and completing paperwork	On-duty time other than driving time

Daily Log: Continued



- Automatic On-Board Recording Device
- Production of Logs & Supporting Documents
- Distribution and Keeping of Daily Logs
- Retention of Records by Carrier
- Inspections
- Tampering with Daily Logs
- Disciplinary Action and Enforcement

Federal Legislation

FEDERAL LEGISLATION

Daily Limit

During a day,
a driver cannot drive:

- After having driven 13 hours
- After being on-duty for 14 hours

Shift Limit

During a work shift,
a driver cannot drive:

- After having driven 13 hours
- After being on-duty for 14 hours
- After 16 hours of time has elapsed since the conclusion of their most recent 8 hours of consecutive off-duty time

Cycle Limit

Depending on the cycle,
a driver cannot drive after
accumulating:

- Cycle 1 - 70 hours of on-duty time in seven consecutive days; or
- Cycle 2 - 120 hours of on-duty time in 14 consecutive days.

Off-Duty Time

A driver may defer a
maximum of two hours if:

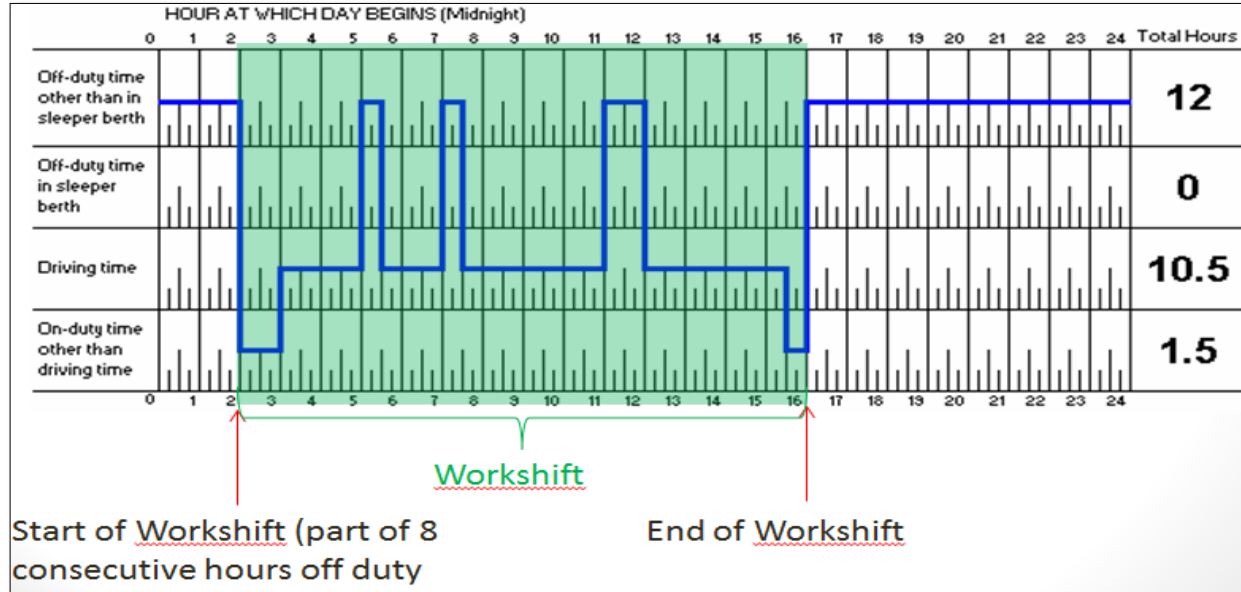
- Not part of the 8 hours
- Taken in 2 days is at least 20 hours
- Added to the 8 hours of off-duty time in the second day
- Total driving time in 2 days does not exceed 26 hours

Daily Limits

In a 24 hour period



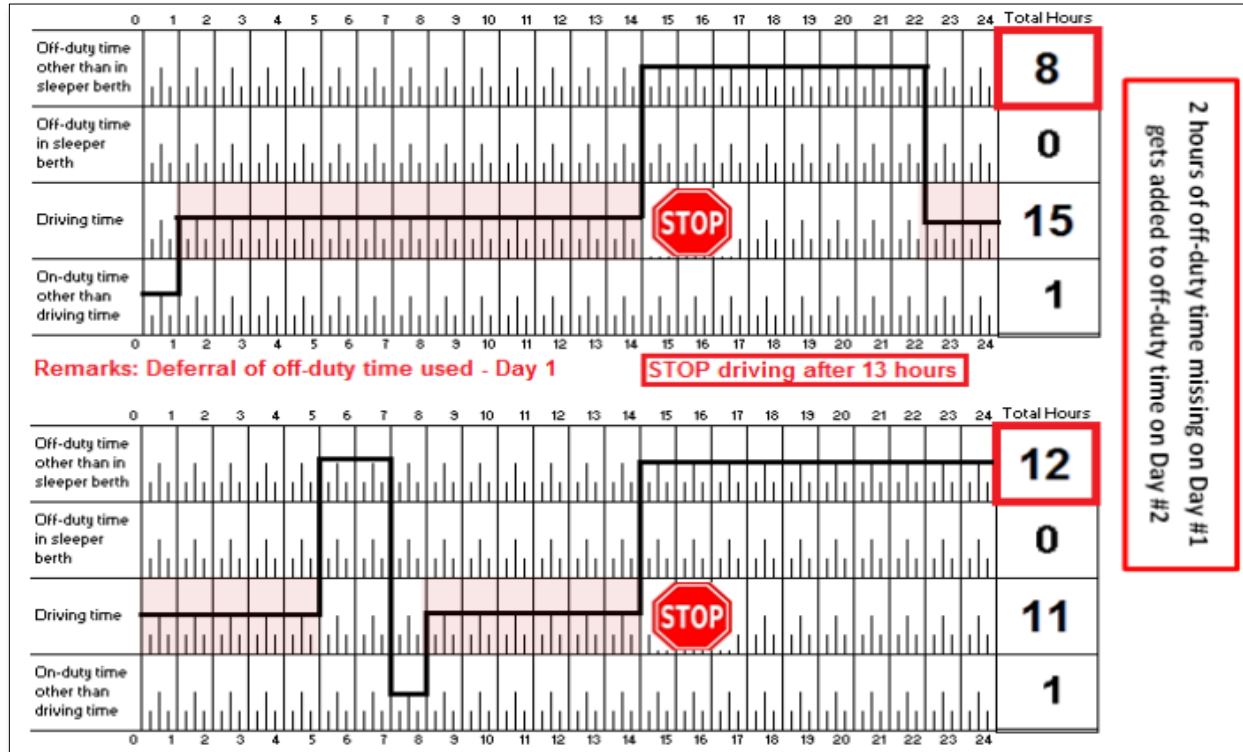
Shift Limits



Mandatory 24 Hours Off Duty

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
 24 hours off-duty	On Duty	On Duty	On Duty	On Duty	On Duty	On Duty
On Duty	On Duty	On Duty	On Duty	On Duty	On Duty	On Duty
On Duty	 24 hours off-duty	On Duty	On Duty	On Duty	On Duty	On Duty

Off-Duty Time Deferrals



Federal Legislation

Splitting Sleeper Berth Time

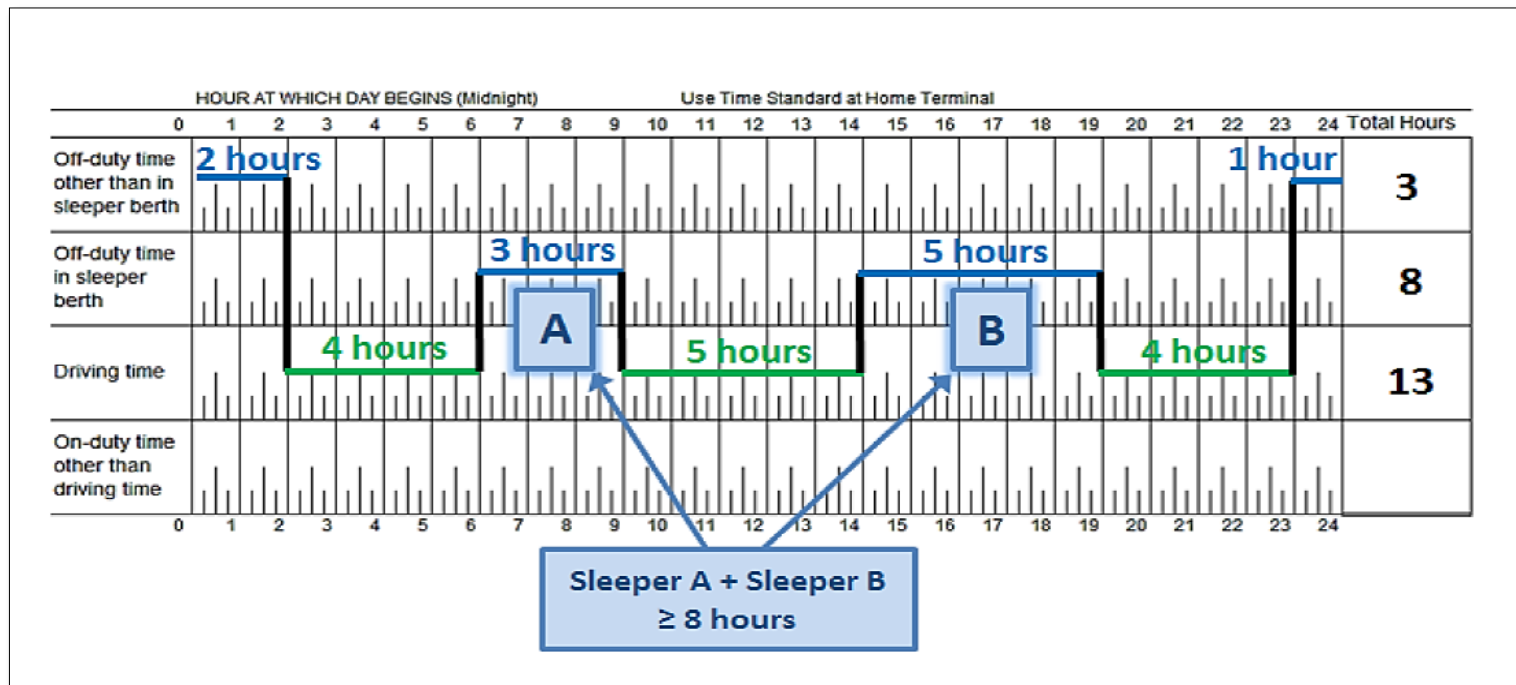
- If the vehicle is equipped with a sleeper berth, driver may rest in the sleeper berth
- 2 sleeper berth periods should be at least 2 hours
- The combined sleeper berth period to make at least 8 hours

Federal Legislation - Sleeper Berth Periods

- How this can be split into shorter periods
- How can it be split when team driving

Sleeper Berth Time

Example of an acceptable use of a sleeper berth



Federal Legislation

Onboard Recording Devices

- Electronic Log Books
- Requirements

Penalties

- Convictions
- \$5,000.00
- \$25,000.00

Federal Legislation

Out of Service Violations

- Peace officers
- Can be pulled off the road
- Administrative penalties

Review

What is an acceptable form of
log book?

Review - Answer

Paper or Electronic

Review

What are the 4 status categories that are recorded on a log book?

Review - Answer

On-Duty

Off-Duty

Sleeper Berth

On-duty Not Driving

Review

What are the cycles and how many hours are in each?

Review - Answer

Cycle 1:

70 hours of on-duty in 7 days

Cycle 2:

120 hours on-duty in 14 days

Review

When can a driver defer hours of the off duty time to the following day?

Review - Answer

If they are not splitting time off duty
or
Inclement weather

Review

What is the maximum hours
that can be deferred?

Review - Answer

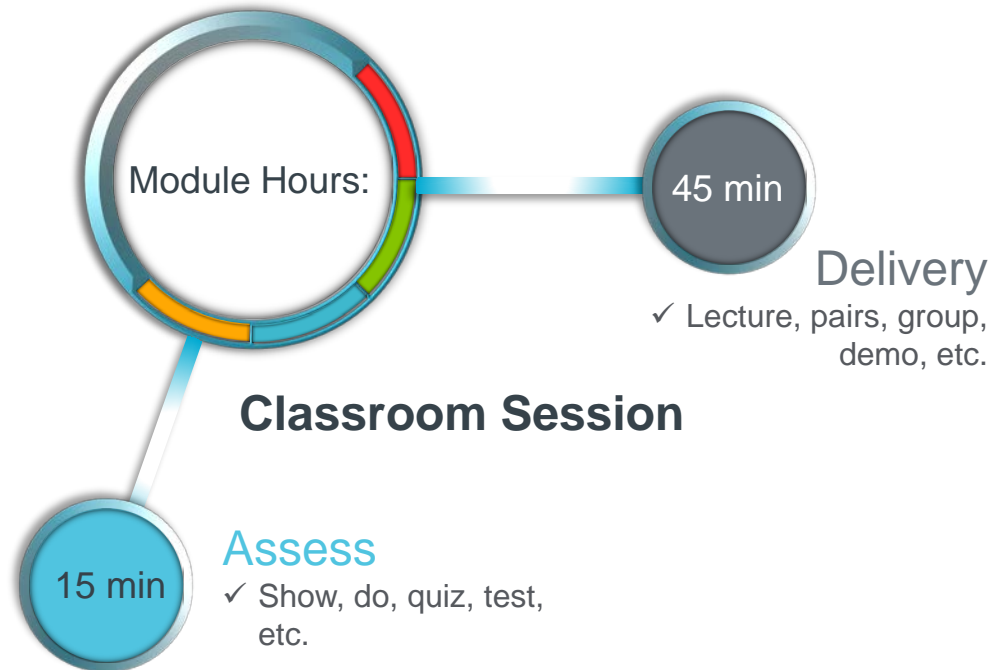
2 Hours



Purpose

Module 8:

- ✓ Importance of safe cargo securement
- ✓ The laws regarding cargo securement
- ✓ How to safely distribute cargo weight during loading



Introduction

Cargo pre-trip

- Visual check/walk around
- Power and hauling characteristics
- Weight of the cargo and distribution

Cargo

- Reduce the chance of a collision caused by cargo shifting or falling
- The drivers responsibility

Cargo Cont.

- Not properly secured can result in:
 - Loss of life
 - Loss of goods
 - Damage to cargo or vehicle
 - Collision with other road users
 - Injury to other road users
 - Fines and vehicle out of service

North American Cargo Securement Standard

- Prior to operating the vehicle
- Securement of vehicle structure and equipment
- The cargo or any other object must not:
 - Interfere
 - Obstruct
 - Prevent

Registered over 4500 kg

- Carrier and Driver responsibility
- Inspect the cargo
 - When & how often
- When you wouldn't need to secure cargo
- If it isn't secured properly

Securement System

- Vehicle Structure
- Securing Devices
- Blocking and Bracing Equipment

Securement Devices

NSC Standard

- Working order
- Correct type for cargo
- Knots, damage, weakened
- Cracks or cuts
- Unfastened
- Specified amount of force

Tiedowns

- Anchor points
- Proper function
- Working Load Limit
- Aggregate (combined) working load limits



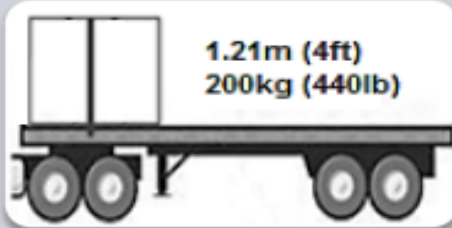
Tiedowns Cont.

- Unmarked and marked
- Rub rails



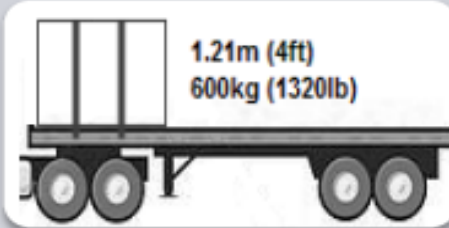
Tiedowns Cont.

Minimum number of tiedowns



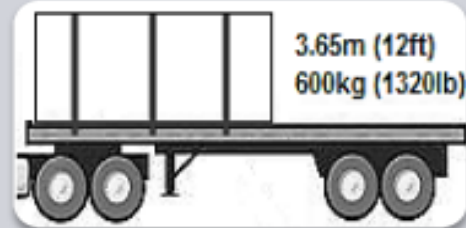
1 Tie Down

- For cargo 1.52 metres or shorter and 500 kilograms or less in weight



2 Tie Downs

- For cargo 1.52 metres or shorter and more than 500 kilograms
- For cargo greater than 1.52m in length but less than 3.04m, regardless of weight



3+ Tie Downs

- For cargo longer than 3.04m

Front End Structure

- Height and width
- Strength
- Penetration Resistance



Important - the cab shield is not a front-end structure or part of the cargo system.

Cargo Placement & Restraint

- Fully Contained
- Immobilized
- General Securement

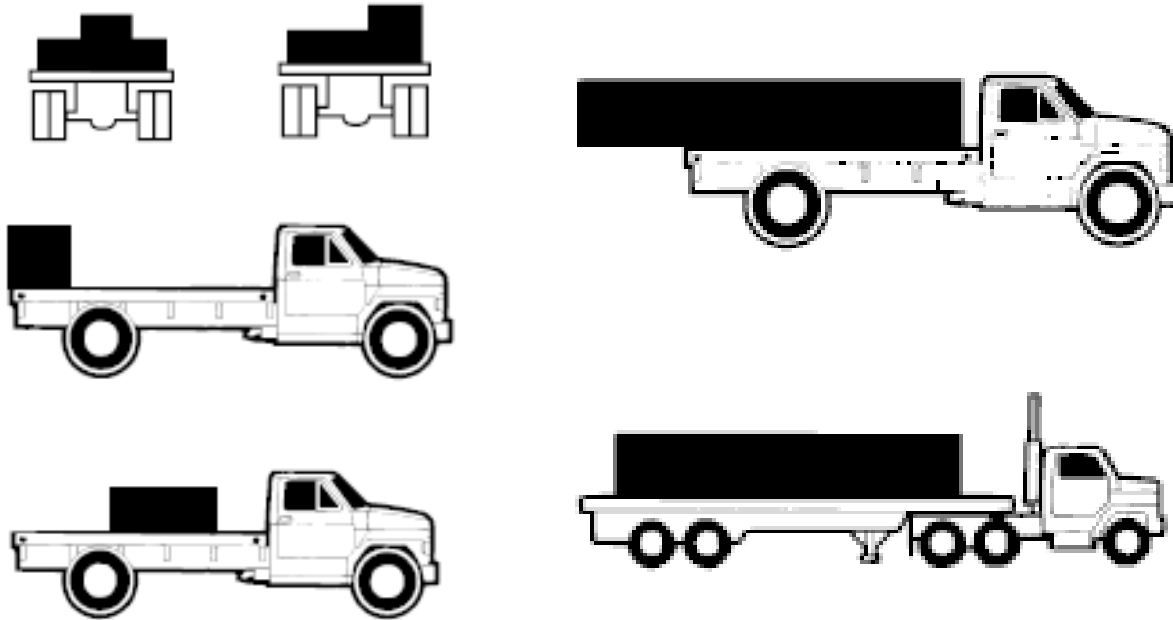


Weight Distribution

- Affects of proper and improper weight distribution
- Drivers responsibilities on every trip

Weight Distribution Cont.

To evenly distribute the load in a trailer:



Specific Cargo Securement

- Logs
- Dressed Lumber
- Metal Coils
- Paper Rolls
- Concrete Pipe

Specific Cargo Securement Cont.

- Intermodal Container
- Vehicles as Cargo
- Roll-on/Roll-off and Hook lift Containers
- Boulders

IT IS EXPECTED THAT THE ACTUAL PRACTICAL TRAINING FOR SPECIFIC CARGO WILL BE DELIVERED BY THE EMPLOYER.

Review

Who has the majority of responsibility when it comes to load securement?

Answer

THE DRIVER

Review

When must the cargo be re-inspected?

Answer

- Change of duty
- Driven 3 hours
- Driven 240 km

Review

What must be marked on the tie down?

Answer

Working Load Limit

Review

How many tiedowns are required for the following cargo?

- 1) 1.52 m (5ft) and 750 kg
- 2) 3.65 m (12ft) and 1500 kg
- 3) 1.21 m (4ft) and 200 kg

Answer

- 1) 2 tiedowns
- 2) 3 tiedowns
- 3) 1 tiedown

Review

What is an Anchor point?

Answer

Structure, fitting or
attachment on a vehicle
where a tiedown is attached.

Review

How do you secure
Tarpaulins?

Answer

Rope

Webbing

Elastic hooks

Review

What are the 3 ways cargo
can be transported?

Answer

Fully contained
Immobilized
General securement

Review

What happens when the front axles
are underweight?

Answer

Affects safe steering of the
truck

Review

Where can you find specific cargo securement regulations?

Answer

North American Cargo Securement
Standard (NSC Standard)

Module 9

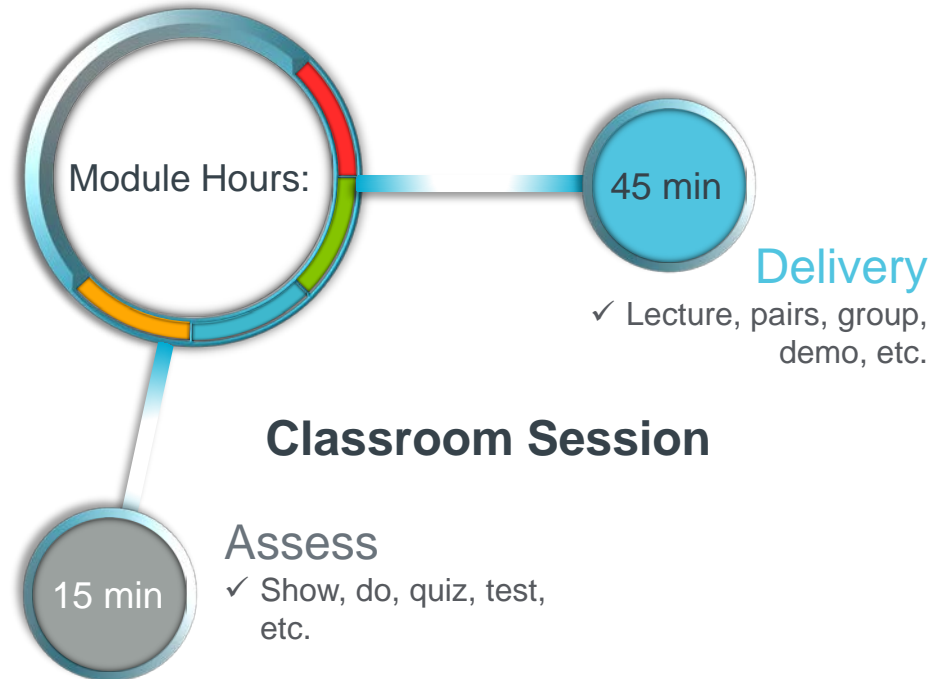


Handling Emergencies

Purpose

Module 9:

- ✓ Understand how to handle minor emergency incidents in a professional manner
- ✓ Understand how to handle situations where they are involved in a vehicle collision
- ✓ Understand how to handle fire incidents
- ✓ Understand how to manoeuvre the tractor-trailer in a safe manner in the event of a mechanical breakdown



Driving Habits

- Safe driving habits may assist a commercial truck driver to respond quickly to emergency situations and avoid collisions.
 - Adapts to the presence of other motorists, pedestrians, cyclists and slow-moving; vehicles that share the road with the vehicle you are driving;
 - Watch for wildlife or livestock that can enter the space around a vehicle, particularly on routes known for collisions involving animals;
 - Monitor and adheres to highway speed advisories;
 - Maintain a high level of alertness while driving;
 - Scan conditions around the vehicle by looking ahead and using mirrors regularly and systematically;

Driving Habits

- Monitor vehicle conditions by scanning instruments and gauges regularly and systematically;
- Monitor the movement and actions of other motorists while passing or being passed.
- Diffuse any situation that could cause anger, hostility or danger;
- Exit the vehicle whenever necessary to inspect clearances and identify potential obstructions; and
- Secure a vehicle properly before exiting the cab or vacating the driver seat;

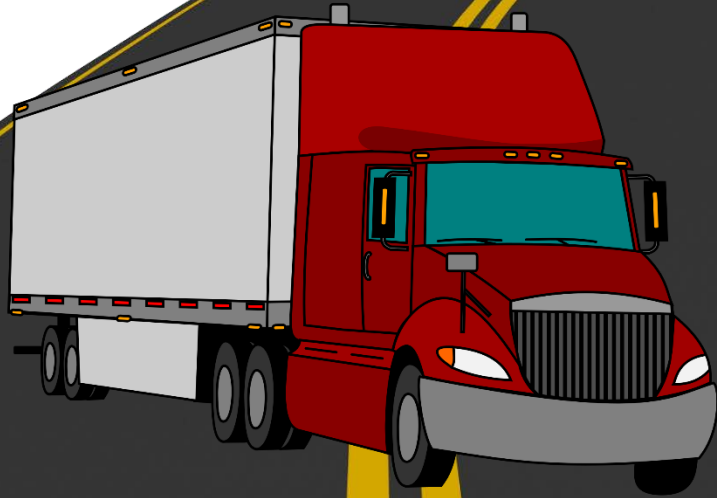
Emergency Driving Techniques

Skid control and the professional driver:

Loss of traction:

- Skid control
- Faulty brakes
- Excessive acceleration or speed in curves
- Rough or slippery surfaces
- Hydroplaning
- Jackknifing

Emergency Driving Techniques



● Threshold Braking

● ABS Brakes

● Steering

Skid Control



Alberta

Emergency Driving Techniques



Take foot off accelerator pedal

Allow engine to slow vehicle down

Grip steering wheel. Steer straight down center of lane

DO NOT apply brakes immediately. Use gentle and steady pressure

Safely move to safe location. Turn hazard lights on and place warning triangles

Jackknifing

Jackknifing is a dangerous situation in which a tractor-trailer skids and the trailer pushes the tractor from behind, causing the entire unit to form an L or V shape.

- Over-acceleration
- Improper braking (most common cause of jackknifing)
- Oversteering (while cornering)
- Driving at a speed not suitable for conditions

Trailer Jackknifing

To prevent trailer jackknifing:

- Ensure that the brake, air, and wheel systems are thoroughly inspected
- Do not drive through curves with excessive speeds. Ease off the accelerator when entering a curve then resume acceleration when driving out of the curve
- If the tractor-trailer begins to swing during braking, release the brakes and provide gentle acceleration to correct the trailer. Avoid hard braking or over-acceleration.

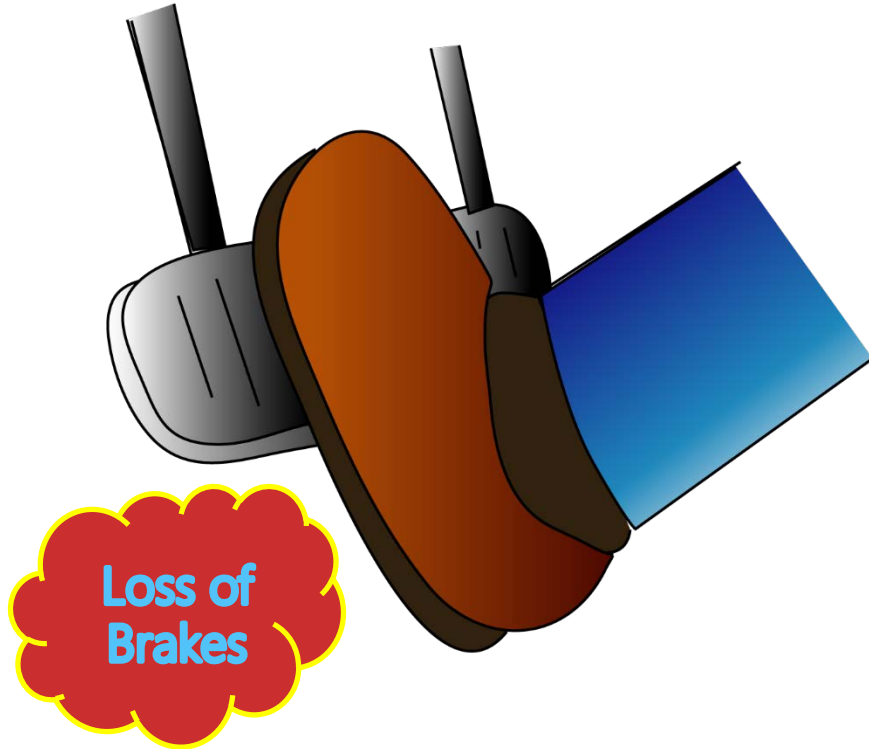
Tractor Jackknifing

To prevent tractor jackknifing:

- Hard braking
- Sudden turns downshifting
- Swerving and braking at the same time
- Overloading the front end of the trailer (also ensure loads are secured properly to prevent goods from shifting to the front end during transport)
- Using engine brakes when road conditions are poor

A proper pre-trip inspection of tires, front wheel alignment, suspension and braking systems is also key in preventing tractor jackknifing. If sudden acceleration is causing the skid, ease up on the accelerator and steer out.

Emergency Driving Techniques



- Pump the brake pedal
- Select a path for exiting. Bring vehicle to a stop
- If vehicle must exit to avoid collision, select path that will minimize injury and damage
- Once stopped, turn on hazard lights and place emergency triangles

Emergency Driving Techniques

What can be done when...

Headlights fail



1. Immediately hit the dimmer switch to see if the high-beams work
2. Activate your right-turn signal
3. Slow your vehicle quickly but safely
4. Carefully steer out of the traffic lane and stop at the side of the road in as safe a location as practical

Mud splashed on windshield



1. Turn on wipers and washers. Activate right turn signal if wipers fail / no washer fluid
2. Look out side windows and apply brakes moderately
3. Pull over to safe location
4. Activate hazard lights. Pull out warning devices

Emergency Evasive Action









Action Steps

1. Controlled emergency braking:
 - i. Resist the urge to slam on brakes
2. Quick steering, with or without braking
 - i. Steer vehicle in an alternate path
 - ii. Firm and gradual steering
3. Leaving the paved portion of road
 - i. Escape path free of hazards
 - ii. Sufficient clearances
 - iii. Path remains clear

Collisions: Minor without injury



-  **Stop the truck**
-  **DO NOT move truck until directed by a police officer**
-  **Assess the scene**
-  **Place approved warning devices**
-  **Contact police and dispatch**
-  **Do not discuss who was at fault. Obtain necessary information**

Collisions: Major

The severity of the collision will determine the order in which you proceed

Assess the situation and evacuate if necessary

Assign someone to protect the scene

Set out approved warning devices

Treat injured if trained to provide First Aid

Summon help (police, dispatch)

Must report collisions to police if

- Anyone has been injured
- Anyone has been killed
- Overall damage exceeds \$2,000
- Any damage has been done to traffic control devices, parking meter or public property
- If police are called to the scene, all drivers must remain



Alberta

Emergency Equipment



Approved Warning Devices

- All trucks must have a minimum of two emergency warning devices
- Must be placed 30 metres in front and rear of truck
- Must be placed 75 metres in front and rear of truck when visibility is reduced to 150 metres



Hazard Lights

- Must use hazard warning lights on your truck as further warning in addition to device placed in front and rear of truck when involved in a collision or emergency situation



Fire Extinguisher

- Dry chemical extinguisher
- Expires 6 years from date
- P-A-S-S Method:
 - ☐ P – Pull the Pin
 - ☐ A – Aim low
 - ☐ S – Squeeze lever
 - ☐ S – Sweep side to side

Review

When are you required to contact police immediately for a collision?

Review - Answer

- Injury
- Death
- Impaired driver
- Hit and run
- Out of province vehicle
- If a vehicle needs to be towed

Review

Where are your warning devices
supposed to be placed?

Review - Answer

In line with the vehicle

30 metres(100 ft.)

In front and rear

Review

When visibility is reduced to 150 metres
how far back from the front and rear
should the warning devices be placed?

Review - Answer

75 Metres (245 ft.)

Review

What does P.A.S.S. stand for?

Review - Answer

Pull the pin

Aim low

Squeeze lever

Sweep from side to side

Review

In what order do you treat for injuries at a collision?

Review - Answer

1. Serious – not breathing
2. Bleeding but have a chance of survival
3. Shock and minor last



Resources

- Some of the clipart and pictures contained in this document are licensed under public domain, *Creative Commons Zero (CC0)*:
<https://creativecommons.org/publicdomain/zero/1.0/>
- The Saskatchewan Government Insurance (SGI) Curriculum presentation
- The Commercial Truck Driver Training Course (Class 1) Guidelines and Curriculum
- Alberta Commercial driver's guide
- The *Traffic Safety Act (TSA)* and its associated regulations:
 - *Use of Highway and Rules of the Road Regulation*
 - *Operator Licensing and Vehicle Control Regulation*
 - *Distracted Driving Regulation*
 - *Traffic Control Device Regulation*
 - *Vehicle Equipment Regulation*
 - *Demerit Point Program and Service of Documents Regulation*
 - *Commercial Vehicle Dimension and Weight Regulation*
 - *Commercial Vehicle Safety Regulation*
 - *Vehicle Inspection Regulation*
 - *Commercial Vehicle Certificate and Insurance Regulation*