CHAPTER 10

GENERAL INFORMATION FOR CLASS D "CHAUFFEUR'S" LICENSE

Class "D" Chauffeur's Driver's License permits the operation of any single vehicle used in commerce if the vehicle has a gross vehicle weight rating of 10,001 or more pounds but less than 26,001, or any combination of vehicles if the vehicles have a combined gross weight rating of 10,001, or more pounds but less than 26,001 pounds inclusive of a towed unit with a gross vehicle weight rating of more than 10,000 pounds and not utilized in the transportation of hazardous materials. A class "D" license may be used for transportation of passengers for hire or fee provided the usage thereof does not fall within the definition of vehicles in classes "A", "B", or "C". A class "D" license allows for operation of those vehicles in the class "E" category. You must be at least 17 years of age to obtain a Class "D" license.

VEHICLE SIZE

Maximum width:

- 8 feet for most vehicles. The load will not project more than 6 inches beyond the width of the body.
- 8 feet 6 inches for buses.

Maximum height:

• 13 feet 6 inches for all vehicles. (Some overpasses or other structures have clearance of less than 13'6".)

Maximum length:

- 40 feet for any single vehicle (including the load).
- 65 feet for truck-tractor and trailer combination
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These limits do not apply to auto carriers, trailers hauling poles or pilings, or trailers hauling logs when operating during daylight hours.

LOADS

Securing loads:

- Contents must not be allowed to drop, shift, leak or otherwise escape.
- The load must be securely fastened so the covering or load does not come loose, or in any manner become a hazard to other motorists.

A load must not extend more than 4 feet to the front of the vehicle or more than 8 feet beyond the rear of the vehicle except poles, pilings and logs may project 15 feet beyond the rearmost part of the trailer. If a load extends four or more feet past the bed or body of any vehicle, a red flag 12 inches' square must be attached to the extreme rear of the load during daylight hours. The entire area of the flag must be visible. At night, a red light must be attached to the extreme rear of the load and visible for at least 500 feet to the sides and rear.

DRIVING

Maximum speed for any vehicle in Louisiana is 70 mph except:

- When pulling or towing another motor vehicle the speed limit is 45 mph.
- School buses are limited to 35 mph when frequently stopping to load or unload children.
- Where a lower speed limit is posted.

• On portions of I-49, the speed limit is 75

FOLLOWING DISTANCE

On rural highways, outside residential areas or business districts, drivers of motor trucks must not follow within 400 feet of one another except to pass.

Also, high beam headlights must be dimmed no less than 500 feet from oncoming traffic and 200 feet of a vehicle being followed.

COASTING

You must not let your vehicle coast downhill with the clutch disengaged or the gear in neutral.

RAILROAD STOPS

You must stop within 50 feet but not closer than 15 feet from the nearest rail. You may not change gears until you have completely crossed over the tracks. This does apply to street-rail crossings within a business or residential district.

EQUIPMENT

Fire Extinguisher: Vehicles transporting passengers for hire must be equipped with at least a type 2-BC fire extinguisher, completely filled and in working condition.

Tow trucks must be equipped with at least one 4-BC fire extinguisher capable of extinguishing flammable liquid fires, completely filled and in working condition.

Motor vehicles transporting explosives must be equipped with at least one fire extinguisher with a rating of at least 10-BC, completely filled and in working condition.

Fenders and Mudguards: Every truck must have a device ("mud flap") to minimize the spray or splash of water or mud or loose road surface material to the rear.

Warning equipment: Freight carrying vehicles and passenger buses must carry:

- Three (3) flares, three (3) electric red lanterns OR three (3) red portable reflectors.
- Two (2) 12-inch square red cloth flags with standards.

Trucks carrying explosives, flammable liquids, compressed gases, or using compressed gas as a fuel must use red electric lanterns or red emergency reflectors only. Flares or fuses are not allowed. This equipment must be used immediately any time the vehicle breaks down. One signal must be placed 100 feet behind the vehicle and 100 feet forward of the vehicle. Each of these signals must be in the center of the lane or shoulder. A third signal must be on the traffic side of the truck 10 feet to the front or rear.

TRAILERS AND TOWED VEHICLES

When towing another vehicle, the draw bar or other connection must of sufficient strength to pull all towed weight and must not exceed 15 feet. Exception: Distance can exceed 15 feet when transporting poles, pipes, machinery or other objects which cannot be readily dismembered.

MIRRORS

A rear view mirror must reflect a view of the highway for a distance of 200 feet to the rear, regardless of the load of the vehicle.

LIGHTS

Any motor vehicle shall not be driven when any of the required lamps or reflectors is obscured by the tailboard, by any part of the load, by dirt or otherwise.

BRAKES

All trailers or semi-trailers with a gross vehicle weight rating of 3,000 pounds or more must be equipped with brakes adequate to stop and hold it.

Care should be used to avoid excessive use of brakes on long downgrades. Drivers should use engine compression as the principal means of controlling speed on long grades. If your brakes should fail on a level road, you should downshift and use engine compression to slow down.

AIR BRAKES

Air brakes use compressed air to make the brakes work. You can apply all the braking force you need to each of the wheels of a heavy vehicle. Air brakes are a safe way of stopping large vehicles if the brakes are well maintained and used properly. Air brake systems are three braking systems combined: the service brake system, the parking brake system, and the emergency brake system.

- The service brake system applies and releases the brakes when you use the brake pedal during normal driving.
- The parking brake system applies and releases the parking brakes when you use the parking brake control.
- The emergency brake system uses part of the service and parking brake's system to stop the vehicle in the event of a brake system failure.

PARTS OF AN AIR BRAKE SYSTEM

Air Compressor: Pumps air into the air storage tanks (reservoirs).

Air Compressor Governor: Controls when the air compressor will pump air into the air storage tanks.

Air Storage Tanks: Used to hold compressed air.

Air Tank Drains (two types):

- 1. Manual operated by turning a quarter turn or by pulling a cable. You must drain the tanks yourself at the end of each day of driving.
- 2. Automatic the water and oil is automatically expelled. They may be equipped for manual draining as well.

Safety Valve: Protects the tank and the rest of the system from too much pressure. The valve is usually set to open at 150 psi. If the safety valve releases air, something is wrong.

Brake Peda: You put on the brakes by pushing down the brake pedal. Pushing the pedal down harder applies more air pressure. Letting up on the brake pedal reduces the air pressure and releases the brakes. Pressing and releasing the pedal unnecessarily can let air out faster than the compressor can replace it. If the pressure gets too low the brakes won't work.

Supply Pressure Gauges: All vehicles equipped with air brakes have a pressure gauge connected to the air tank. These gauges tell you how much pressure is in the air tanks.

Application Pressure Gauge: This gauge shows how much air pressure you are applying to the brakes. (This gauge is not on all vehicles.)

Low Air Pressure Warning: A low air pressure warning signal is required on vehicles with air brakes. A warning signal you can see must come on before the air pressure in the tanks falls below 60 psi. (Or one half the compressor governor cutout pressure on older vehicles). The warning is usually a visible red light. A buzzer may also come on.

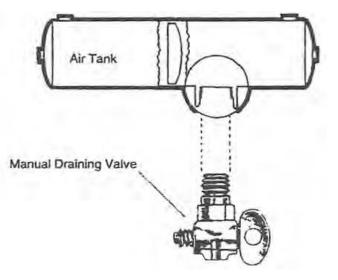
Spring Brakes: All trucks must be equipped with emergency brakes and parking brakes. They must be held on by mechanical force. Spring brakes are usually used to meet these needs. When driving, powerful springs are held back by air pressure. If the air pressure is removed, the springs put on the brakes.

Parking Brake Controls: In newer vehicles with air brakes, you engage the parking brakes using a **diamond shaped, yellow, push-pull control knob**. You pull the knob out to put the parking brakes (spring brakes) on, and push it in to release them. On older vehicles, the parking brakes may be controlled by a lever. Use the parking brakes whenever you park. **NEVER PUSH THE BRAKE PEDAL DOWN WHEN THE SPRING BRAKES ARE ON**. If you do, the brakes could be damaged.

INSPECTING THE AIR BRAKE SYSTEM The following three-part air brake check must be performed:

Step 1: With the engine running, build the air pressure to governed cut-out (100-125 psi). Shut off the engine, chock your wheels, if necessary, release the tractor protection valve and/or parking brake (push in), fully apply the foot brake and hold it for one minute. Check the air gauge to see if the air pressure drops more than three (3) pounds in one minute (single vehicle).

Step 2: Turn the key to the "on" position (without starting the engine). Begin fanning off the air pressure by rapidly applying and



releasing the foot brake. Low air warning devices (buzzer, light, and flag) should activate before air pressure drops below 60 psi.

Step 3: Continue to fan off the air pressure. At approximately 20-40 psi, the parking brake valve should close (pop out).

In addition to the three-part air brake check, the following items must be inspected prior to operating a vehicle equipped with air brakes:

- Air compressor drive belt (if compressor is belt driven)
- Manual slack adjusters on S-cam brakes
- Brake drums (or discs), linings, and hoses
- Rate of air pressure buildup (with engine at operating RPM, the pressure should build from 85 to 100 psi within 45 seconds or manufacturer's specifications)
- Air compressor governor cut-in and cut-out pressures
- Test parking brake
- Test service brakes

USING THE AIR BRAKES

Emergency Stops: You should brake so you can steer and so your vehicle stays in a straight line. Use one of the following two methods:

1. Controlled braking - Put on the brakes as hard as you can **without** locking the wheels (do not turn the steering wheel while doing this).

2. Stab braking - a) Press the brake pedal as hard as you can. b) Release the brakes when the wheels lock up. c) As soon as the wheels start rolling, put on the brakes fully again.

Stopping Distance: With hydraulic brakes (used on cars and light/medium trucks), the brakes work

instantly. With air brakes, it takes a little time (one half second or more) for the air to flow through the lines to the brakes. Thus, the total stopping distance for vehicles with air brake systems is made up of **four** different factors.

Perception Distance + Reaction Distance

- + Brake Lag Distance
- + Blake Lay Distance
- + Effective Braking Distance
- = Total Stopping Distance

Example: The air brake lag distance at 55 mph on dry pavement adds about 32 feet. So at 55mph for an average driver under **good** traction and a brake condition, the total stopping distance is over 300 feet. This is longer than a football field.

Low Air Pressure Warning: If the low air pressure warning comes on, stop and safely park your vehicle as soon as possible.

Brake Fading or Failure: Brakes can fade or fail from excessive heat caused by using them too much and not relying on the engine braking effect or improper adjustment.

Parking Brakes: Any time you park, use the parking brakes unless:

1. The brakes are very hot (from having come down a steep grade).

2. The brakes are very wet in freezing temperatures.

Note: For more complete and detailed information about air brakes, please refer to the Louisiana Driver's Manual for Commercial Vehicle Driver Licensing.

CHAPTER 10-A

TRAILER SAFETY

Most SUVs, pickup trucks, vans, minivans, and passenger cars can be equipped to tow a trailer. Check the vehicle owner's manual to ensure your vehicle is properly equipped to tow your trailer. Towing a vehicle is different as it changes the overall weight of the vehicle. You will need to take this into account as you adjust your driving speed and stopping distance.



Hitching Systems

The most common type of hitch is the ball and coupler. It is important to make sure that the size of the ball and coupler match to prevent separation of the towed vehicle during transport.

Make sure the hitch has provisions for the connection of safety chains or other approved safety devices. The safety chains or other approved safety device shall be securely attached your vehicle and shall be of sufficient strength to hold the trailer behind your vehicle in case the connection between the two vehicles detaches. When connected, safety chains should have some slack to permit sharp turns but should not drag on the road. In addition, they should cross under the trailer tongue to help prevent the tongue from dropping to the road in the event the trailer separates from your vehicle.

Braking Systems

All trailers with a gross weight of 3,000 pounds or more are required to be equipped with brakes. Brakes shall be designed to be applied by the driver of the towing motor vehicle from its cab, and said brakes shall be so designed and connected that in case of an accidental breakaway of the towed vehicle the brakes shall be automatically applied.

Lighting

Trailers are required to have taillights, brake lights, side marker lights, turn signals, and side and rear reflectors. You must ensure that the electrical connector on your vehicle matches the electrical connector of the trailer. Be sure to check the electrical connection between your vehicle and the trailer to ensure it is not dragging the ground and has enough slack to allow for sharp turns. Always make sure the lights on your trailer are functioning properly before towing.

Tires

All your trailer tires should be the same type, size, and construction; do not mix bias-belted and radial tires. In selecting tires for your trailer, buy the size, type, and load range found on the trailer's certification label or in the owner's manual. Keep in mind that tires have a load rating that indicates the amount of weight they can carry safely. As with your vehicle, always maintain proper tire pressure and replace worn tires. Remember, your vehicle's tires may require a higher tire pressure for towing, especially heavy loads.

Loading and Weight Distribution

Your ability to handle and control your vehicle and trailer is greatly improved when the cargo is properly loaded and distributed. Refer to your vehicle and trailer owner's manual to find out how to:

- Balance weight from side to side
- Distribute cargo weight evenly along the length of the trailer
- Secure and brace all items to prevent them from moving or fall off during travel
- Adjust the height of the tow vehicle/trailer connection
- Apply load leveling (weight distributing hitch bars)

