

ROADMASTER DRIVERS SCHOOL

STUDY GUIDE FOR THE COMMERCIAL DRIVER'S LICENSE

INTRODUCTION

COMMERCIAL DRIVER LICENSE (CDL) ENDORSEMENT EXAM

TANKERS

SUPPORTING TEXT PUBLISHER: COMMERCIAL DRIVER LICENSE MANUAL VERSION 2.0
SECTION 8
YOUR STATE DEPARTMENT OF DRIVER LICENSING

STUDY GUIDE USE INFORMATION

This Study Guide is designed to help you learn and understand the information necessary to successfully pass the CDL endorsement exam, **TANKERS**. All persons seeking a commercial driver's License and will transport liquids over 1000 gallons in a tank trailer must take this written test. Refer to the Commercial Driver License Manual to help you understand the correct information. Each question is referenced in the section the correct information can be found.

The study guide consists of 3 major parts. 1. **Key facts you need to know to pass the written test.** 2. **One practice test to measure your knowledge of the subject.** 3. **Answer sheet for self-grading the practice test.**

Study and learn all key facts in the study guide. This is the information you need to know to pass the test. When you feel you have read and understood the key facts, take the practice test without using the answer sheet. Self-grade your first practice test. Re-study the key facts that refer to the questions you missed. If you missed 3 questions or less, you are ready to challenge the **CDL TANKERS** written Test.

You have the option of taking this test at the same time you take your other written tests or waiting until after you have your **CDL Class A permit or license**. It is recommended that you take the three written tests you need to get your CDL Class A License first. If you pass the three you need and fail the TANK VEHICLES test; the testing center will hold all your tests until you successfully pass all the tests you challenged. It is recommended you take this test after you have additional training or more experience and your CDL permit or license.

Roadmaster Drivers School has no relationship with the CDL testing facilities. You must pass the **General Knowledge, Air Brakes and Combination Vehicles** test in order to receive a **CDL Class A Permit**. Once you have the Class A CDL permit, you will be qualified to attend the Skills portion of the Truck Driver Course. You can also challenge other written endorsement tests at this time.

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TANKERS

KEY FACTS YOU NEED TO KNOW TO PASS THIS TEST.

Study these key facts until you are sure you know the information. More detailed information can be found in your Commercial Drivers License Manual in Section 8. (Section 7 in some Florida Manuals)

1. Hauling tankers requires special care due to high center of gravity and liquid surge.
2. High center of gravity means the vehicle is top heavy and more likely to roll over.
3. Tankers can turn over at speed limits posted for curves.
4. Surge can move a vehicle in the direction the liquid is moving.
5. Hauling liquid requires special handling because of liquid movement.
6. Side to side surge can cause a rollover.
7. Bulkheads are liquid tight separations between compartments inside a tank.
8. When you load a bulk headed tanker you should check weight and distribution.
9. When you unload small bulk headed tanks, check for distribution of weight.
10. Bulkhead (separations) with openings is called baffles.
11. A tanker with baffles has less front to back surge.
12. Smooth bore tanks have nothing inside to slow down the flow of liquid.
13. Forward to back surge is strongest in smooth bore tankers.
14. "Outage" means the amount of unfilled space in your tanker.
15. You need to know your outage for liquid expansion (some liquids expand more than others do when they get warm).
16. The amount of liquid in a tank depends on the amount of liquid expansion and legal weight.
17. The best way to take curves in a tanker is to slow down before the curve and slightly accelerate going through the curve.
18. Empty tankers need larger stopping distances than fully loaded tankers.
19. If you lose your brakes always use an escape route or ramp.
20. If you go into a front wheel skid you will continue to go straight no matter how you steer.
21. Emergency stops are controlled by stab braking.
22. When making quick steering movement, do not apply the brake.
23. At night you must adjust your speed so you can stop within the distance you can see.
24. Wet roads can double your stopping distance at any speed.
25. Tanks have special items that must be checked, see operator manual for your tank

26. Always check for leaks before operating a Tank Trailer.
27. Outage is the room in the tank left for liquid expansion
28. Different liquids require different Outage space
29. Make sure you know and have the special purpose equipment for the Tank you are pulling.
30. Baffled Tanks have bulkheads throughout the tank to minimize surge
31. The posted speed for a curve may be too fast for a tank vehicle carrying liquids.
32. If your wheels start to skid, take action to restore traction.

NOW THAT YOU KNOW THE KEY FACTS IN SECTION (8), TAKE THE PRACTICE TEST WITHOUT REFERRING TO THE ANSWER SHEET. SELF-GRADE YOUR TEST AND RE-STUDY THE MISSED QUESTIONS. (That is if you have any missed questions) YOU MAY WANT TO PUT YOUR ANSWERS ON A SEPARATE SHEET OF PAPER SO YOU CAN TAKE THE TEST MORE THAN ONCE. IF YOU DON'T UNDERSTAND THE QUESTION, GO TO YOUR CDL MANUAL AND REVIEW THE SECTION THAT IS REFERENCED AT EACH QUESTION. YOU CAN FIND THE CORRECT INFORMATION IN THE REFERENCED SECTIONS.

TANKERS

PRACTICE TEST

Read each question and all the answers carefully. Select the most correct answer. After answering all questions in the practice test, check them with the answer sheet for correctness. You can also check your answers for correctness by reading the Commercial Drivers License Manual, section 8. The questions listed are only similar to the ones that you can expect to find on the actual CDL written test. By studying this guide, you will be able to determine the most correct answer when you take the CDL written TANKERS Test.

When taking the CDL written test, follow these basic test-taking rules:

- 1. Read the entire question and all answers before selecting your answer. Remember there maybe more than one right answer and you need to select the most correct answer.**
- 2. Do not read words into the questions that are not there.**
- 3. Watch for words that may change the meaning of the question, i.e. (NOT, EXCEPT, etc.)**
- 4. Follow all instructions, oral or written.**

SECTION 8 – TANKERS

1. A tank vehicle is a vehicle used to transport : (8.1)
 - A Any liquid or liquefied gaseous material in a permanently attached tank.
 - B A portable tank having a capacity of 100 gallons or more.
 - C A tanker trailer for hauling liquids with no baffles.
 - D All of the above.
2. Hauling liquids in tanks requires special skills because: (8.2)
 - A. Of the high center of gravity and liquid movement.
 - B. Of low center of gravity and liquid movement.
 - C. Of the special design of the trailers.
 - D. Of the products they are designed to haul.
3. You must know the outage requirements when: (8.2.6)
 - A. Unloading a tanker.
 - B. Loading a tanker with dry bulk.
 - C. Hauling liquid in bulk.
 - D. None of the above.

4. The amount of liquid to load into a tanker depends on: (8.2.7)
- A. The amount the liquid that will expand in transit.
 - B. Weight of the liquid.
 - C. Legal weight limits.
 - D. All of the above.
5. Non-baffled or smooth bore tanks are normally used for hauling: (8.2.5)
- A. Gas.
 - B. Food products.
 - C. Acids.
 - D. Very heavy liquids.
6. Smooth bore tankers are more difficult to drive because: (8.2.5)
- A. They only have two baffles.
 - B. They have nothing to slow down the flow of the liquid.
 - C. They only have bulkheads.
 - D. There is a surge only when stopping.
7. Use of baffles are sometimes forbidden because: (8.2.5)
- A. They are hard to clean when hauling acid.
 - B. Of sanitation requirements.
 - C. They will not meet outage requirements.
 - D. None of the above.
8. Tests have shown that tankers will turn over at posted: (8.3.3)
- A. Off ramp speed.
 - B. On ramp speed.
 - C. Speeds on highway curves.
 - D. All of the above.
9. Bulkheads are: (8.2.4)
- A. Used to slow down the movement of liquids in transit.
 - B. For hauling quantities of different amounts in tanks.
 - C. Used only when hauling food stuffs.
 - C. Full of holes used for equalizing loads.

10. Liquid surge is most dangerous in tanks: (8.2.2)
- A. With bulkheads.
 - B. With baffles.
 - C. Partially filled.
 - D. Loaded to full capacity.
11. Tankers that haul milk use.: (8.2.5)
- A. Baffles with holes.
 - B. Bulkheads.
 - C. Bulkheads with holes.
 - D. Smooth bore tanks.
12. Because a tankers load is high off the ground: (8.2.1)
- A. It will be top heavy.
 - B. It will have a high center of gravity.
 - C. It will roll over easier.
 - D. All of the above.
13. The person in charge of loading and unloading a cargo tank with hazardous material must be within _____ feet of the tanker: (9.5)
- A. 15.
 - B. 25.
 - C. 50.
 - D. 100.
14. Never park a tanker carrying explosives A or B within _____ feet of the traveled part of the road: (9.6)
- A. 5.
 - B. 10.
 - C. 25.
 - D. 50.
15. Dense liquids may require that you only partially fill a tank. The amount of liquid to load into a tank depends on. (8.2.7)
- A. Legal limits.
 - B. The weight of the liquid.
 - C. The amount the liquid will expand in transit.
 - D. All of the above are correct

16. A portable tank mounted on a truck or trailer must be rated at how many gallons to require you to have a tanker endorsement. (8.1)
- A. 100.
 - B. 250.
 - C. 500.
 - D. 1000.
17. You are on level ground, why would you keep your foot on the brake pedal at a stop sign? (8.2.2)
- A. So the vehicle won't roll backwards.
 - B. So that the vehicle won't roll forwards.
 - C. Because the surging of the liquid in the tanks could cause the vehicle to move forward or rearward.
 - D. All are true statements.
18. What is used to divide a large tank into several smaller tanks? (8.2.3)
- A. Baffles.
 - B. Smooth boring.
 - C. Bulkheads.
 - D. None of the above.
19. In what type of tank is the liquid surge the most noticeable? (8.2.5)
- A. Smooth bore.
 - B. Bulkhead.
 - C. Baffled.
 - D. Open tank.
20. Liquids expand as they warm up. You, as the driver must leave room for this expansion of the liquid. What is the term used to describe this expansion? (8.2.6)
- A. Dry bulk.
 - B. Surge.
 - C. Smooth boring.
 - D. Outage.

**TANKERS
PRACTICE TEST
ANSWER SHEET**

1. A
2. A
3. D
4. D
5. B
6. B
7. B
8. D
9. A
10. C
11. D
12. D
13. B
14. A
15. D
16. D
17. D
18. C
19. A
20. D