

CHAPTER 8 Starting, Steering, Stopping

STUDY GUIDE FOR CHAPTER 8 LESSON 1

Automatic Transmissions

- A. The following sentences are procedures for starting a car with an automatic transmission. However, they are in the wrong order. Write the number that identifies the correct order of each step in the space to the left.

- _____ a. Turn the ignition key to the Start position. Release as soon as the engine starts.
- _____ b. If you do not have an automatic fuel-injection system, set the automatic choke by pressing the accelerator pedal once to the floor and releasing it.
- _____ c. Make sure that the gear selector lever is in Park.
- _____ d. Press the accelerator lightly with your foot and hold it.
- _____ e. As the engine idles, check your gauges to be sure that the oil-pressure system and other systems are working.
- _____ f. Make sure that the parking brake is set.

- B. For each sentence below, circle T if the statement is true and F if it is false. Correct each false statement in the space below.

1. For best control of both the accelerator and brake pedals, rest the heel of your foot on the floor. T F

2. To keep from rolling back after stopping on an uphill grade, use your right foot to press on the brake pedal while gently accelerating with your left foot. T F

3. Threshold braking increases braking efficiency by locking the car's wheels in an emergency braking situation. T F

4. The amount of braking pressure required to stop a vehicle depends in part upon the surface of the road. T F

- C. FIND OUT MORE. The chapter suggests purchasing a vehicle with antilock brakes. Call up a new vehicle dealer and ask if antilock brakes are an option with new vehicles; if so, how much do they cost?

STUDY GUIDE FOR CHAPTER 8 LESSON 2

Manual Transmissions

A. Correct each of the following statements. You do not have to repeat the sentence exactly.

1. When you make a downshift in an emergency, the first thing to do after you have pressed on the brake is to shift to Second gear.

2. The difference between driving an automatic vehicle and one with a manual transmission is that a manual shift requires the use of the clutch pedal to make the brakes work.

3. The friction point is the point at which the clutch and other parts of the engine separate.

4. You hold a manual transmission vehicle in place on a hill by pressing on the gas pedal slightly while keeping the clutch near the friction point.

5. The easiest way to get a feel for where the friction point is to practice using Fourth or Fifth gear.

6. Glance at your feet from time to time as you are driving to be sure that they are on the correct pedals.

- B. FIND OUT MORE. Ask at least ten people you know who drive whether they prefer an automatic or a manual transmission. What reasons do they give for their choices?

STUDY GUIDE FOR CHAPTER 8 LESSON 3

Acceleration, Deceleration, and Speed

A. Complete the sentences below by filling in the blanks with the correct words.

1. The rate of acceleration is the _____ it takes to accelerate from one speed to another.
2. You check your speed by giving quick glances at the _____.
3. As _____ varies, there is a difference in the car's vibration and level of sound.

B. Complete the following statements by circling the correct words in the parentheses.

1. (Gradual/Sudden) acceleration is recommended in most cases.
2. As the speed of a vehicle increases, the rate of acceleration is (higher/lower).
3. You need (more/less) time to pass another vehicle when traveling at 50 mph than at 30 mph.
4. A heavy truck needs (more/less) time and distance to decelerate than cars do.

C. For each sentence below, circle T if the statement is true and F if it is false. Correct each false statement in the space below.

1. One of the factors that affect a car's acceleration rate is the road surface. T F

2. Accelerating quickly saves fuel. T F

3. For best control while accelerating, you should press gently on the accelerator with the heel of your foot. T F

4. It is safe to look at the speedometer while driving as long as you do it by taking quick glances.
T F

D. FIND OUT MORE. The chapter's "Connections: Math" tells you how to figure out miles per hour on trips. Read and solve the following problem.

You and your family went on a long vacation. Your first leg of the trip took 6 hours and you traveled 330 miles. The next day, you went 522 miles and you drove for 11 hours. On the last day, you drove 360 miles in 8 hours. What was your average speed in miles per hour for the trip?

STUDY GUIDE FOR CHAPTER 8 LESSON 4

Learning How to Steer the Vehicle

A. For each sentence below, circle T if the statement is true and F if it is false. Correct each false statement in the space below.

1. It often takes more time and energy to brake to avoid hitting an object than to steer away from it. T F

2. At speeds over 25 or 30 mph, the only way to avoid a collision may be to step on the brakes.
T F

3. Keeping your vehicle moving on the path of travel you have chosen is called tracking.
T F

4. To track smoothly, you need to focus your attention directly in front of the vehicle you are driving. T F

5. Steering through a turn requires more steering wheel movement than does lane positioning.
T F

6. In push-pull-feed steering, you have to cross your hands when turning the steering wheel.
T F

7. Backing while looking into the rearview mirror is not a good idea. T F

8. When backing, the rear of your vehicle moves in the opposite direction to the steering wheel.
T F

B. FIND OUT MORE. Talk with somebody who drives frequently or with a professional driver such as a trucker, police officer, or bus driver. Ask the person what procedures she or he uses when backing up. What differences are there between the person's procedures and the one described in the chapter?