BRAKE SYSTEM

10.1. Vocabulary

Ex. 1. *Match the words to their Russian equivalents.*

1. hydraulic brake	a. тормозная колодка
2. power brakes	b. усилитель тормозов
3. brake fluid	c. нутромер
4. master cylinder	d. тормозная система
5. disc brake	e. педаль тормоза
6. brake shoe	f. антиблокировочная тормозная система
7. brake pad	g. колодка тормозного диска
8. anti-lock braking system	h. барабанный тормоз
9. parking brake	i. гидравлический тормоз
10. brake system	j. гидроусилитель тормозов
11. caliper	k. стояночный тормоз
12. drum brake	l. главный тормозной цилиндр
13. brake pedal	m. дисковый тормоз
14. brake line	n. тормозная жидкость
15. brake booster	o. тормозная магистраль

Ex. 2. *Complete the sentences with the given words:*

system, line, disc, anti-lock, pedal, booster, master, caliper, power, hydraulic, parking, fluid, drum, pads, brake

The mechanic checked the _____(1) braking system before giving the car back to the customer.

Mary noticed that her brake _____(2) was not working properly and needed to be replaced.

Tom made sure to regularly check the brake _____(3) in his car to prevent any issues with braking.

The mechanic found a leak in the brake _____(4) and had to replace it immediately.

The new brake _____(5) are performing well, my car stops much faster now.

When I pressed on the brake _____(6), it felt loose and didn't have as much resistance as before.

The mechanic suggested replacing the _____(7) shoe, as it was heavily worn out.

It is important to regularly maintain your brake _____(8) to ensure safe driving.

If you hear a strange noise while braking, it could indicate a problem with the _____(9).

_____(10) brakes are commonly used in cars nowadays for better performance.

My old car has _____(11) brakes, but they still work perfectly after all these years.

The _____(12) brake on my bike allows for smoother and more precise stopping.

The _____(13) cylinder is responsible for distributing the brake fluid to all four wheels.

Always remember to engage the _____(14) brake when leaving your car on an incline.

The _____(15) brakes stopped working suddenly, so I had to use maximum force on the pedal.

10.2. Reading

Ex. 1. *Read the text.*

Brake System

The brake system is one of the most important systems in a car. It is responsible for stopping or slowing down your vehicle, so if it doesn't work properly, you could be in serious danger.

The main parts of your vehicle's brake system are the brake pedal, brake booster, master cylinder, hydraulic brake lines, calipers, wheel cylinders, rotors, drums, pads, and shoes. In some vehicles, there is also an anti-lock braking system (ABS) that helps to prevent skidding when you apply the brakes suddenly.

When you press the brake pedal, it pushes a rod inside the brake booster. The brake booster is a large metal chamber that uses vacuum pressure to multiply the force you use on the brake pedal. This makes it easier for you to stop your vehicle. The rod inside the brake booster pushes a piston inside the master cylinder. The master cylinder is a small metal container filled with brake fluid. When the piston moves, it forces the brake fluid through the brake lines to the wheels of your vehicle.

In a disc brake system, the brake fluid flows to the calipers. Each caliper contains one or more pistons that push the brake pads against the rotor, which is a flat metal disc that is attached to the wheel. As the brake pads squeeze the rotor, the friction slows down or stops the vehicle. In a drum

brake system, the brake fluid flows to the wheel cylinders instead of the calipers. The wheel cylinders push the brake shoes against the inside of the brake drum to slow down or stop the vehicle.

If any part of your brake system isn't working properly, your vehicle may not stop when you need it to. For example, if your brake pads are worn out, they won't be able to create enough friction to stop your vehicle quickly. If your brake fluid is low or contaminated, it won't be able to flow properly, and your brakes may feel soft or spongy. If your brake lines are leaking, the fluid may not reach your brakes at all.

To help prevent problems with your brake system, you should have your vehicle's brakes inspected regularly. During a brake inspection, a mechanic will check the thickness of your brake pads and the condition of your rotors, drums, shoes, and other parts. They will also check your brake fluid level and look for any leaks in your brake lines. If they find any problems, they can repair or replace the necessary parts to keep your brake system working properly.

Ex. 2. *Say if the following statements are TRUE (T) or FALSE (F).*

1. The brake system is responsible for accelerating the vehicle.

2. The brake booster uses vacuum pressure to increase the force applied to the brake pedal.

3. The master cylinder is a large metal chamber that contains brake fluid.

4. In a disc brake system, the brake fluid flows to the wheel cylinders.

5. The friction between the brake pads and the rotor slows down or stops the vehicle.

6. If the brake pads are worn out, they will create more friction to stop the vehicle quickly.

7. Low or contaminated brake fluid can cause the brakes to feel soft or spongy.

8. Leaking brake lines can prevent the brake fluid from reaching the brakes.

10.3. Communication

Ex. 1. *Make questions using the following words:*

1. often/checked/brakes
2. important/brake fluid/topped
3. warning signs/failing/brake system
4. know/change/brake pads
5. regularly/replace/brake rotors
6. know/brake pads/replaced
7. experienced/brake failure/driving
8. true/apply/brake pedal
9. purpose/ABS system/car
10. weather/affect/brake performance