АНГЛИЙСКИЙ ЯЗЫК

Практикум по грамматике английского языка для студентов автомеханических специальностей

А

Могилев 2014
Практикум включает грамматические задания, предназначенные для повторения, систематизации и закрепления знаний по разделам грамматики, необходимым для перевода профессионально ориентированной литературы.

Учебное издание

АНГЛИЙСКИЙ ЯЗЫК

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Unit I

Grammar for revision: construction there+be, relative pronouns

Exercise 1. Fill in the gaps with the appropriate form of the verb to be.

1. There …. a trouble in the engine. 2. There …. a car in the garage. 3. There …. a new garage behind my house. 4. There …. a great number of cars in the streets of Moscow. 5. There …. an accident on the road. 6. There …. 2 cars in the garage. 7. There …. many desks and chairs in the classroom. 8. There …. a new garage near my house. 9. There …. difficult exercises in this book. 10. There …. 25 students in the classroom. 11. There …. two windows in the room. 12. There …. a lady and a boy in the car. 13. There …. some books and a dictionary on the table. 14. There …. a trouble in the transmission.

Exercise 2. Translate the following sentences into Russian. Mind the use of there + be.

1. There are a lot of tubes, pipes, wires and components under the bonnet of a car.
2. There are temperatures of over 700°C inside the engine.
3. There were different models of this car.
4. There weren’t enough traffic signs on that road.
5. Excuse me, is there a service station near here?
6. There were several empty seats in the bus.
7. Look! There is an accident. Call the ambulance!
8. There wasn’t a heater in the car.
9. There are seven groups in the mechanics of a car.
10. There will be some design changes in a new model of the car.

Exercise 3. Translate the following sentences into Russian. Mind the use of there + be.

1. In the cylinder head there is a combustion chamber, two valve ports and two valves, for each cylinder.
2. In practice there is an overlap in the timing of the valves.
3. If there is too much petrol it will not be completely burnt.
4. There may be some advantages in the more complex capacity discharge system.
5. Engines can overheat when there is not sufficient water in the radiator.
6. There are four strokes in the action cycle of most car engines.

Exercise 4. Match the sentence halves, join them with an appropriate relative pronoun (that, which, or who).

Example: 1 + (g) There were three people in the room who/that I had never seen before.
1. There were three people in the room.

2. There was a narrow bridge.

3. There are still people in the world.

4. There aren't many Beatles songs.

5. There have been rumors.

6. There aren't many workers.

7. There are a lot of toys in the shop.

8. There was a man at the barbecue.

a. have never seen a television.

b. the finance minister is going to resign.

c. connected the two halves of the village.

d. I would like to get for the children.

e. was wearing only a pair of shorts.

f. would welcome an increase in income tax.

g. I had never seen before

h. he can't play the piano.

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Unit II

Grammar for revision: singular and plural of nouns, noun + noun combination

Exercise 1. Put the words into Plural:

- tube, part, clutch, gearbox, source, man, century step.

Exercise 2. Read and translate the following sentences paying attention to the nouns in Plural.

1. Most Americans buy a new car every five or six years.
2. A steam-driven engine had three wheels and carried two passengers.
3. On Sundays you see thousands of cars on the roads into the country.
4. The protection of persons and personal belongings inside a car against crime is very important.
5. Steam cars had big disadvantages.
6. The first road markers were piles of stones at intervals.
7. Automobiles are the chief means of passenger transport in the United States of America.
8. Trucks carry heavy loads over long distances.
9. The engines of large trucks have from about 200 to more than 400 horsepower.
10. Numerous attempts in England to develop steam cars failed because of competition from railroad companies.
11. Most trucks have more powerful engines than automobiles.
12. Motor transport includes buses, lorries, motor coaches, and motor cars.
13. Traffic is very heavy in Moscow.
Exercise 3. Translate the following word combinations:
pedestrian crossing, car garage, traffic jam, exhaust pipe, combustion chamber, leather seats, ignition key, steam engine, fuel system, gasoline station, water jacket, worm gear, sport car race, all-wheel drive, tyre repair equipment, spark-ignition engine, power door locks.

Exercise 4. Expand these phrases. You can change words and add information.
1. a gas flow meter =
2. an engine speed dial =
3. a tyre pressure gauge =
4. an air pressure sensor =
5. a fuel intake port =

Exercise 5. Make full sentence definitions from exercise 4.
Example: A gas flow meter is a meter which measures the flow of gas along the pipe.

Unit III
Grammar for revision: prepositions, noun + preposition, adjective + preposition, verb + preposition

Exercise 1. Fill in the blanks with the suitable prepositions.
1. Day and night, hundreds of thousands ... lorries travel ... Europe's main arteries.
2. Road transport has the capacity ... carrying goods door ... door.
3. The need to share infrastructure ... other road users raises the important question ... road safety.
4. A significant percentage ... overall passenger transport is made up ... vehicles used ... urban or inter-urban transport that are operated ... transport companies ... the supervision ... the public authorities.
5. Vehicles are not supposed to be driven ... speeds which are higher than the posted maximum.
6. Freeways are large and wide roadways ... limited access.
7. Motor vehicle drivers wishing to travel ... great distances ... the city will usually take the freeways or expressways in order to minimize travel time.
8. If the freeway is elevated, the crossing road will pass ... it.
9. ... business days ... most cities, traffic congestion reaches great intensity ... predictable times ... the day ... the large number ... vehicles using the road ... the same time.
10. In some cities each vehicle has a specific day … the week … which it is forbidden traveling the roads … rush hour.

**Exercise 2. Fill in the blanks with the suitable prepositions.**

1. Trucks and busses have specific weight and length restrictions which are imposed … safety reasons.
2. Road transport possesses significant advantages … other modes.
3. It is impossible … developing countries to have rates … individual vehicle ownership, especially compared … the United States.
4. … such circumstances cycling is to be considered an alternative … the automobile … urban areas … developing countries, although more … economic reasons.
5. The basic technology is however very similar, as road transportation massively relies … the internal combustion engine.
6. In addition, there are serious limits … the traction capacities … cars and trucks because of the considerable increases … energy consumption.
7. It would be useful to encourage the introduction … active safety systems … all new vehicles.
8. Reminders to put safety belts … must become standard vehicle equipment.
9. Protection … vehicle occupants … the event … impact is progressing remarkably.
10. Half … all those killed … accidents were not wearing their seatbelts … the time … the accident.

**Unit IV**

*Grammar for revision: comparative and superlative forms of adjectives, comparative and superlative patterns.*

**Exercise 1. Complete the sentences with the correct form of adjectives from the box.**

|----------------------------------------------------------------------------------------|

1. The Audi TT has a top speed of 250 mph. It is much … than a Fiat Panda.
2. Rolls-Royce makes some of the … cars in the world.
3. All new cars now have airbags as standard so they are . than cars were years ago.
4. A diesel engine is still … than a petrol engine, even though they are much quieter than they used to be.
5. Volvos have the reputation of being some of the … cars on the market.
6. The interior of a Bentley is … and luxurious than a BMW 7-series.
7. The Porsche Cayenne weighs two and a half tons. It is … than the BMW X5.
8. The Lamborghini Diablo is one of the … cars in the world.
9. A car engine with twelve cylinders is … than one with six cylinders.
10. These leather seats are the … seats I’ve ever sat in!

Exercise 2. Compare the differences between these two sports cars. Modify comparisons 1–4 below in a general way and comparisons 5–8 in a specific way, using the prompts.

Examples: 1. The GT Sport accelerates a great deal faster than the Roadster. 5. The maximum speed of the GT Sport is 71 kph faster than the Roadster’s.

<table>
<thead>
<tr>
<th>Roadster</th>
<th>GT Sport</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Acceleration (0-100 kph / secs)</td>
<td>7.9</td>
</tr>
<tr>
<td>2 Fuel economy (kilometres per litre)</td>
<td>15.8</td>
</tr>
<tr>
<td>3 Stability</td>
<td>****</td>
</tr>
<tr>
<td>4 Suspension</td>
<td>****</td>
</tr>
<tr>
<td>5 Top speed (kph)</td>
<td>177</td>
</tr>
<tr>
<td>6 Power (brake horsepower)</td>
<td>157</td>
</tr>
<tr>
<td>7 Storage space (litres)</td>
<td>150</td>
</tr>
<tr>
<td>8 Price (€)</td>
<td>23,809</td>
</tr>
</tbody>
</table>

1. GT Sport / accelerate / great deal / fast / Roadster.
2. Roadster / lot / economical / GT Sport.
4. Roadster’s suspension / slightly / good / GT Sport’s.
5. maximum speed / GT Sport / 71 kph / fast / Roadster’s.
6. Roadster’s engine / two thirds / powerful / GT Sport’s.
7. GT Sport’s storage space / twice / large / Roadster’s.
8. GT Sport / 50% / expensive / Roadster.

Exercise 3. Write eight more sentences about the cars in exercise 2, using the prompts. Modify your comparisons in a general or specific way as appropriate.

1. acceleration / worse
   The Roadster’s acceleration is much worse than the GT Sport’s.
2. two thirds / fuel
3. unstable
4. less comfortable
5. two thirds
6. one and a half times
Exercise 4. Write personal answers to these questions about travelling by bus, train or car, using general or specific comparisons.

Example: 1 At weekends, I use the bus much more often. On weekdays, I use the train twice as often as the bus.

1. Which means of transport do you use more often on weekdays and at weekends?
2. In your experience, how do they compare in terms of comfort, convenience, cost and speed?

Exercise 5. Compare all three cars using the expressions in the box. Say which one you like best, and why.

Talking about advantages and disadvantages

<table>
<thead>
<tr>
<th>One great advantage is ...</th>
<th>A major drawback/disadvantage is ...</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think the ... feature is a big plus point.</td>
<td>I can see problems with the ...</td>
</tr>
<tr>
<td>One point in favour of the ... is ...</td>
<td>The downside is ...</td>
</tr>
</tbody>
</table>

Car 1: the Audi TT 2.0T FS
Fuel tank capacity 55 L
Engine size 1,984 cc
Top speed 149 mph
Acceleration 0 to 62 mph: 6.6 sec.
Fuel consumption 36.7 mpg
CO₂ emission 183 g/km

Car 2: the BMW Z4 2.0i SE Roadster
Fuel tank capacity 55 L
Engine size 1,998 cc
Top speed 137 mph
Acceleration 0 to 62 mph: 8.2 sec.
Fuel consumption 37.7 mpg
CO₂ emission 181 g/km

Car 3: the Saab 93 convertible 1.8t 150bhp
Fuel tank capacity 62 L
Engine size 1,998 cc
Exercise 6. Fill in the gaps with the comparative or superlative form of the adjectives in brackets.

Which is the better fuel for a car? Is it petrol or diesel? Petrol is (1) more common (common) because it makes a car go (2) faster (fast) than diesel. It’s also much (3) less noisy (noisy) than diesel. Diesel usually costs less than petrol, and you can travel for more kilometres per litre, because diesel has about 10% more energy per litre than petrol. But diesel engines are (4) ______ (noisy) and (5) ______ (heavy) than petrol ones, although they last longer. From an environmental point of view, diesel oil is (6) ______ (good) than petrol, because the exhaust from diesel engines produces less pollution. It’s also (7) ______ (safe). Because diesel is (8) ______ (combustible) than petrol, it’s less likely to catch fire in an accident.

A newer fuel, LPG (Liquid Petroleum Gas), makes cars go as fast as petrol, but produces less energy per litre. However, LPG is becoming very popular in some countries because it’s the (9) ______ (harmful) to the environment compared with diesel or petrol. Of the three types of fuel (LPG, petrol and diesel), cars that use LPG emit the (10) ______ (small) amount of pollution from their exhaust. LPG is also the (11) ______ (clean) fuel when you’re filling the car, because the gas is completely sealed. There are two more strengths of LPG: it’s the (12) ______ (quiet) fuel, and the (13) ______ (expensive) of the three. LPG engines are about the same weight as petrol ones, but they’re much (14) ______ (durable).

Exercise 7. Translate the following sentences paying attention to the ... construction.

1. The greater is the number of cylinders in an engine, the smoother will be its running.
2. The hotter is the cylinder wall, the smaller are the losses through friction.
3. The higher is the grade or additional load, the lower is the air/fuel ratio.
4. The higher the temperature at which heat engines can be operated, the more efficient they will be.
5. The more petrol there is in the combustion chamber, the ‘richer’ is the air/fuel mixture.
6. The slower the car moves, the more fuel it burns.
7. The greater is the air velocity through the venturi, the greater is the
flow of petrol from the pipe.

8. The less is the weight of the valve-operating gear, the longer is the engine life.

9. The lighter is the metal cylinder blocks are made of, the better heat conduction is.

10. The less quantity of air or the larger quantity of fuel are, the ‘richer’ will be the condition for starting.

11. The faster the crankshaft revolves in relation to the road wheels, the greater is the force available in order to drive the car.

12. The more gears are used, the wider is the range of speed ratios between the engine and the wheels.

13. The more oil is heated, the thinner it gets.

14. The warmer the air becomes, the more heat is carried off and less air is needed for cooling.

15. The greater the number of cylinders, the smaller will be variation in torque.

16. The higher the temperature of the unburned mixture, the greater will be the detonation.

Exercise 8. Translate the following sentences paying attention to as ... as ... construction.

1. Cylinders can be arranged in one as well as in two rows.

2. The walls of the combustion chamber should be as smooth as possible.

3. Silencer rusts (ржавеет) from the inside as well as from the outside.

4. The weight of the valve-operating gear should be as low as practical.

5. Pistons must be as light as possible.

Unit V

Grammar for revision: tenses of verbs in the Active Voice

Exercise 1. How well do you know your partner? Use words from the box to complete the table for you and your partner. Then work together to check your answers.

always – normally – frequently – often – sometimes – seldom – never

<table>
<thead>
<tr>
<th>How often do you ... ?</th>
<th>You</th>
<th>Your partner</th>
</tr>
</thead>
<tbody>
<tr>
<td>buy a new car</td>
<td></td>
<td></td>
</tr>
<tr>
<td>check your tyre pressure</td>
<td></td>
<td></td>
</tr>
<tr>
<td>travel on holiday by car</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Exercise 2. Translate the following sentences paying attention to the tense form of the verb.

1. The engine converts only a quarter of its heat into power.
2. Man began to make vehicles many centuries ago.
3. In 1784 William Murdoch built a model of a steam vehicle.
4. He was reading when his friend telephoned.
5. When the driver used the brakes, the car stopped.
6. Nearly 60 different materials went into the construction of the car.
7. They are driving fast.
8. Our students are studying mechanics.

Exercise 3. Put the verbs in brackets into appropriate tense form.

1. Every year a rally of the oldest cars (to take place) in England.
2. Many people (to use) trucks to move their household goods.
3. The first roads (to appear) in the Roman Empire.
4. They (to go) to the country by car tomorrow.
5. People (to make) many efforts to find a new source of energy.
6. As a rule, the exhibition of old cars (to arouse) great interest.
7. Large lorries (to bring) the construction units to the site tomorrow.
8. They (to install) the first traffic signal outside the House of Parliament in 1868.
9. Many industries (to use) trucks to carry raw materials to factories.
10. The traffic in England (to keep) to the left side of the road.
11. Early steam cars (to damage) the roads.
12. He (to graduate) from the University in a year.
13. The combustion of an air and gasoline mixture (to take place) inside the internal combustion engine.
14. Road safety (to be) very important for traffic.
15. Yesterday trucks (to bring) fruits, vegetables, and livestock from farms to markets.
16. They (to install) this electric sign at the crossing in a week.

Exercise 4. Complete the text putting the verbs in brackets into appropriate tense form.
What’s in a Name?

You ever 1) …. (think) about car names? They actually 2) …. (mean) anything? And you 3) …. (know) what the name of your car 4) …. (mean)?

For example, you may 5) …. (think) «Rover» 6) …. (be) just a name, but there 7) …. (be) never just a name in marketing. A rover 8) …. a wanderer – someone who 9) …. (like) to travel around. So the name 10) …. (suggest) mobility, freedom, having fun, and going wherever you want to go. These 11) …. (be) important qualities when Rover cars first 12) …. (come) on the market.

Marketing departments of car companies 13) …. (spend) a lot of time and money thinking up names for cars. The names should 14) …. (be) a reflection of the brand, product, and target group. The car you drive 15) …. (tell) the world about your status, how much money you 16) …. (have), and the socio-economic group you 17) …. (belong) to (or want to belong to). Good car names 18) …. (be) catchy and 19) …. (fit) the product, such as the «Beetle» or the «Mini».

The name should also 20) …. (appeal) to a global audience. At the very least, the name should not 21) …. (mean) anything bad in another language. This 22) …. (be) why Rolls-Royce 23) …. (decide) not to use the name 'Silver Mist' for one model: mist 24) …. (mean) animal manure in German!

American car makers 25) …. (like) to give their SUVs names that 26) …. (remind) people of the Wild West, full of adventure and danger. You 27) …. (know) that 'Wrangler' 28) …. (be) another word for cowboy? Or that 'Maverick' 29) …. (mean) an unbranded cow that 30)…. (stray) from the herd? People who 31) …. (own) SUVs seldom 32) …. (drive) them off-road, but they 33) …. (enjoy) the feeling of excitement that the name 34) …. (create).

Exercise 5. Fill in the gaps with the appropriate form of Present Perfect.

1. We … (stiffen) the front suspension to produce more precise steering at high speeds.
2. We … also (increase) the size of the disc brakes for a shorter braking distance.
3. Firstly, we … (enhance) the Cd value with a new design.
4. We … also (reduce) the kerb weight of the car by over 50 kilos by using light-weight materials.
5. We … (introduce) a start-stop automatic so that the engine cuts out if you stand still for more than three seconds and starts again when you take your foot off the brake.

Exercise 6. Read the following instructions and respond to them quickly. Confirm (a) what you are doing and then (b) what you have done.
Example: – Bring out the new tyres.
    – Right. I’m bringing them out now. (You are doing now – a)
    – OK, I’ve brought them out. (You have done – b)

1. Bring out the new tyres.
2. Lift up the front of the car.
3. Take off the two wheels.
4. Put on the new wheels.
5. Take away the old wheels.
6. Pump in the petrol.
7. Switch off all the electrical systems.
8. Turn on the emergency power source.

Exercise 7. Make dialogues between a supervisor (S) and a trainee (T) from the checklists (список, перечень).

Example: 1 S: How are you getting on?
    T: I’ve put the new tyres on. I’m still tightening the wheel nuts. It’s almost done.
    S: OK, good. Have you adjusted the air pressure yet?
    T: No, I haven't done that yet. I’ll do it next.

<table>
<thead>
<tr>
<th></th>
<th>put new tyres on</th>
<th>tighten wheel nuts</th>
<th>adjust air pressure</th>
<th>done</th>
<th>in progress</th>
<th>not yet done</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>take cover off</td>
<td>repair computer</td>
<td>take out damaged chip</td>
<td>done</td>
<td>in progress</td>
<td>not yet done</td>
</tr>
<tr>
<td>3</td>
<td>replace burnt wire</td>
<td>switch on power</td>
<td>check other wires</td>
<td>done</td>
<td>in progress</td>
<td>not yet done</td>
</tr>
<tr>
<td>4</td>
<td>switch off electricity</td>
<td>test all circuits</td>
<td>find any faults</td>
<td>done</td>
<td>in progress</td>
<td>not yet done</td>
</tr>
<tr>
<td>5</td>
<td>strip off old paint</td>
<td>plaster holes in wall</td>
<td>buy new paint</td>
<td>done</td>
<td>in progress</td>
<td>not yet done</td>
</tr>
<tr>
<td>6</td>
<td>take apart telephone</td>
<td>put it together again</td>
<td>test it</td>
<td>done</td>
<td>in progress</td>
<td>not yet done</td>
</tr>
</tbody>
</table>
Exercise 8. Complete the dialogues with the appropriate form of the verbs in brackets.

Example: A: Have you switched off the engine yet? (switch off)
        B: No, not yet. I’m switching it off now.

A: Has she ______ the jack yet? (bring out)
B: No, she hasn’t. Look, she’s ______ now.

A: Has he _____ the wheel nuts yet? (take off)
B: No, not yet. I think he’s _____ at the moment.

A: Have you_______ the new wheels yet? (put on)
B: Hold on. I’m ______ right now.

A: Have the mechanics _____ the jacks yet? (take away)
B: Not yet, but I think they’re ______ now.

A: Has Bill ______ the spark plugs yet? (put back)
B: I don’t think so. I think he’s ______ now.

Exercise 9. Complete this progress report by the car mechanic to his supervisor.

Supervisor Have you checked the tyres yet?
Mechanic Yes, we (1) ______ (check) all the tyres first thing this morning, and we (2) ______ (find) that the road OS tyre was worn. So we (3) ______ (replace) it.

Supervisor What about the tyre pressures? Have you adjusted them yet?
Mechanic Yes, we (4) ______ (adjust) them when we (5) ______ (put) the tyres on. Then, at about ten this morning, we (6) ______ (examine) the fuel system. We (7) ______ (take) it apart and (8) ______ (unblock) the fuel pipe.

Supervisor Good. Have you repaired the damaged paintwork on the door?
Mechanic Yes, we (9) ______ (strip) off the damaged paint just before lunch, and then straight after lunch, we (10) ______ (clean) the door, (11) ______ (repair) it and (12) ______ (repaint) it.

Supervisor Good. Now what about the air conditioner? Have you checked it?
Mechanic Yes, we checked it at about three this afternoon. Then we (13) ______ (pump) some new fluid into the air conditioning system.

Supervisor What about the oil leak under the car? Have you had time to look at that yet?
Mechanic Yes, we (14) ______ (do) that about an hour ago.
Unit VI

Grammar for revision: Tenses of verbs in the Passive Voice

Exercise 1. Translate the following sentences into Russian. Mind the use of the Passive Voice.

1. The first steam-powered vehicle was built in 1672 as a toy.
2. In Russia a vehicle with a steam engine was made by Ivan Kulibin in 1791.
3. Pistons are made of an aluminium alloy.
4. Power was transmitted from the pistons to the crankshaft.
5. The head and the block were usually made of cast iron.
6. The bottom end of the connecting rod is called the big-end.
7. The fuel is burnt and the heat is converted into mechanical energy by the engine.
8. Nearly 60 different materials were used in the production of the car.

Exercise 2. Complete the sentences with the passive form of the verb in brackets.

1. This model … (produce) in the new factory in Poland.
2. German cars … (sell) all over the world.
3. The orders …. (can/place) by fax or online.
4. The cars … (assemble) by robots.
5. Spare parts … (can/buy) from your local dealer.
6. The interiors … (design) by computer.
7. Tyres … (should/replace) before they wear down completely.

Exercise 3. Change this set of instructions into a description of a process, using the Passive Voice and the words in the box.

<table>
<thead>
<tr>
<th>finally – first – next – now – then</th>
</tr>
</thead>
<tbody>
<tr>
<td>Begin: First the engine is run for a few minutes. Then it is switched off. Now the...</td>
</tr>
<tr>
<td><strong>How to change the oil in a car</strong></td>
</tr>
<tr>
<td>1. Run the engine for a few minutes.</td>
</tr>
<tr>
<td>2. Switch off the engine.</td>
</tr>
<tr>
<td>3. Take off the oil drain plug.</td>
</tr>
<tr>
<td>4. Empty the old oil into a container.</td>
</tr>
</tbody>
</table>

Exercise 4. Rewrite this set of instructions as a paragraph describing a process. Use the passive form of the verbs.
Begin: *First the bonnet of the car is opened and the battery is located. Then ...*

**Servicing a car battery**

1. Open the bonnet of the car. Locate the battery.
2. Loosen the battery cables, using a wrench. Remove the battery cables from the posts.
3. Always remove the negative (or earth) cable first, then the positive.
4. Carefully lay the detached ends of the cables to one side.
5. Wipe away corrosion from the top of the battery, using baking soda and water.
6. If corrosion is very heavy, you can clean it from the posts using a wire brush.
7. Apply petroleum jelly to the inside of the terminals and posts.
8. Reattach the cables. Close the car bonnet.

**Exercise 5. Put the verbs in brackets into the appropriate form of the Passive Voice.**

1. Changes in the supply of transport services ... (affect) by human technologies, customer demand and external cost.
2. Many characteristics of transport demand ... (influence) by a multitude of simultaneously occurring tendencies.
3. In Helsinki the road dust problem mainly ... (blame) on winter sanding and ... (address) since the 1980s.
4. The capacity of existing European waterways ... fully ... (not/ utilize).
5. The need for sustainable mobility and alternative land use policies ... recently ... (recognize).
6. Since 90 % of all traffic information ... (perceive) visually, special attention must ... (pay) to the visibility of traffic signs and systems.
7. Domestic road transport ... (deregulate) in most European countries.
8. Transport ... (affect) by international economic shifts, by tourism and by changes in the balance of trade with Europe.
9. Road infrastructure costs ... closely ... (examine) in the UK over many years.

**Exercise 6. Complete the text putting the verbs in brackets into appropriate form of the Passive Voice.**

Now we come to the engine. The principle of the internal combustion engine 1) ... (not/change) in the last 100 years. The engine 2) ... (take) in fuel and air which 3) ... (compress) in a combustion chamber. Then this mixture 4) ... (ignite) by a spark plug to produce an explosion, which 5) ... (move) the piston in the cylinder. The up and down motion of the piston in the cylinder...
6) … (convert) into rotational motion by the crankshaft. The rotational force generated by the engine 7) … (know) as torque. The size of the engine 8) … (determine) the power. The more cylinders there 9) … (be), the more powerful the engine. This power 10) … (transmit) through the clutch, the gearbox, the propeller shaft (in rear-wheel and four-wheel drive), and the axles to the wheels. The position of the engine can 11) … (vary), but generally speaking it 12) … (mount) at the front. In some sports cars, the engine 13) … (mount) at the rear (e. g. Porsche) or in the middle (e. g. Ferrari or Lamborghini) because of weight distribution.

**Exercise 7. Complete the text putting the verbs in brackets into appropriate form of the Passive Voice.**

First, the parts 1) … (deliver) by truck or rail to the delivery area of the car assembly plant. From here, some parts 2) … (take) to the body shop, and other parts 3) … (transport) to the chassis line. The parts 4) … (carry) around the plant by forklift (автопогрузчик с вилочным захватом) trucks or conveyor belts.

In the body shop, the panels 5) … (weld) to the frame to form the body of the car. This 6) … (do) by more than 400 robots.

Then the body 7) … (take) to the paint shop. Here it 8) … (clean) and 9) … (paint) by robots. After this, the body 10) … (check) by human workers to look for faults.

Next, the painted body moves along a conveyor belt to the trim line (внутренняя отделка) and many parts 11) … (add) to it. For example, the instrument panel, the air conditioning system, the heating system and the electrical wiring 12) … (install) here. The windscreen 13) … (insert) by robots using laser guides.

Meanwhile, in the chassis line, components 14) … (add) to the chassis. First, the chassis 15) … (turn) upside down, to make the work easier. Then the fuel system, the transmission, the suspension, the exhaust system, the axles and the drive shaft 16) … (install). Next the chassis 17) … (turn) over. The engine 18) … (lower) into the chassis and 19) … (connect) to it.

Now the chassis and the body move simultaneously to the final assembly line. Here the body 20) … (attach) to the chassis, and all the final parts 21) … (add). The tyres and the radiator 22) … (add). The hoses 23) … (connect), and the radiator and air conditioner 24) … (fill) with fluid.

Lastly, the finished car and all electrical systems 25) … (test). The car 26) … (fill) with fuel and the engine 27) … (start) for the first time. The car 28) … (put) on special rollers to test the engine and the wheels. If it passes the test, the car finally 29) … (drive) out of the assembly plant.
Exercise 8. Complete the text putting the verbs in brackets into appropriate form of the Passive Voice.

The fuel, normally a mixture of petrol and air, 1) … (burn) in cylinders inside the engine – that is why the term "internal combustion' 2) … (use).

Petrol and air 3) … (mix) in the carburetor and 4) … (draw) into a combustion chamber at the top of each cylinder. Pistons, inside the cylinders, 5) … (compress) the mixture, which then 6) … (ignite) by a spark plug. As the mixture 7) … (burn), it 8) … (expand) and 9) … (force) the piston down on its power stroke. The up-and-down movement of the pistons 10) … (transform) into rotary movement and 11) … (drive) the crankshaft, which 12) … (transmit) power to the wheels through the clutch, gearbox and final drive. Connecting rods 13) … (link) the pistons to the crankshaft. A camshaft, which 14) … (drive) by the crankshaft, 15) … (control) inlet and exhaust valves at the top of each cylinder.

Exercise 9. Put general and special questions to the following sentences.

1. Automobiles are the chief means of passenger transport in Japan.
2. They held meetings in the library.
3. John will attend some special courses.
4. The Belorussian history dates back to the 13\textsuperscript{th} century.
5. They developed trade routes between villages and towns.
6. The company will install these engines in the heavy-duty trucks and tractors.
7. Drivers pay for using particular routes.
8. They will provide cheap parking on the outskirts of the city.
9. He left his car at home.
10. Most drivers obey traffic rules.
11. The traffic will be heavy in the center of the city tomorrow.
12. Two and a half million cars pass through New York City each day.
13. Ford Motors produced cars in large numbers.
14. An electric car will not require gasoline at all.

Exercise 10. Put Alternative and Disjunctive questions to the following sentences.

1. Toyota is increasing the capacity of its French factory.
2. A petrol engine meets the customer’s demands well.
3. They are solving transport problems now.
4. They are building a new road.
5. That car is keeping to the left side of the road now.
6. A long stream of buses was running along the road.
7. They are wheeling that old car now.
8. They will begin the production of this car next year.
9. This bus is going the shortest route.
10. This company produces a wide range of engines.
11. He is driving his new car now.
12. The number of buses on these routes is increasing.
13. That idea attracted many engineers.
14. I am driving a car at full speed.
15. They were developing a new model of engine from 1885 to 1889.
16. We are building a new road.
17. Engineers were working on a new model of engine in Germany and the United States.
18. The engine is operating well.
19. Many engineers were experimenting with steam vehicles at that time.
20. Toyota plans to sell 800,000 vehicles in Europe next year.

Unit VII

Grammar for revision: Sentence structure: subject, verb, object etc.

Exercise 1. Put the words in the correct order to make sentences.
1. stations / carry / to / service / gasoline / trucks.
2. automobiles / will / produce / they / tractors / and.
3. had / disadvantages / cars / steam / big.
4. hard / Nick / at / work / German / his / doesn’t.
5. trucks / food / stores / grocery / to / carry.
6. the / built / first / the / Romans / roads.
7. will / go / Poland / car / to / he / by.
8. research / they / support / his / don’t.
9. a / Minsk / big / center / is / traffic.
10. car / will / they / their / tomorrow / repair.
11. year / Nick / went / by / last / Japan / air / to.
12. cities / buses / transportation / within / provide.
13. cars / steam / a / made / noise / terrible.
14. will / they / a / engine / powerful / install.
15. factory / he / go / the / to / day / doesn’t / every.
16. cars / don’t / the / air / electric / pollute.
17. truck / will / this / on / operate / gasoline.
18. people / valuable / some / collect / cars.
19. developed / engineers / this / many / model.

Exercise 2. Put the words in the correct order to make sentences.
Mind the use of the Present Continuous.
1. now/aren’t/working/we.
2. for/is/waiting/he/you/the/in/corridor?
3. his/old/the/is/driving/man/car.
4. factory/the/increasing/is/capacity/its.
5. is/his/John/now/riding/bicycle?
6. sister/playing/my/isn’t/piano/now.
7. his/he/theses/on/working/was/to/from/1991/1988.
8. a/was/testing/he/device/new.
9. to/and/are/library/his-going/John/the/friends.
10. an/aren’t/having/you/now/lesson/English.
11. is/mechanism/this/operating/still.
12. on/isn’t/institute/working/our/this/problem/the/during/past/years/two.
13. with/was/Richard Dudgeon/experimenting/vehicles/steam?
14. 100/than/more/American/were/plants/steamers/making.
15. 1912/on/35,000/nearly/American/cars/operating/were/in/electric/roads.
16. was/automobile/the/becoming/in/familiar/sight/a/the/1890s.
17. engineers/on/working/were/steam/in/engine/Germany/the/and/United States.

**Unit VIII**

**Grammar for revision: the Infinitive, the Infinitive Constructions.**

**Exercise 1. Translate the following sentences into Russian. Mind the use of the Infinitive.**

1. Vehicles are not supposed to be driven at speeds which are higher than the posted maximum.
2. To enforce speed limits, two approaches are generally employed.
3. This encourages drivers to travel at the posted limit in order to minimize stopping.
4. Some cities adopt policies to reduce rush-hour traffic and pollution and encourage the use of public transportation.
5. The purpose of these policies is to reduce the number of vehicles on the roads and thus reduce rush-hour traffic intensity.
6. Even though the drivers seem to acknowledge falling asleep as an important cause in road accidents, few drivers seem aware of the severity of sleep-related accidents.
7. Road transport growth is expected to soar in Eastern Europe.
8. Very few measures have been taken to provide a basic regulation of social conditions in the road transport sector.
9. What is needed is to make rail transport once again competitive enough to remain one of the leading players in the transport system in the
enlarged Europe.

10. Driver fatigue or falling asleep is recognized to be among the most important causative factors in road crashes, next to alcohol, speeding and inattention.

11. Buses are believed to be potentially flexible and cost effective method of public transport offering many advantages over rail.

Exercise 2. Translate the following sentences into Russian. Mind the use of the Infinitive.

1. The engine must be able to start below freezing point.
2. Since no water is allowed to escape, the system is usually filled at the factory with a mixture of water and antifreeze.
3. The function of the radiator is to dissipate heat from the hot water that circulates in the cooling system.
4. The remainder of the heat has to be disposed of.
5. This helps to generate the high-voltage output from the coil or capacity discharge device.
6. To allow for some loss of voltage in the system, up to 30,000 volts may need to be generated.
7. If the driver wants to stop the car he uses brakes.
8. When a car stops from 60 mph, its brakes generate enough heat to boil 2 pints of water.
9. To prevent wear and overheating, the engine has a lubrication system.
10. Designers try to reduce the number of parts and weight of the valve-operating gear.
11. The carburettor is to ensure that the correct amount of petrol is drawn into the air stream.

Exercise 3. Translate the following sentences into Russian. Mind the use of the Infinitive.

1. The faster the crankshaft revolves in relation to the road wheels, the greater is the force available to drive the car.
2. For good engine performance, the spark must be big enough to ignite the fuel mixture efficiently.
3. The further apart the electrodes are the higher is the voltage that is needed to make a spark.
4. The designer’s objective is to make the exhaust quiet.
5. To separate the moving parts of an engine oil must have the right viscosity.
6. This helps to generate the high-voltage output from the coil or capacity discharge device.
7. The tubes are fitted with fins to provide a greater contact area for the cooling air.
Exercise 4. Translate the following sentences into Russian. Mind the use of the Complex Object.

1. A gearbox enables the engine to cope with the wide variations in the power and torque.
2. The steering system makes the car turn in the direction required.
3. The brakes cause the car to stop.
4. As the mixture burns it expands and forces the piston to move down on its power stroke.
5. A differential gear allows the road wheels to rotate at different speeds.
6. The starter motor is operated electrically and turns the flywheel and crankshaft, which causes the pistons and connecting rods to move up and down.
7. Mechanical pumps are subjected to heat from the engine which can cause vapour to lock the fuel system.
8. We consider the primary components of an automobile to be the power plant, the power transmission, the running gear, and the control system.

Exercise 5. Translate the following sentences into Russian. Mind the use of the Complex Subject.

1. Transmission, running gear and steering mechanism are known to be the main units of the chassis.
2. The clutch is known to connect the engine with the driving wheels of the car.
3. The gearbox is known to change the speed of the car.
4. The steering mechanism is known to change the direction of the car.
5. Brakes are considered to be one of the most important mechanisms of the car.
6. We know the frame to be the structural centre of any car.
7. Car specialists consider the conventional frame to be extremely rigid and strong.
8. We know the frame to be insulated from the other parts by rubber pads to prevent metal-to-metal contacts.
9. Many specialists consider the body parts to be used to structurally strengthen the entire car.
10. The manufacturers believe the unibody constructions to be called so because they are made integral with the body.


Unit IX

Grammar for revision: the Participle and the Participial Constructions.

Exercise 1. Translate the following sentences into Russian. Mind the use of Participle I.

1. The valve-operating gear gives an adequate opening period.
2. The hot water passing through a radiator dispenses the heat to the atmosphere.
3. Pistons provide the force driving the engine.
4. The cars having engines at the rear are cooled by the air circulating over fins cast in the cylinder head.
5. There are conditions increasing the fuel-to-air running ratio.
6. Because of the cold metal petrol clinging to its surface remains liquid.
7. The important parts of the shaft are the journals rotating in and supported by the main bearings.
8. Some automobiles use diesel piston engines running on diesel oil.
9. Acceleration is another condition increasing the amount of fuel that is used.
10. A spark plug consists of a metal electrode passing through the centre of a ceramic insulator.
11. The oil cuts down friction and wear due to lubrication of the pistons, bearings and other moving parts.
12. Oil is dispersed by the rotating crankshaft.
13. There is another bleed leading to the rocker-shaft bearings.
14. The condenser protecting the contact-breaker points from excessive arcing is also mounted on the base plate.
15. The ignition system provides the electric sparks igniting the mixture.
16. The sump being bolted to the bottom of the crankcase is made of sheet steel, cast aluminium or magnesium.

Exercise 2. Translate the following sentences into Russian. Mind the use of the Participles.

1. Cars and trucks have improved in numerous respects, becoming far more reliable, safer and less polluting.
2. Being an engine of commerce, the logistics industry is fueled by the health of the overall economy.
3. Transport companies earn money being engaged in freight transportation instead of writing the accompanying documents.
4. Goods in lots which are too small for the traditional bulk transport can be moved using containers.
Indices showing cost developments for different kinds of road transport have to be published regularly.

6. The 1939 World Fair had exhibits indicating that almost everything in transport would operate automatically.

7. Vehicles travelling on the network include automobiles, bicycles, buses, trains, people and aircraft.

**Exercise 3. Translate the following sentences into Russian. Mind the use of Participle II.**

1. The flywheel is a heavy and carefully balanced disk.
2. The fuel burnt in cylinders inside the engine is a mixture of petrol and air.
3. Cylinders can be arranged in one row, in two rows set at an angle or set sideways in two rows.
4. The pistons made of an aluminium alloy slide up and down inside the cylinders as many as 100 times a second.
5. The engine must be a rigid structure in order to withstand the heavy loads applied to the crankshaft bearings.
6. The cylinder block carries the crankshaft with the connecting rods and pistons attached.
7. Air pollution caused by intensive car, lorry and air traffic is finally starting to worry those who are most exposed to it.
8. One of the main measures considered by logistics managers of agro industries with continuous process is related to truck waiting times in the reception area.
9. The total journey time by public transport consists of the time taken to get to or from bus-stop, the waiting time and the time on board the vehicle.
10. The distribution services offered included warehousing, administration, order processing and the control of the goods flowing via the transport network.
11. Transport services provided in return for money can immediately be classed as third-party operations.
12. The investigation carried out is based on the data from the road surface measurements made on stale roads and accidents reported by the police.
Список литературы


