

TOOLS 1 **(инструменты 1)**

Vocabulary

Word	Translation
phillips screwdriver	крестообразная отвёртка
needlenose pliers	острогубцы;
phillips screw	крестообразные шурупы
slotted screw	минусовый шуруп
flathead screwdriver	плоская отвёртка
hammer	молоток
diagonal cutters	диагональные кусачки
wire stripper	инструмент для зачистки проводов; стриппер
electrical tape	изоляционная лента
medical hemostat	медицинский зажим
wrench	гаечный ключ
hex wrench	шестигранный ключ
torque wrench	динамометрический ключ
magnifier	лупа
pounding	дробление, измельчение
striking	ударение
loosening	ослабление; раскручивание
tightening	затягивать; поджимать;
clamping tool	зажимное устройство
jaws	тиски
gripping	захват; зажим
gauge	калибровка
insulate	изолировать

Glossary

A **Phillips screwdriver** is used to drive in (вкручивать) Phillips screws.

Needlenose pliers are small pliers with thin, long jaws used for cutting and gripping (зажима) in detailed work.

A **flathead screwdriver** has a flat blade (плоская лопасть) at the tip and is used with slotted screws (минусовые шурупы).

A **hammer** is a tool with a heavy metal head that is used for pounding (дробление) or striking (удары).

Diagonal cutters are pliers with angled cutting jaws (угловые режущие клёщи) used to cut wires.

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A **wire stripper** is used to cut and remove insulation from a wire.

Electrical tape is tape made of plastic or vinyl used to insulate electrical wires

A **hemostat** is a clamping tool (зажимное устройство) used to clamp and hold wires.

A **hex wrench** is an L-shaped tool used for loosening (ослабление) or tightening (затягивание) screws and bolts with a head shaped like a hexagon.

A **torque wrench** uses a gauge (калибровка) to tighten nuts and bolts with the desired amount of force.

A **magnifier** enlarges (увеличивать) the appearance (внешний вид) of an object to allow for detailed viewing.

Exercise 1 Listen the text, read and translate it

Mr. Tech's weekly advice column

Question: I want to start repairing electronics. What sort of tools do I need to get started?

Dear Reader,

Start by buying a Phillips screwdriver and needlenose pliers. These are two of the most basic tools. Phillips screws are most common in electronics. However, sometimes you'll see slotted ones. In this case, you'll need a flathead screwdriver. Another useful tool is a hammer. For electrical work, diagonal cutters are important. You will also need a wire stripper and electrical tape. A medical hemostat is also helpful to hold your wires. After these basics, look into different types of wrenches. I suggest a hex wrench and a torque wrench. Also, a magnifier is helpful for detailed work.

Exercise 2: Questions about the text:

1. What two basic tools should you start with?
2. What type of screws is most common in electronics?
3. What screwdriver do you need for slotted screws?
4. What other useful tool is mentioned?
5. What is important for electrical work?
6. What two items are needed for wire work?
7. What is a medical hemostat used for?
8. What types of wrenches are suggested?
9. What is helpful for detailed work?

Exercise 3: True/False Questions:

1. Phillips screws are most common in electronics.
2. You never see slotted screws in electronics.
3. A flathead screwdriver is needed for slotted screws.
4. A hammer is not a useful tool for electronics repair.
5. Diagonal cutters are important for electrical work.
6. A wire stripper and electrical tape are not needed.
7. A medical hemostat is helpful to hold wires.
8. A hex wrench and a torque wrench are types of wrenches.
9. A magnifier is not helpful for detailed work.
10. Needlenose pliers are one of the most basic tools.

Exercise 4: Fill in the Blanks

Word Bank: magnifier, slotted, hemostat, Phillips, torque, hammer, needlenose, wire stripper, flathead, hex, diagonal cutters, electrical tape, Phillips

1. Start by buying a _____ screwdriver and _____ pliers.
2. _____ screws are most common in electronics.
3. Sometimes you'll see _____ screws.
4. For slotted screws, you'll need a _____ screwdriver.
5. Another useful tool is a _____.
6. For electrical work, _____ are important.
7. You will also need a _____ and _____.
8. A medical _____ is helpful to hold your wires.
9. I suggest a _____ wrench and a _____ wrench.
10. A _____ is helpful for detailed work.

Exercise 5: Match the Tool with Its Purpose

Tool	Purpose
1. Phillips screwdriver	A. Used to hold wires
2. Flathead screwdriver	B. Used for detailed work
3. Needlenose pliers	C. Used for Phillips screws
4. Diagonal cutters	D. Used for slotted screws
5. Wire stripper	E. Important for electrical work
6. Hemostat	F. Used to strip wires
7. Magnifier	G. Holds small parts
8. Hex wrench	H. A type of wrench
9. Torque wrench	I. Another type of wrench
10. Electrical tape	J. Used to insulate wires

Exercise 6: Choose the Correct Word

1. Start by buying a (flathead / Phillips) screwdriver.
2. (Slotted / Phillips) screws are most common in electronics.
3. For slotted screws, you need a (flathead / Phillips) screwdriver.
4. Another useful tool is a (hammer / hemostat).
5. For electrical work, (pliers / diagonal cutters) are important.
6. You will need a (wire stripper / hammer) and electrical tape.
7. A medical (wrench / hemostat) is helpful to hold wires.
8. I suggest a (hex / Phillips) wrench and a torque wrench.
9. A (magnifier / hammer) is helpful for detailed work.
10. (Flathead / Needlenose) pliers are one of the most basic tools.

Exercise 7: Guess the Tool (Clues)

1. I am used for Phillips screws. I start with "P".
2. I am used for slotted screws. I start with "F".
3. I am important for electrical work. I start with "D".
4. I am used to strip wires. I start with "W".
5. I am helpful to hold wires. I start with "H".
6. I am helpful for detailed work. I start with "M".

Exercise 8: Guess the Tool (Clues)

1. I am used for Phillips screws. I start with "P".
2. I am used for slotted screws. I start with "F".
3. I am important for electrical work. I start with "D".
4. I am used to strip wires. I start with "W".
5. I am helpful to hold wires. I start with "H".
6. I am helpful for detailed work. I start with "M".

Exercise 9: Put the Words in the Correct Order

1. tools / basic / two / are / these.
2. most / electronics / Phillips / in / screws / common / are.
3. slotted / sometimes / screws / see / you.
4. flathead / need / screwdriver / you / a.
5. useful / hammer / a / is / tool.
6. cutters / electrical / for / diagonal / work / important / are.
7. wire / need / stripper / you / a / tape / and / electrical.
8. wires / hemostat / hold / helps / medical / a.
9. wrench / hex / torque / a / suggest / I / and / wrench / a.
10. work / magnifier / detailed / a / helpful / for / is.

Exercise 10: Listen to the dialogue and fill in the missing words

Emma: I've decided to start repairing electronics. Where should I begin?

Alex: Begin with the basics: a (1) _____ screwdriver and (2) _____ pliers.

Emma: Are Phillips screws really that common?

Alex: Yes, they are the most common in electronics, but sometimes you'll see (3) _____ ones.

Emma: So what do I need for slotted screws?

Alex: A (4) _____ screwdriver. And don't forget a (5) _____ — it's useful too.

Emma: What tools do I need for working with wires?

Alex: You'll need (6) _____, a (7) _____, and (8) _____.

Emma: Is there anything that helps hold the wires steady?

Alex: Yes, a medical (9) _____ is perfect for holding wires.

Emma: What about wrenches and detailed work?

Alex: I suggest a (10) _____ wrench and a (11) _____ wrench. And a (12) _____ is great for detailed work.

Exercise 11: True/False Questions about the Dialogue

1. Emma has decided to start repairing electronics.
2. Alex says to begin with a flathead screwdriver and needlenose pliers.
3. Phillips screws are the most common in electronics.
4. You never see slotted screws in electronics.
5. A flathead screwdriver is needed for slotted screws.
6. A hammer is not useful for electronics repair.
7. For working with wires, you need diagonal cutters, a wire stripper, and electrical tape.
8. A medical hemostat helps hold wires steady.
9. Alex suggests a hex wrench and a torque wrench.
10. A magnifier is not helpful for detailed work.

Exercise 12: Write your dialogue based on the provided templates.

Template 1. Educational Dialogue (Beginner + Expert)

Beginner: I want to start repairing electronics. What tools should I buy first?

Expert: Start with a Phillips screwdriver and needlenose pliers.

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Beginner: Why those two?

Expert: Because Phillips screws are the most common in electronics, and needlenose pliers are great for holding small parts.

Beginner: What if I find slotted screws?

Expert: Then you'll need a flathead screwdriver. A hammer is also useful.

Beginner: What about working with wires?

Expert: You'll need diagonal cutters, a wire stripper, and electrical tape.

Beginner: How can I hold the wires while I work?

Expert: A medical hemostat is very helpful for that.

Beginner: What about wrenches and detailed work?

Expert: I suggest a hex wrench and a torque wrench. And a magnifier helps with detailed work.

Template 2. Dialogue Between Two Students (Emma + Alex)

Emma: I've decided to start repairing electronics. Where should I begin?

Alex: Begin with the basics: a Phillips screwdriver and needlenose pliers.

Emma: Are Phillips screws really that common?

Alex: Yes, they are the most common in electronics, but sometimes you'll see slotted ones.

Emma: So what do I need for slotted screws?

Alex: A flathead screwdriver. And don't forget a hammer — it's useful too.

Emma: What tools do I need for working with wires?

Alex: You'll need diagonal cutters, a wire stripper, and electrical tape.

Emma: Is there anything that helps hold the wires steady?

Alex: Yes, a medical hemostat is perfect for holding wires.

Emma: What about wrenches and detailed work?

Alex: I suggest a hex wrench and a torque wrench. And a magnifier is great for detailed work.

Template 3. Dialogue Between Two Beginners (Max + Lily)

Max: I want to fix my old radio. What tools do I need?

Lily: Start with a Phillips screwdriver and needlenose pliers.

Max: Why a Phillips screwdriver?

Lily: Because most screws in electronics are Phillips. But sometimes you'll see slotted screws too.

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Max: What do I need for those?

Lily: A flathead screwdriver. A hammer is also useful to have.

Max: What about wires?

Lily: You'll need diagonal cutters, a wire stripper, and electrical tape.

Max: How do I hold the wires while soldering?

Lily: Use a medical hemostat — it holds wires perfectly.

Max: Anything else?

Lily: Yes, a hex wrench, a torque wrench, and a magnifier for detailed work.

Useful Phrases for Dialogue Templates

English	Russian
I want to start repairing electronics.	Я хочу начать ремонтировать электронику.
What tools should I buy first?	Какие инструменты купить в первую очередь?
Where should I begin?	С чего мне начать?
Start with a Phillips screwdriver and needlenose pliers.	Начните с крестовой отвертки и плоскогубцев.
Begin with the basics.	Начните с основ.
Why those two?	Почему именно эти два?
Because Phillips screws are the most common in electronics.	Потому что крестовые винты наиболее распространены в электронике.
Needlenose pliers are great for holding small parts.	Плоскогубцы отлично подходят для удержания мелких деталей.
What if I find slotted screws?	А если я найду шлицевые винты?
Then you'll need a flathead screwdriver.	Тогда вам понадобится плоская отвертка.
A hammer is also useful.	Молоток тоже полезен.
Don't forget a hammer.	Не забудьте про молоток.
What about working with wires?	А что насчёт работы с проводами?
You'll need diagonal cutters, a wire stripper, and electrical tape.	Вам понадобятся бокорезы, стриппер для проводов и изолента.
How can I hold the wires while I work?	Как удерживать провода во время работы?
A medical hemostat is very helpful for that.	Медицинский зажим очень помогает для этого.

Is there anything that helps hold the wires steady?	Есть ли что-то, что помогает удерживать провода?
What about wrenches and detailed work?	А что насчёт ключей и детальной работы?
I suggest a hex wrench and a torque wrench.	Я рекомендую шестигранный ключ и динамометрический ключ.
A magnifier helps with detailed work.	Лупа помогает при детальной работе.
I want to fix my old radio.	Я хочу починить своё старое радио.
Most screws in electronics are Phillips.	Большинство винтов в электронике — крестовые.
Sometimes you'll see slotted screws too.	Иногда вы также встретите шлицевые винты.
Use a medical hemostat — it holds wires perfectly.	Используйте медицинский зажим — он отлично держит провода.
Anything else?	Что-то ещё?

Exercise 13: Instructions for Repairing Electronics

Word Bank: torque, slotted, hemostat, Phillips, wire stripper, hammer, needlenose, flathead, hex, diagonal cutters, electrical tape, Phillips

Step 1. Gather all necessary tools before you begin the repair.

Step 2. Start with a (1) _____ screwdriver and (2) _____ pliers.

Step 3. Remove the screws from the device. Most of them will be (3) _____.

Step 4. If you find (4) _____ screws, use a (5) _____ screwdriver.

Step 5. If a component is stuck, gently tap it with a (6) _____.

Step 6. Cut the damaged wires using (7) _____.

Step 7. Strip the wire ends with a (8) _____.

Step 8. Wrap the exposed wires with (9) _____ to insulate them.

Step 9. Hold the wires steady with a medical (10) _____ while soldering.

Step 10. Use a (11) _____ wrench for hex bolts and a (12) _____ wrench for precise tightening.

Step 11. For detailed work, use a magnifier to see the small parts.

Step 12. Reassemble the device, test it, and make sure everything works properly.

Exercise 14: Report on Using Electronics Repair Tools

Word Bank: magnifier, slotted, hemostat, Phillips, torque, hammer, needlenose, wire stripper, flathead, hex, diagonal cutters, electrical tape

This report describes the tools I used during an electronics repair.

First, I used a (1) _____ screwdriver to open the device, because most screws in electronics are Phillips.

For the (2) _____ screws, I used a (3) _____ screwdriver instead.

To hold small parts, I used (4) _____ pliers.

When a component was stuck, I gently tapped it with a (5) _____.

For cutting wires, I used (6) _____.

To remove insulation, I used a (7) _____.

To insulate the exposed wires, I wrapped them with (8) _____.

While soldering, I held the wires steady with a medical (9) _____.

For hex bolts, I used a (10) _____ wrench.

For precise tightening, I used a (11) _____ wrench.

For detailed work, I used a (12) _____.

In conclusion, all these tools were necessary for a successful repair.