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DEPARTMENT OF EDUCATION

Computer Systems Servicing

Computer Systems Servicing
Quarter 1 – Module 12: Computer assembly procedures

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Computer Systems Servicing

Quarter 1

Self-Learning Module 12

Computer assembly procedures

Introductory Message

For the Facilitator:

Welcome to the **Computer Systems Servicing** Self-Learning Module on **Computer assembly procedures**!

This Self-Learning Module was collaboratively designed, developed and reviewed by educators from the Schools Division Office of Pasig City headed by its Officer-in-Charge Schools Division Superintendent, Ma. Evalou Concepcion A. Agustin, in partnership with the City Government of Pasig through its mayor, Honorable Victor Ma. Regis N. Sotto. The writers utilized the standards set by the K to 12 Curriculum using the Most Essential Learning Competencies (MELC) in developing this instructional resource.

This learning material hopes to engage the learners in guided and independent learning activities at their own pace and time. Further, this also aims to help learners acquire the needed 21st century skills especially the 5 Cs, namely: Communication, Collaboration, Creativity, Critical Thinking, and Character while taking into consideration their needs and circumstances.

In addition to the material in the main text, you will also see this box in the body of the module:

Notes to the Teacher

This contains helpful tips or strategies that will help you in guiding the learners.

As a facilitator you are expected to orient the learners on how to use this module. You also need to keep track of the learners' progress while allowing them to manage their own learning. Moreover, you are expected to encourage and assist the learners as they do the tasks included in the module.

For the Learner:

Welcome to the **Computer Systems Servicing** Self-Learning Module on **Computer assembly procedures**!

This module was designed to provide you with fun and meaningful opportunities for guided and independent learning at your own pace and time. You will be enabled to process the contents of the learning material while being an active learner.

This module has the following parts and corresponding icons:

Expectations - This points to the set of knowledge and skills that you will learn after completing the module.

Pre-test - This measures your prior knowledge about the lesson at hand.

Recap - This part of the module provides a review of concepts and skills that you already know about a previous lesson.

Lesson - This section discusses the topic in the module.

Activities - This is a set of activities that you need to perform.

Wrap-Up - This section summarizes the concepts and application of the lesson.

Valuing - This part integrates a desirable moral value in the lesson.

Post-test - This measure how much you have learned from the entire module.

EXPECTATIONS

After completing this lesson, you should be able to:

1. Identify the procedures in assembling a computer.
2. Demonstrate the proper procedure in assembling a computer.
3. Value the importance of assembling a computer.

PRE-TEST

Direction: Read each statement carefully. Write the letter of the correct answer.

_____1. What is the best indicator that you have successfully assembled a computer?

a. There is a beeping sound as you turn it on.
b. The PC is able to boot up to the BIOS.
c. You are able to close the system case cover.
d. All wires are connected and the lights blink when turned on.

_____2. After removing the central processing unit, add thermal paste on the pins before putting it back to the CPU socket.

a. True
b. False
c. Maybe
d. None of the above

_____3. After disassembling a computer, what do you usually do before re-assemble the components again?

a. Let them dry through the air conditioner or at room temperature
b. Use a well sanitized moist cloth and wipe the components neatly
c. Note the specifications
d. Put them away in a clean and secure box

_____4. Before assembling the system unit of computer, clean the system case and the components with a brush.

a. True
b. False

c. Maybe
d. None of the above

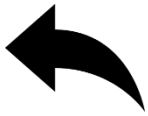
_____5. When this component being installed in the slot, you should push these down properly to align it to the slots until you hear a click when the tabs lock.

a. Power Supply Unit

b. CPU Fan

c. Central Processing Unit

d. Random Access Memory



RECAP

Direction: Fill-in the blanks of the steps to disassemble a system unit. Choose the answer from the box.

System unit	Components	PPE	Computer	Cables	Tools

1. Prepare the _____ and materials.

2. Before opening the _____, turn off the computer and unplug the AVR.

3. Remove all the _____ or connectors from the system unit back panel.

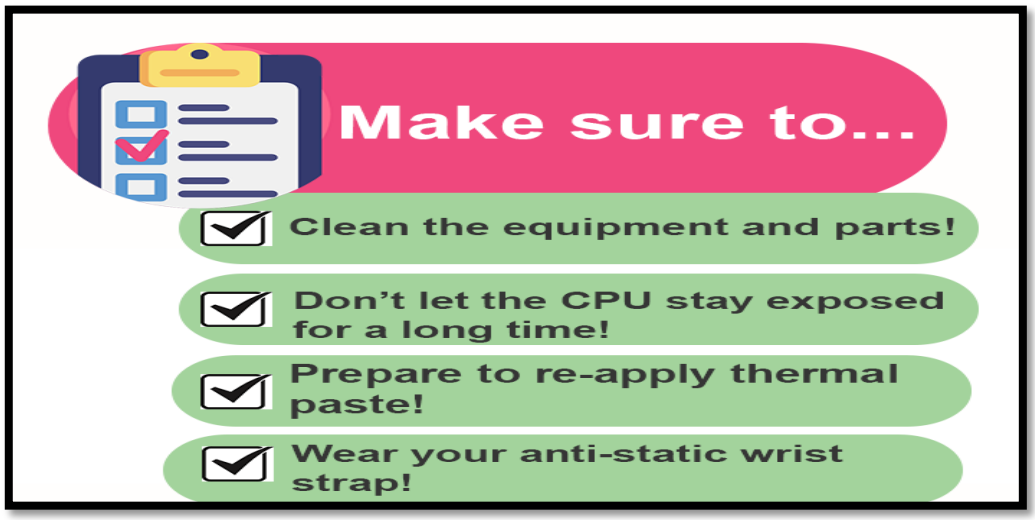
4. Wear anti-static wrist strap and other _____.

5. Remove the _____ inside the system unit, according to the layout of the system case.

LESSON

Preparing for Assembly

Before going into the assembly proper, you will have to prepare all the materials that you will need.



https://www.e-tesda.gov.ph/pluginfile.php/115508/mod_book/chapter/1797/Assembly%20Preparing.png

Steps to assemble a system unit:

1. Clean the components and parts of the system unit before assembly.
2. Create an inventory of the specifications of components inside the system unit.
3. Wear anti-static wrist strap and other PPE.
4. Assemble the components inside the system unit, according to the layout of the system case.
    a) Motherboard
    b) Processor (CPU)
    c) Heat sink
    d) Front panel connectors
    e) Expansion cards
    f) Hard disk drive
    g) Floppy disk drive
    h) Optical disk drive
    i) Memory (RAM)
    j) Power supply unit
    k) Power cables (24 pins, 4pins)
    l) Data cables (PATA/SATA)
5. Attach the System cover properly.
6. For testing, turn on the computer to check for any errors.

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https://images-na.ssl-images-amazon.com/images/I/51xX8nDVCML._AC_SY400_.jpg
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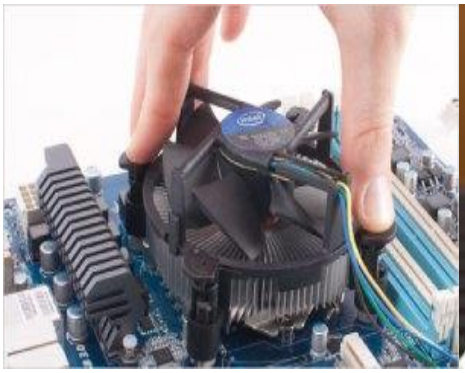

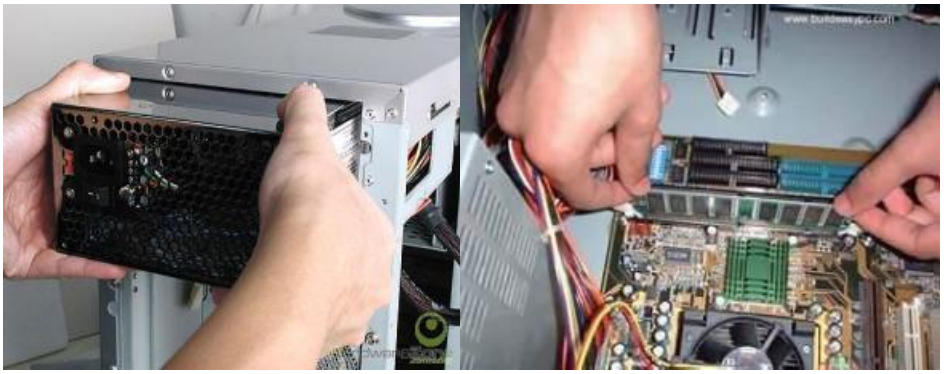

https://xhosamaintenance.files.wordpress.com/2012/02/

ACTIVITIES

Direction: Arrange the following sequence of steps to assemble a system unit. Write numbers 1-5 on the blank line.

_____ Assemble the components inside the system unit, according to the layout of the system case.

_____ Clean the components and parts of the system unit before assembly.

_____ Wear anti-static wrist strap and other PPE.

_____ For testing, turn on the computer to check for any errors.

_____ Create an inventory of the specifications of components inside the system unit.

Performance Checklist

Check the following if you've met the criteria:

CRITERIA: Did you…?	YES	NO
1. Clean the components and parts of the system unit before assembly?		
2. Create an inventory of the specifications of components inside the system unit?		

3.Wear anti-static wrist strap and other PPE?		
4. Assemble the components inside the system unit, according to the layout of the system case:		
a. Motherboard?		
b. Processor (CPU)?		
c. Heat sink?		
d. Front panel connectors?		
e. Expansion cards?		
f. Hard Disk Drive?		
g. Floppy disk drive?		
h. Optical Drive?		
i. RAM (Random Access Memory)?		
j. Power Supply unit?		
k. Power cables (24 pins, 4pins)?		
l. Data cables (PATA/SATA)?		
5. Attach the System cover properly?		
6. For testing, turn on the computer to check for any errors?		

WRAP-UP

Observe proper procedures in handling computer parts and installation of hardware to ensure that you are safe from any harm that the computer can cause you. Also, must ensure that the system is safe from any destruction or harm as well. For example, your hands must be completely dry before you must touch any metal or chips in the motherboard as you assemble the insides of CPU.

VALUING

Direction**:** Read and answer the following questions carefully in two to three sentences each number.

1. What are the importance of assembly of system unit?

_____
_____
_____

2. Cite a situation in which you can apply the knowledge of assembly of system unit.

_____
_____
_____

POST-TEST

Direction: Fill-in the blanks of the steps to assemble a system unit. Choose the answer from the box.

Testing	Assemble	Computer	Anti-static	Cover	Specifications

1. Create an inventory of the _____ of components inside the system unit.
2. Wear _____ wrist strap and other PPE.
3. _____ the components inside the system unit, according to the layout of the system case.
4. Attach the system _____ properly.
5. For _____, turn on the computer to check for any errors.

KEY TO CORRECTION

Pre-Test:	Recap:
1. B	1. Tools
2. A	2. System unit
3. C	3. Cables
4. A	4. PPE
5. D	5. Components
Activity:	Post-Test:
1. 4	1. Specification
2. 1	2. Anti-static
3. 3	3. Assemble
4. 5	4. Cover
5. 2	5. Testing

References

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