Lab - Remote Technician – Fix a Hardware Problem (Instructor Version)

**Instructor Note**: Red font color or gray highlights indicate text that appears in the instructor copy only.

1. Introduction

In this lab, you will gather data from the customer, and then instruct the customer to fix a computer that does not boot.

In the work order below, document the customer’s problem and any resources you used to resolve the issue. Using professionalism, how would you communicate with the client? Create a sample script describing how you are troubleshooting the problem in client-friendly terms.

**Instructor Note**: In this lab, one student will play the role of a customer, while another student plays the role of a technician. The goal is to demonstrate the special skills needed to help a customer fix a computer remotely. Begin this first remote technician lab with a demonstration so that students can understand how these types of labs are conducted:

* + - 1. Select two students who are willing to participate and have good troubleshooting skills.
      2. Position the students back-to-back so that the students cannot see each other or the other student’s computer.
      3. The student playing the role of the customer must behave like an inexperienced user.
      4. During the demonstration, ask the class questions about the troubleshooting procedure. For example, “Is there a better way to phrase that question?”, “Is the student technician skipping any steps?”, or “What would you do differently?”.
      5. If at any time the students are unable to proceed, allow the student customer to make suggestions for the student technician. Allow the other students to make suggestions, as well.
      6. After a successful demonstration of the process, send each team of students to their computers to complete the lab. The students in each team can reverse the roles of customer and technician in later labs so that all students experience both sides of the exercise.

**Instructor Note**: Make one or more of the following hardware changes to each lab computer prior to class, depending on time limits:

* Switch the mouse and keyboard connections (PS2) where hardware is available.
* Unplug the power cable from the optical drive.
* Unplug the data cable for the hard drive from the motherboard.
* Eject the memory completely from the memory bank(s) and place at the bottom of the case.
* Unplug the front panel power on switch cable from the motherboard.

# Work Order

| Student Technician Sheet | |
| --- | --- |
| **Company Name:** | JH Travel, Inc. |
| **Contact:** | Dan Handy |
| **Company Address:** | 204 N. Main Street |
| **Company Phone:** | 1-866-555-0998 |

| *Generating a New Ticket* | | | | | |
| --- | --- | --- | --- | --- | --- |
| **Category:** | Hardware | **Closure Code:** | N/A | **Status:** | Open |
| **Type:** | N/A | **Escalated:** | Yes | **Pending:** | N/A |
| **Item:** | N/A |  | **Pending Until Date:** | | N/A |
| **Business Impacting? (Yes / No)** | | Yes |  | | |
| **Summary** | The computer will not turn on or the computer beeps constantly. | | | | |
| **Case ID#:** | 47 | | **Connection Type:** | N/A | |
| **Priority:** | 2 | | **Environment:** | N/A | |
| **User Platform:** | Windows 10 | |  | | |
| Blank row. No information. | | | | | |
| Blank row. No information. | | | | | |

# Problem Description:

Type your answers here.

Computer will not boot. Customer does not know the manufacturer of the BIOS. Customer cannot identify error from beep sequence. Customer did not hear any strange sounds from the computer. Customer does not smell smoke or burning electronics.

# Problem Solution:

Type your answers here.

Verified external cable connections. Mouse and keyboard connections were reversed (if applicable). Connections were corrected. Internal hardware and cable connections were verified. RAM was not installed. Customer installed RAM. Optical drive power cable was disconnected. Optical drive power cable was reconnected. Hard drive data cable was disconnected from the motherboard. Hard drive data cable was reconnected to the motherboard. Computer displayed “Non-system disk or disk error” upon reboot. Computer was shut down and rebooted to confirm the solution. Front panel power on switch cable was unplugged from the motherboard. Front panel power on switch cable was reconnected to the motherboard.

# Your Reponse to the Customer

Type your answers here.

Answers will vary. An example is provided below.

Dear Dan Handy,

Thank you for contacting us.

You informed us that your computer does not turn on after opening the case and reviewing the hardware inside the case. No new hardware was installed.

Please check for any loose connections, such as front panel power on switch cable to the motherboard and power cable for any internal hardware, like optical and hard drives.

Please verify that all the data cable are connected for all the drives.

Before closing the case, verify that all the RAM memory modules are installed properly.

After closing the case, please power on the computer and remove any non-system disk from the optical drive as necessary.

I hope this was helpful. If the issue continues, please contact the support team.

Thank you,

Support team

# Any Technical Resources Used

Type your answers here.

Answers will vary.

1. Student Customer Sheet

Use the contact information and problem description below to report the following information to a level-two technician:

**Contact Information**

Company Name: JH Travel, Inc.

Contact: Dan Handy

Company Address: 204 N. Main Street

Company Phone: 1-866-555-0998

**Problem Description**

I work with cars all the time and I know how they work, but I do not know how my computer works. This morning it was pretty slow because I guess more and more people are using those internet travel sites. So, after my morning coffee, I decided to figure out what makes my computer work. I opened the case and just started looking at the different things inside. When I put everything back together, everything seemed to fit, and I didn’t see any leftover parts. Now it does not work at all. It beeps at me all the time.

**Note**: After you have given the level-two tech the problem description, use the Additional Information to answer any follow-up questions the technician may ask.

**Additional Information**

* Windows 10
* The computer has no new hardware.
* The computer has not been moved recently.
* Except for the beeping, I did not hear any other strange sounds from the computer.
* I do not smell any electronics burning or see any smoke.
* The computer looks the same as it did yesterday.

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