## **Your Performance**

Your Score: 3 of 3 (100%) Pass Status: Pass Elapsed Time: 2 minutes 17 seconds Required Score: 100%

## **Task Summary**

## Actions you were required to perform:

- Swap out the bad hard drive
- ✓ Connect the new hard driveHide Details
  - Connect the Data cable to the Data port on the new hard drive
  - Connect the Sata Power to the Power port
- Connect the data cable for drive 2 to the motherboard

## **Explanation**

Complete this lab as follows:

- 1. Verify the problem as follows:
  - a. Click the **power** button on the computer to start the computer.
  - b. As the BIOS loads, press the **Delete** key. How many drives have been detected?
  - c. From the top navigation tabs, select **Bench** to switch to the Bench view to verify the hardware configuration of the drives.
  - d. Click the **power** button to turn the computer off.
- 2. Troubleshoot the hard drives and cables as follows:
  - a. Above the computer, select **Motherboard** to switch to the motherboard view for the computer.
  - b. Select the **SATA** cable connector on a hard drive.
  - c. Under Selected Component, make sure the cable connectors are correctly connected to the hard drive and the motherboard.
  - d. Repeat steps 2b–2c for each hard drive.
  - e. Select a *power connector* on a hard drive.
  - f. Under Selected Component, make sure the **power connectors** are connected correctly to the hard drives.
  - g. Repeat steps 2e–2f for each hard drive.
  - h. Above the computer, select **Front** to switch to the front view of the computer.
  - i. Click the **power** button on the system case to start the computer.
  - j. As the BIOS loads, press the **Delete** key.
    - How many drives have been detected?
  - k. From the top navigation tabs, select **Bench** to switch to the Bench view to to troubleshoot the final drive.
  - l. Click the **power** button to turn the computer off.
  - m. On the Shelf, expand PC Tools.
  - n. Drag the **Power Supply Tester** from the Shelf to the Workspace area.
  - o. Above the computer, select **Motherboard** to switch to the motherboard view.
  - p. Drag the **20+4 pin power supply connector** from the motherboard to the ATX Main port on Power Supply Tester.
  - q. Drag the **15-pin SATA power connector** from the hard drive to the SATA port on the Power Supply Tester.
    - What do the lights and values on the Power Supply Tester indicate?
  - r. Drag the **15-pin SATA power connector** from the Power Supply Tester to the hard drive connector.
  - s. Drag the second **15-pin SATA power connector** from the second hard drive to the SATA port on the Power Supply Tester.
    - What do the lights and values on the Power Supply Tester indicate?
  - t. Drag the **20+4 pin power supply connector** from the Power Supply Tester to the motherboard connector.
  - u. Drag the **15-pin SATA power connector** from the Power Supply Tester to the hard drive connector.

3/16/2020 Simulation Viewer

- 3. Connect a known good SATA cable as follows:
  - a. Drag the **SATA connector** from the bottom hard drive to the Workspace to disconnect it.
  - b. Drag the other end of the **SATA connector** from the motherboard to the Workspace.
  - c. On the Shelf, expand Cables.
  - d. Select the SATA cable.
  - e. Under Selected Component, drag a **SATA connector** to a SATA port on the motherboard.
  - f. Under Selected Component, drag the unconnected SATA connector to the connector on the hard drive.
  - g. Above the computer, select **Front** to switch to the front view for the computer.
  - h. Click the **power** button on the computer to start the it.
  - i. As the BIOS loads, press the **Delete** key. In the BIOS, what is the status of the final hard drive?
- 4. Replace the hard drive as follows:
  - a. From the top navigation tabs, select **Bench** to switch to the Bench view.
  - b. Click the **power** button to turn the computer off.
  - c. Above the computer, select **Motherboard** to switch to the motherboard view.
  - d. Disconnect the **SATA power cable** from the hard drive.
  - e. Disconnect the SATA data cable from the hard drive.
  - f. Drag the **hard drive** to the Shelf.
  - g. Expand Hard Drives.
  - h. Drag the **hard drive** to the open 3.5 inch bay.
  - i. Under Partial Connections for the computer, drag the unconnected SATA cable to the connector on the
  - j. Under Partial Connections for the computer, select the **power supply**.
  - k. Under Selected Component, drag the unconnected **SATA power cable** to the connector on the hard drive.
  - l. Above the computer, select **Front** to switch to the front view for the computer.
  - m. Click the **power** button on the computer to start the computer.
  - n. As the BIOS loads, press the **Delete** key. In the BIOS, what is the status of the final hard drive?
  - o. Click Exit to restart.
  - p. After Windows loads, right-click Start and select Disk Management.
  - q. Click **OK**.
  - r. Verify that Windows recognizes all the disks.