Commercial

1. No power - PDTTPZ141

1. **<u>Symptom check</u>**: Here we will need to verify the activity of LED lights in keyboards, fan sounds, beep sounds and, in the LCD, as well. If there is any activity, we need to continue troubleshooting for the "No POST" issue. If there is no activity, proceed to the next checklist.
   <u>Questions:</u>
   - Do you see any activity on the display?
   - Do you hear any sound or noise coming from the machine?
   - Do you see any LED flashing on the keyboard or on the power button?
2. **<u>Known issue check</u>**: Verify whether there is any ongoing issue for the machine type in the "Tips Viewer" column.
3. **<u>Power reset</u>**: The next checklist suggests us to do a power reset the PC with only the original configuration. When suggesting the customer to do a power reset, make sure they're not using any other external devices such as hard drive, keyboard, and mouse (If laptop).
   <u>Instruction to provide:</u>
   Please unplug all the external devices such as keyboard, mouse, hard drive from the computer and (press the power button for 15seconds/ use the paperclip to press and hold the reset hole for 5 seconds). Once the system is off, turn it on again by attaching only the power button.
4. **<u>Power button and Novo button check</u>**: Here we need to verify whether there is any damage on the power button and novo button. You can ask the customer to send you a picture or you can use the Rescue Lens feature. If there is any damage, we need to proceed with the CID process.
   <u>Questions</u>:
   - Could you send me the picture of the Power Button and (Novo Button)?
   - I need to verify the power button. Let's use the recuse lens to review them quickly.
5. **<u>AC Adaptor check</u>**: Our 5th checklist is to verify whether the customer is using the original and the compatible AC Adapter and ensure all the connectors are firmly attached. There are times, some customers will use 3rd party adapter's which may not transfer sufficient power to charge the battery. If they don't have the original adapter/cable, ask the customer to find it or purchase a new one. If they have the original cable, verify whether the adapter and the power cables are damaged. If there is a damage, follow the CID process and dispatch the parts accordingly. For the best result, use the Rescue Lens to verify the damage.
   <u>Questions</u>:
   - Are you using the original power adapter and the cable?
   - Could you check whether all the connecters are firmly attached?
6. **<u>AC Adapter swap test</u>**: In this step, we need to suggest the customer to try a different AC adapter. This step is to isolate whether the problem is with laptop or the adapter. If there is none available, do not force the customer.
   <u>Questions</u>: Do you have any other AC adapter that we can try with your laptop?
7. **<u>Wall outlet check</u>**: Here, you need to suggest the customer to try a different power outlet. This step is to isolate whether the problem is with the adapter or the power outlet.
8. **<u>DC in and USB-C port check</u>**: Now, we need to verify whether there is any damage on the DC-in/USB-C port. For the best result, use the Rescue Lens to verify the damage.

   <u>Solutions:</u>
   i. If there is any cable/adapter damage found, follow the replacement process based on warranty.

2. A few keys (not function keys) not working - PDTTPZ921

1. **Liquid Spill check**: Our 1st checklist suggests checking whether there is any liquid spillage on the keyboard. Using Rescue Lens is the best approach to confirm this. If it has only recently occurred, suggest that power be turned off, the AC adapter be unplugged, and the battery be removed. For safety reasons, suggest the customer not to use it until it is entirely dry.
    *   If yes, follow the CID process and close the case.
    *   If no, verify whether the function and Ctrl key swapping is disabled in system settings.
2. **Key cap check**: Verify whether the key caps are off. Using Rescue Lens is the best approach to confirm this.
    *   If yes, follow the CID process issue and close the case.
    *   If no, check whether the issue is in BIOS and CMD windows. If it doesn't work in BIOS & CMD, possibly an OS problem. Help the customer to refresh the PC.
    *   If a wrong character is displayed, check the keyboard language and region settings.
3. **Foreign object and Struck key**: Here, we need to check whether there is foreign object fallen and struck in the keyboard.
    *   If yes, suggest the customer to clean the keyboard using the blower/hair dryer or hold the machine upside down.
    *   If no, suggest the customer to use the onscreen keyboard. If still not working, we will dispatch the parts.

3. Battery cannot be charged - PDTTPZ811

1. **Battery re-attach & hardware reset**: Before we start, suggest the customer to remove all the external devices such as hard drive, keyboard, mouse and reattach the battery.
    Instructions to provide:
    Please unplug all the external devices such as keyboard, mouse, hard drive from the computer. Remove the AC adapter and battery. (For machine type with reset hole - use the paperclip to press and hold the reset hole for 5 seconds). Once the machine is off, attach the adapter and battery, and turn on the computer.
2. **Battery capacity and related system status**: Now, we need to verify the battery icon in the system tray when the power is connected. Customer may not know to describe icon. Make sure to utilize the Rescue Lens and identify the status. While doing so, verify all the cables are firmly attached and charge the machine for 6 hours to see if it charges.
    Points to note:
    *   If machine not charging above 95% - Once the battery is fully charged to 100%, it may not charge again to 100%, This is working as designed, and is intended to extend the physical life of the battery by preventing short recharge scenarios.
    *   If machine is at 0% charge – Please connect the computer to the charger and charge it for 6 hours completely. The battery may be in over discharge mode, which requires some time to activate it.
    If machine is in 0% even after 6 hours of charge, proceed to next step.
3. **Tool check**: Here we need to verify the battery status, battery charge threshold limit using the Lenovo Vantage application.
    Instructions to provide:
    Please open the Lenovo Vantage application, go to "Device" and "Power", you will see "Battery status". Could you please tell me the battery status?
    Also, do you see the "Battery charge threshold" turned on?

    Solutions:
    i.   Run a Lenovo Diagnostic test, if report is failure, follow the replacement process based on warranty.

4. AC Adapter faulty - PDTTPZB31

1. Confirm AC adapter: In our 1st checklist, we will verify whether the adapter is plugged directly into the computer or a docking station. If connected to a docking station, follow the troubleshooting for dock. If connected directly to the power source, verify whether customer is using the compatible power adapter.
    Question:
    *   Is the power adapter connected directly to the power source or connected with the dock?

2. <u>Power cord and electricity supply check</u>: Here we need to verify whether the power cord is connected firmly with the adapter. Also, look for CID issues and do an adapter swap test.
   Questions:
   - Are you using the original power adapter and the cable?
   - Could you check whether all the connecters are firmly attached?

   Points to note:
   - If there is a CID issue, follow the CID process.
   - If there is a problem with power cable without CID, follow the replacement procedure.
3. <u>Port check</u>: On our 3rd checklist, we need to verify the ports, plugs and connectors for the CID issue. Use the Rescue lens for better result.
   - If there is damage identified, follow the CID process.
4. <u>Cross check</u>: On the 4th checklist, we need to verify whether customer is using the appropriate adapter in the respective port. Do a cross check with other adapter and power cords if available.

   Solution:
   i. If the other power adapter or the power cable works, follow the replacement procedure.
   ii. If any CID is identified, make sure to follow CID replacement procedure and if there are any additional fees inform the customer about the same.

5. Power on but No POST (No Display, No video) + No Beep Sound - PDTTPZ112

1. *<u>Config check and power reset</u>*: For the 1st check list, suggest the customer to remove all the external devices such as hard drive, keyboard, mouse and reattach the battery. Random BIOS issue can be fixed by power reset.
   Instructions to provide:
   Please unplug all the external devices such as keyboard, mouse, hard drive from the computer, remove the battery and (press the power button for 15seconds/ use the paperclip to press and hold the reset hole for 5 seconds). Once the system is off, turn it on again by attaching only the power button.
2. <u>Power indicator</u>: Here we will need to verify the activity of power indicator when you plug the adapter again such as power indicator on or blinking. If there is no such activity, initiate the troubleshooting for the "No Power" issue.
3. <u>Power button</u>: Here we will ask the customer to press the power button and see if there is any activity of LED lights in keyboards, fan sounds, and, in the LCD. If there is no activity, we need to continue troubleshooting for the "No Power" issue.
   Questions:
   - Do you see any activity on the display?
   - Do you hear any sound or noise coming from the machine?
   - Do you see any LED flashing on the keyboard or on the power button?

   Solution:
   i. If the above checklist, didn't fix the issue, there are possibilities, it could be a dim display issue because of the backlight failure. User can verify this by using a flashlight on the LCD screen. If the customer can see the content, continue troubleshooting for "Dim Display" issue
   ii. Suggest the customer to change the LCD lid position, there could be possibilities for LCD cable issue
   iii. Do an LCD self-test if available
   iv. Connect an external monitor to verify and isolate the problem
   v. If none fixes the issue, follow the replacement procedure for LCD.

6. USB device is not recognized when attached - PDTTPZB21

1. <u>USB device driver and power</u>: Our 1st checklist, suggest verifying the power and the drivers for the USB device/ports.
   Instructions:
   - Could you check whether there any updates available for Windows?

- Could you check whether the USB driver is up to date in Device Manager? (Make sure to provide the steps)

2. <u>USB device functionality</u>: Here we need to verify whether the USB device is working when connected with a different device to isolate the problem. If the USB device doesn't work with different machine, suggest the customer to contact the USB device vendor.
   Questions:
   - Could you connect the USB device to a different computer and see whether it works?

3. <u>USB port functionality</u>: Now, we need to check the USB port with a different USB device. If a different USB device works, suggest the customer to contact the USB device vendor.

Solution:

i. If none works, look for CID issue. If no CID identified, suggest the customer to restart the device
ii. Try a different USB port, if none works, enable USB in BIOS settings
iii. If there is an error pop up message, change USB 3.0 settings in BIOS
iv. If none works, follow the replacement procedure.

Consumer

1. No power - PDTIPZ141

1. <u>Power reset</u>: The 1st checklist suggests us to do a power reset the PC with only the original configuration. When suggesting the customer to do a power reset, make sure they're not using any other external devices such as hard drive, keyboard, and mouse (If laptop).
   Instruction to provide:
   Please unplug all the external devices such as keyboard, mouse, hard drive from the computer and (press the power button for 15seconds/ use the paperclip to press and hold the reset hole for 5 seconds). Once the system is off, turn it on again by attaching only the power button.

2. <u>Power indicator and Novo button check</u>: Here we will need to verify the activity of power indicator when plugging the adapter again such as power indicator on or blinking. Also, press the Novo button to see if there is any activity. If it works with the Novo button, then follow the replacement procedure for the power button.
   Questions:
   - Do you see any activity on the display?
   - Do you hear any sound or noise coming from the machine?
   - Do you see any LED flashing on the keyboard or on the power button?

Solutions:

i. If none works, verify whether the customer is using the original and the compatible AC Adapter
ii. Ensure all the connectors are firmly attached
iii. There are times, some customers will use 3rd party adapter's which may not transfer sufficient power to charge the battery. If they don't have the original adapter/cable, ask the customer to find it or purchase a new one. If they have the original cable, verify whether the adapter and the power cables are damaged
iv. If the different power adapter or the power cable works, follow the replacement procedure.
v. If any CID is identified, make sure to follow CID replacement procedure and if there are any additional fees inform the customer about the same.
vi. For the best result, use the Rescue Lens to verify the damage

2. A few keys (not function keys) not working. Wrong character displayed; keys wrongly mapped - PDTIPZ921

1. <u>BIOS or CMD windows checking</u>: Our 1st checklist suggests verifying whether the issue occurs in BIOS and CMD windows.
   Points to note:
   - If it doesn't work, possibly an OS problem. Help the customer to refresh the PC.
   - If a wrong character is displayed, check the keyboard language and region settings.
2. <u>Liquid Spill check</u>: Now, we need to check whether there is any liquid spillage on the keyboard. Using Rescue Lens is the best approach to confirm this. If it has only recently occurred, suggest that power be turned off, the AC adapter be unplugged, and the battery be removed. For safety reasons, suggest the customer not to use it until it is entirely dry.
   Points to note:
   - If yes, follow the CID process and close the case.
   - If no, verify whether the function and Ctrl key swapping is disabled in system settings.
3. Key cap check: Verify whether the key caps are off. Using Rescue Lens is the best approach to confirm this.
   - If yes, follow the CID process issue and close the case.
   - If no, check whether the issue is in BIOS and CMD windows.
4. <u>Foreign object and Struck key</u>: Here, we need to check whether there is foreign object fallen and struck in the keyboard.
   - If yes, suggest the customer to clean the keyboard using the blower/hair dryer or hold the machine upside down.
   - If no, suggest the customer to use the onscreen keyboard. If still not working, we will dispatch the parts.

3. Power on but No Post (no display, No video) + no beep sound - PDTIPZ112

1. <u>Config check and power reset</u>: For the 1st check list, suggest the customer to remove all the external devices such as hard drive, keyboard, mouse and reattach the battery. Random BIOS issue can be fixed by power reset.
   Instructions to provide:
   Please unplug all the external devices such as keyboard, mouse, hard drive from the computer, remove the battery and (press the power button for 15seconds/ use the paperclip to press and hold the reset hole for 5 seconds). Once the system is off, turn it on again by attaching only the power button.
2. <u>Power indicator</u>: Here we will need to verify the activity of power indicator when plugging the adapter again such as power indicator on or blinking. If there is no such activity, initiate the troubleshooting for the "No Power" issue.
3. <u>Power button check</u>: Here we will ask the customer to press the power button and see if there is any activity of LED lights in keyboards, fan sounds, and, in the LCD. If there is no activity, we need to continue troubleshooting for the "No Power" issue.
   Questions:
   - Do you see any activity on the display?
   - Do you hear any sound or noise coming from the machine?
   - Do you see any LED flashing on the keyboard or on the power button?

   Solution:
   i. If the above checklist, didn't fix the issue, there are possibilities, it could be a dim display issue because of the backlight failure. User can verify this by using a flashlight on the LCD screen. If the customer can see the content, continue troubleshooting for "Dim Display" issue
   ii. Suggest the customer to change the LCD lid position, there could be possibilities for LCD cable issue
   iii. Do an LCD self-test if available
   iv. Connect an external monitor to verify and isolate the problem
   v. If none fixes the issue, follow the replacement procedure for LCD.

4. AC adaptor faulty - PDTIPZB31

1. <u>Power cord and electricity supply check</u>: Here we need to verify whether the power cord is connected firmly with the adapter. Also, look for CID issues and do an adapter swap test.
   Questions:
   - Are you using the original power adapter and the cable?
   - Could you check whether all the connecters are firmly attached?
   Points to note:
   - If there is a CID issue, follow the CID process.
   - If there is a problem with power cable without CID, follow the replacement procedure.
2. <u>Port check</u>: On our 2nd checklist, we need to verify the ports, plugs and connectors for the CID issue. Use the Rescue lens for better result.
   - If there is damage identified, follow the CID process.
3. <u>Cross check</u>: On the 3rd checklist, we need to verify whether customer is using the appropriate adapter in the respective port. Do a cross check with other adapter and power cords if available.

   <u>Solution</u>:
   i.   If the other power adapter or the power cable works, follow the replacement procedure.
   ii.   If any CID is identified, make sure to follow CID replacement procedure and if there are any additional fees inform the customer about the same.

5. Battery cannot be charged, or Battery not detected - PDTIPZ811

1. <u>AC adapter and power supply check</u>: In our 1st checklist, we need to verify the battery icon in the system tray when the power is connected. Customer may not know to describe icon. Make sure to utilize the Rescue Lens and identify the status.
   Points to note:
   - If the status shows "AC not plugged in" or "Low battery"
     - Verify all the cables are firmly attached
     - Try a different power adapter and cable
   - If the status shows "Battery not detected", reattach the battery and do a system reset.
     Instructions to provide:
     Please unplug all the external devices such as keyboard, mouse, hard drive from the computer. Remove the AC adapter and battery. (For machine type with reset hole - use the paperclip to press and hold the reset hole for 5 seconds). Once the machine is off, attach the adapter and battery, and turn on the computer.
2. <u>Battery capacity check</u>: Some consumer laptops have an application called "Energy Management" or "One Key Optimizer" pre-installed. If the settings are set to "Conservation mode", battery will not charge when the capacity is high. Here we need to suggest the customer to use the computer, discharge the battery to lower than 50% and then try charging the machine again.
3. <u>BIOS, Lenovo Diagnostic & Energy management check</u>: On the 3rd checklist, we need to suggest the update the BIOS, Energy Management and the One Key optimizer application to the latest version. Also, check the battery status using Vantage.
   Points to note:
   - If the battery status is good, connect the computer to the charger and charge it for 6 hours completely. The battery may be in over discharge mode, which requires some time to activate it.
   - If status is "Exhausted or Damaged", reset the battery gauge in EM or OKO.
   - If status is "Failure", follow the replacement procedure based on warranty.