

repair through out-of-warranty (OOW) channel Note:

Slide 7



The first checkpoint is to enquire whether the keys are popped off. If the customer has Accidental Damage Protection (ADP), follow ADP process but if the customer does not have ADP, advise for repair through out-of-warranty (OOW) channel



The second checkpoint is to enquire whether there's liquid spillage and probe to find out how it occurred. Follow ADP process or repair through OOW channel, as applicable.







The third checkpoint is to enquire whether the keys are hard to press. Check if any foreign particle is stuck, if yes, advise customer to remove it using a hair dryer by turning the heater OFF or holding the keyboard upside down and shake it. If it doesn't help, advise customer for repair though OOW channel. However, if there's no foreign particle, check for Customer induced damage (CID) and suggest for repair through OOW or replace it, as applicable.

Keys popped off: The first checkpoint is to enquire whether the keys are popped off. If the customer has Accidental Damage Protection (ADP), follow ADP process but if the customer does not have ADP, advise for repair through out-of-warranty (OOW) channel

Liquid spillage: The second checkpoint is to enquire whether there's liquid spillage and probe to find out how it occurred. Follow ADP process or repair through OOW channel, as applicable.

Hard to press: The third checkpoint is to enquire whether the keys are hard to press. Check if any foreign particle is stuck. If yes, advise customer to remove it using a hair dryer by turning the heater OFF or holding the keyboard upside down and shake it. If it does not help, advise customer for repair though OOW channel. However, if there's no foreign particle, check for Customer induced damage (CID) and suggest for repair through OOW or replace it, as applicable.

	Types of keyboard issues Types and definitions 207 Leconstituted Alagan served.	
Slide 9	Few keys aren't working O-N-screen key (OSK) is working but hiw keys aren't working O-SK and hardware keys both not working Keyboard works in Novo button menu/BIOS Neyboard doesn't work in Novo button menu/BIOS Neyboard doesn't work in Novo button menu/BIOS Brightness increase and decrease issue with keys Keyboard Auto-typing Keyboard Auto-typing Neyboard Sund unless any key is pressed Neyboard beardight not working Susues due to morsoon season Nestyping of keys (Wrong characters displayed) ** ** ** ** ** ** ** ** **	Here are few scenarios of keyboard issues: Few keys are not working On-screen key (OSK) is working but h/w keys are not working OSK and hardware keys both not working Complete keyboard not working Keyboard works in Novo button menu/BIOS Keyboard does not work in Novo button menu/BIOS/Windows Function keys not working Brightness increase and decrease issue with keys Keyboard Auto-typing Keyboard malfunctioning (Special characters) Keyboard beep sound / sound unless any key is pressed Keyboard backlight not working Numpad not working

Mistyping of keys (Wrong characters displayed) Slide 10 Note: a) On-screen Key is working but hardware key isn't working in BIOS or cmd a) On-screen Key is working but hardware key is not working in llowed:

Check which keys are not working (to eliminate function keys, number pad keys, etc)

Go to Device manager, refresh the keyboard driver, and restart the system BIOS or cmd Release flee power (If the entire row is not Release flee power (if the entire row is not working)
Check in BIOS by setting admin/user p/w or command prompt and OSK
Replace keyboard if OSK keys are working but not in BIOS or command prompt Apart from the primary checklist, here are the steps to followed: Check which keys are not working (to eliminate function keys, number pad keys, etc) Go to Device manager, refresh the keyboard driver, and restart the system Release flee power (If the entire row is not working) Check in BIOS by setting admin/user p/w or command prompt and OSK Replace keyboard if OSK keys are working but not in BIOS or command prompt

Slide 11 Note: b) Both OSK and hardware key aren't working b) Both OSK and hardware key are not working Check which keys are not working (to eliminate Go to Device manager, refresh the keyboard driver, and restart the system Release flee power (If the entire row is not Although rare, here are the steps to followed apart from the primary working) • Update BIOS, chipset and IMEI driver • Perform Windows update checklist: Perform One key recovery / Operating system reinstallation (OKR/OSRI) Check which keys are not working (to eliminate function keys, number pad keys, etc) Go to Device manager, refresh the keyboard driver, and restart the system Release flee power (If the entire row is not working) Update BIOS, chipset and IMEI Perform Windows update Perform One key recovery / Operating system reinstallation (OKR/OSRI) Slide 12 Note: a) Keyboard works in Novo button menu/BIOS a) Keyboard works in Novo button menu/BIOS ecklist: Perform flee power Check with external Keyboard if possible Refresh Keyboard drivers and restart (Some keyboard drivers will have device drivers i.e. Here are the steps to followed Update BIOS chipset and Intel Management apart from the primary checklist: Engine Interface (IMEI) and input / output (I/O) Update windows to latest version and reset/OSRI Dispatch keyboard drivers Perform flee power Check with external Keyboard if possible Refresh Keyboard drivers and restart (Some keyboard drivers will have device drivers i.e. synaptic)

Update BIOS chipset and Intel Management Engine Interface (IMEI) and input / output (I/O) Update windows to latest version and reset/OSRI Dispatch keyboard drivers Slide 13 Note: b) Keyboard does not work in Novo Here are the steps to followed apart from the primar button menu/BIOS/Windows: Perform flee power

Check with external Keyboard if possible Refresh Keyboard drivers and restart (Some keyboard drivers will have device drivers i.e. Here are the steps to followed keyboard urverssynaptic)
Update BIOS, chipset and Intel Management
Engine Interface (IMEI)
Dispatch keyboard drivers apart from the primary checklist: Perform flee power Check with external Keyboard if possible Refresh Keyboard drivers and restart (Some keyboard drivers will have device drivers i.e. synaptic) Update BIOS, chipset and Intel Management Engine Interface (IMEI) Dispatch keyboard drivers

Function keys aren't working Here are the steps to followed apart from the primary checkfast: - Check with or without Function keys - Check with or function keys - I had do driver and BIOS - 2) Right click on Sound icon and troubleshoot - Check FI in BIOS to see if keybacoard is working - Which of working Check the Hardware - Microtroving Check the Hardware - Microt

Note:

Function keys are not working:

Here are the steps to followed apart from the primary checklist:

Check with or without Function key

Check other Function keys

For audio Function keys:

- 1) Audio drivers and BIOS
- 2) Right click on Sound icon and troubleshoot

Check F1 in BIOS to see if keyboard is working

Mic not working: Check the Hardware Maintenance Manual (HMM) for Mic hotkey. (eg: if hotkey is F4, Check Alt + F4 or Fn + Alt + F4)

Install Lenovo Utility, update BIOS and audio drivers

Check Hotkey Mode in BIOS (Unified Extensible Firmware Interface or UEFI: Single Fn Key)

Brightness Increase Decrease Here are the steps to followed apart from the primary checkist • Check HMM for hookeys • Try increasing/decreasing brightness through Windows • Enable the generic driver for monitor in Device Manager • Install altest display driver and update BIOS • Perform system reset

Note:

Brightness Increase/Decrease:

Here are the steps to followed apart from the primary checklist:

Check HMM for hotkeys

Try increasing/decreasing brightness through Windows

Enable the generic driver for monitor in Device Manager

Install latest display driver and update BIOS

Perform Windows Update

Perform system reset





Note:

a) If customer is not logged in:

Here are the steps to followed apart from the primary checklist:

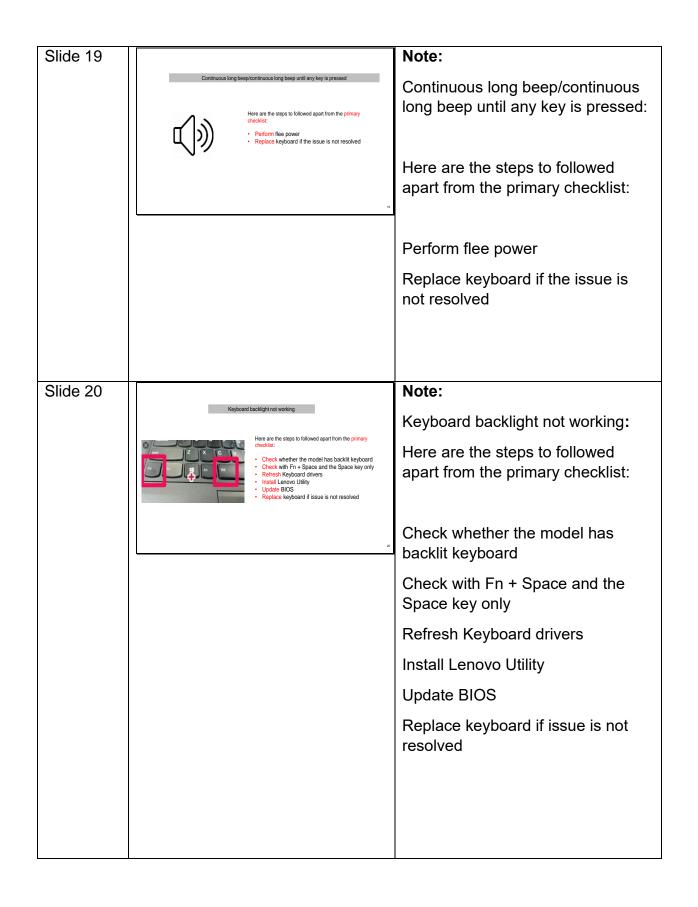
Check which keys are auto-typing

Perform flee power release, if the keyboard is auto-typing on password screen

Validate in BIOS (Try setting User password or supervisor password)

Replace keyboard, if the issue is not resolved

Slide 17 Note: b) If customer is logged in b) If customer is logged in: Here are the steps to followed Check with Win+R and in cmd, Validate in BIOS (Try setting User password or supervisor password) apart from the primary checklist: Perform flee power release Replace keyboard, if the issue is not resolved Check with Win+R and in cmd, Validate in BIOS (Try setting User password or supervisor password) Perform flee power release Replace keyboard, if the issue is not resolved Slide 18 Note: Keyboard malfunctioning (special characters): Here are the steps to followed apart from the primary Check language settings and change it English Here are the steps to followed US Refresh keyboard drivers, update BIOS, update windows and reset/OSRI if issue doesn't resolve after changing Language settings Replace keyboard if the issue is not resolved apart from the primary checklist: Check language settings and change it English US Refresh keyboard drivers, update BIOS, update windows and reset/OSRI if issue does not resolve after changing Language settings Replace keyboard if the issue is not resolved



Slide 21 Note: Numpad keys not working Numpad keys not working: Here are the steps to followed Go to Control Panel: Ease of Access >> Ease of Access Center >> Make the keyboard easier to use >> uncheck "Turn on Mouse key" apart from the primary checklist: Remember – Numpad as a <u>separate entity</u> is available on the keyboard for products <u>above 15-inch</u> monitor screen. Screen size <u>less than 15-inch</u> will have the numpad on as a <u>row over</u> <u>QWERTY keys</u>. Go to Control Panel: Ease of Access >> Ease of Access Center >> Make the keyboard easier to use >> uncheck "Turn on Mouse key" Remember - Numpad as a separate entity is available on the keyboard for products above 15inch monitor screen. Screen size less than 15-inch will have the numpad on as a row over QWERTY keys. Slide 22 Note: Numpad keys not working Numpad keys not working: Click on 'Ease of access' Ease of Access center Make the keyboard easier to use Check the radio button - Turn on mouse keys

1. Click on Start and click Settings. 2. Select Time & Language. 3. Select Language on the Left pane. 4. Under Preferred Languages on the Left pane. 5. If the desired Language is not set as the Default Input Language, change the Default Input Language by Clicking on Choose an Input Method to always use as default' option. 6. If the issue still persists, check with onscreen keypad and external keyboard. 7. If the OSK and external keyboard show wrong characters dispatch system board. 8. If the OSK and external keyboard work normally, dispatch keypad

Note:

Wrong characters displayed:

- 1. Click on **Start** and click **Settings**.
- 2. Select Time & Language.
- 3. Select **Language** on the **Left** pane.
- 4. Under Preferred Languages check the Default Input Language.
- 5. If the desired Language is not set as the Default Input Language, change the Default Input language to the preferred Language by clicking on 'Choose an Input Method to always use as default' option.
- 6. If the issue still persists, check with onscreen keypad and external keyboard.
- 7. If the OSK and external keyboard show wrong characters dispatch system board.
- 8. If the OSK and external keyboard work normally, dispatch keypad

Slide 24

- Most of the Ideacenter AIO system are shipped with Wireless Keyboard and Mouse
- If complete wireless keyboard is not working, then first replace AA cell battery with new one and check if its working
- · If not, follow the Pairing process



Note:

Wireless keyboard is not functioning:

Most of the Ideacenter AIO system are shipped with **Wireless Keyboard** and **Mouse**

If complete wireless keyboard is not working, then first replace AA cell battery with new one and check if its working

If not, follow the Pairing process

Slide 25

Step 1: Put USB Dongle insert in PC, and start step 2 after 30S

Step 2: Let the keyboard close to USB Dongle, keep within 10cm

Step 3: Synchronously keep pressing 3 Keys: "F2", "F3", and "F4"

Step 4: Insert 2 dry-cell and keep for 1s, and then release keys "F2", "F3", and "F4"

Step 5: Keep pressing key "3"

Step 6: The LED will be lighted on and flicker. At this time, key "3" can be released. Pairing is finished



Note:

Here are the steps that could be followed to pair the device correctly:

Step 1: Put USB Dongle insert in PC, and start step 2 after 30S

Step 2: Let the keyboard close to USB Dongle, keep within 10cm

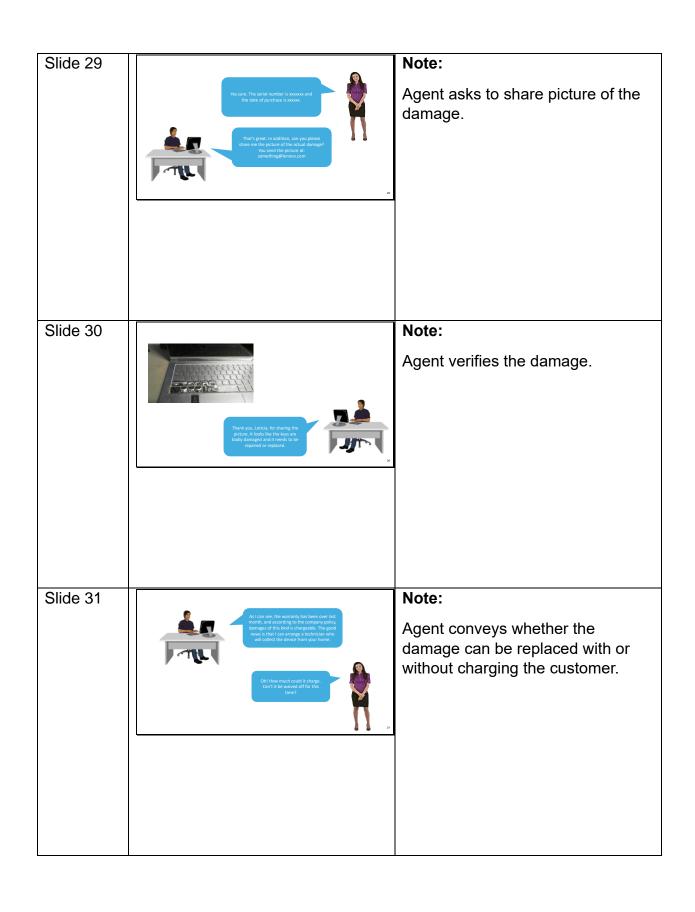
Step 3: Synchronously keep pressing 3 Keys: "F2", "F3", and "F4"

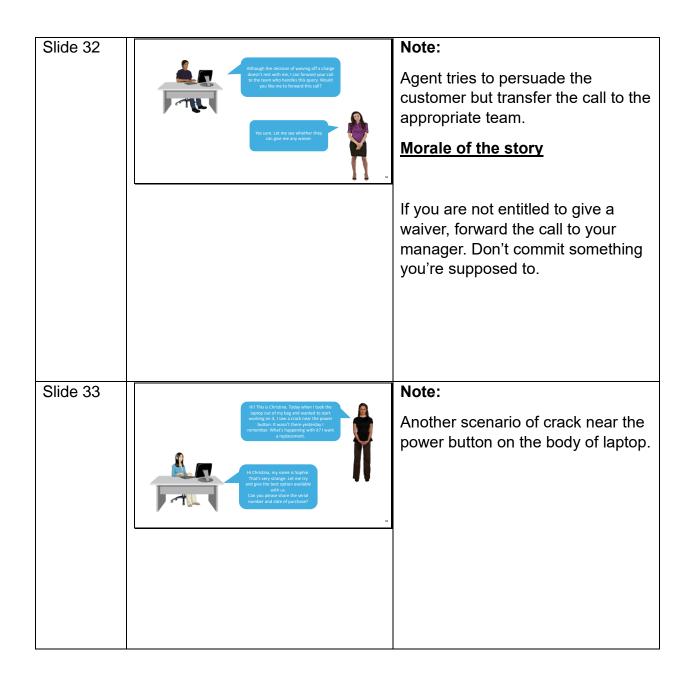
Step 4: Insert 2 dry-cell and keep for 1s, and then

release keys "F2", "F3", and "F4"

		Step 5: Keep pressing key "3"
		Step 6: The LED will be lighted on and flicker. At this time, key "3" can be released. Pairing is finished.
Slide 26		Note:
	Wipe the outside of the keyboard under a bright light bulb Option B: Use a low setting on a hair dryer/blower Customers are not willing for either Option B	Here's another scenario in which you will provide information on how to maintain the keyboard during monsoon season
		Wipe the outside of the keyboard with a cloth to remove all surface moisture
		Either one of the below options to be followed
		Option A: Place the keyboard under a bright light bulb for an hour to remove any accumulated moisture
		Option B: Use a low setting on a hair dryer/blower to evaporate moisture for 10-15 minutes
		Cases where customers are not willing for either Option A or Option B, proceed with Keyboard dispatch
		Important Note:
		Educate customer on performing Monsoon troubleshooting steps – document the same in SR notes

		If Keyboard is Damaged during Monsoon troubleshooting steps - need L2 approval for part replacement
Slide 27	Scenarios Examples of cases with keyboard issue	
Slide 28	Hi, this is Letticia. List night, my cut can over a cardle pileded seal for my legicity, it was it is it that moment, and insert thought this would happen. It fell directly on the keyboard and few keys of damaged. How do I fix it? HI Leticia, this is Jonah. I understand that this was an accident and not an intentional one. List the ole-key on papieles and try to help you. Can you please help me the serial number of the device and date of purchase?	Note: Damaged keyboard issue





Slide 34 Note: Agent verifies the customer details. Slide 35 Note: Agent asks for picture of the damage and checks whether it can be repaired with or without charging the customer. **Morale of the story** Even if you gauge that the case to be Customer-induced damage, check the warranty status of the device and inform the customer if the service is chargeable or not.