

# Hardware replacement tips

Part replacement highlights

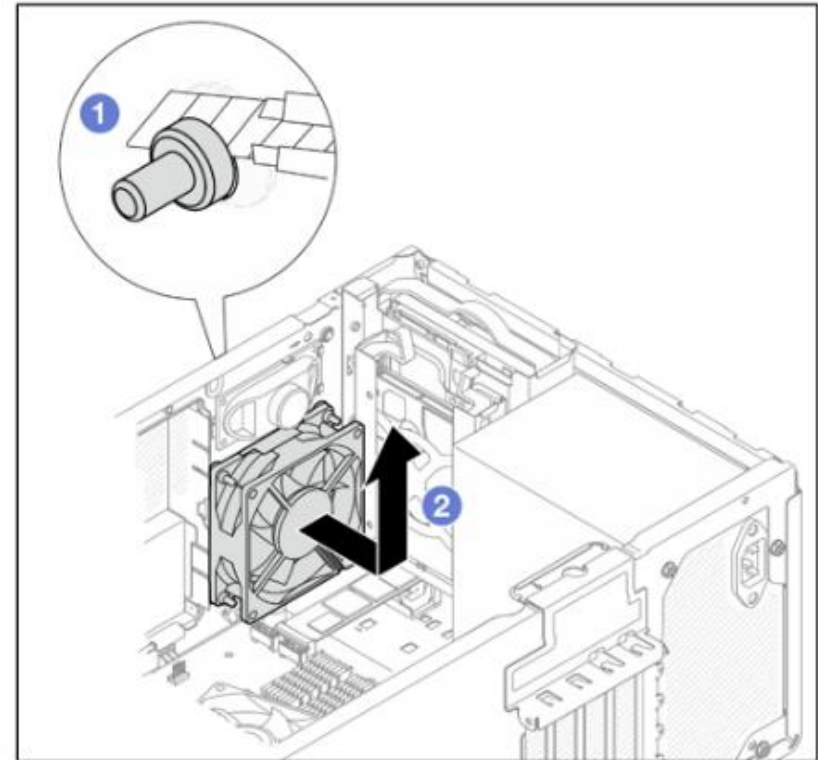
Lenovo

## Replacing a fan

When removing the rear fan as part of a system board replacement, carefully squeeze the four rubber fan mounts with a pair of pliers, push them inward, and then slide the fan away from the chassis. You should also use this method when removing the front fan as part of a thermal sensor replacement. When removing a failed front or rear fan, cut off the four rubber mounts and remove the fan. (It will not be reinstalled back into the system.)



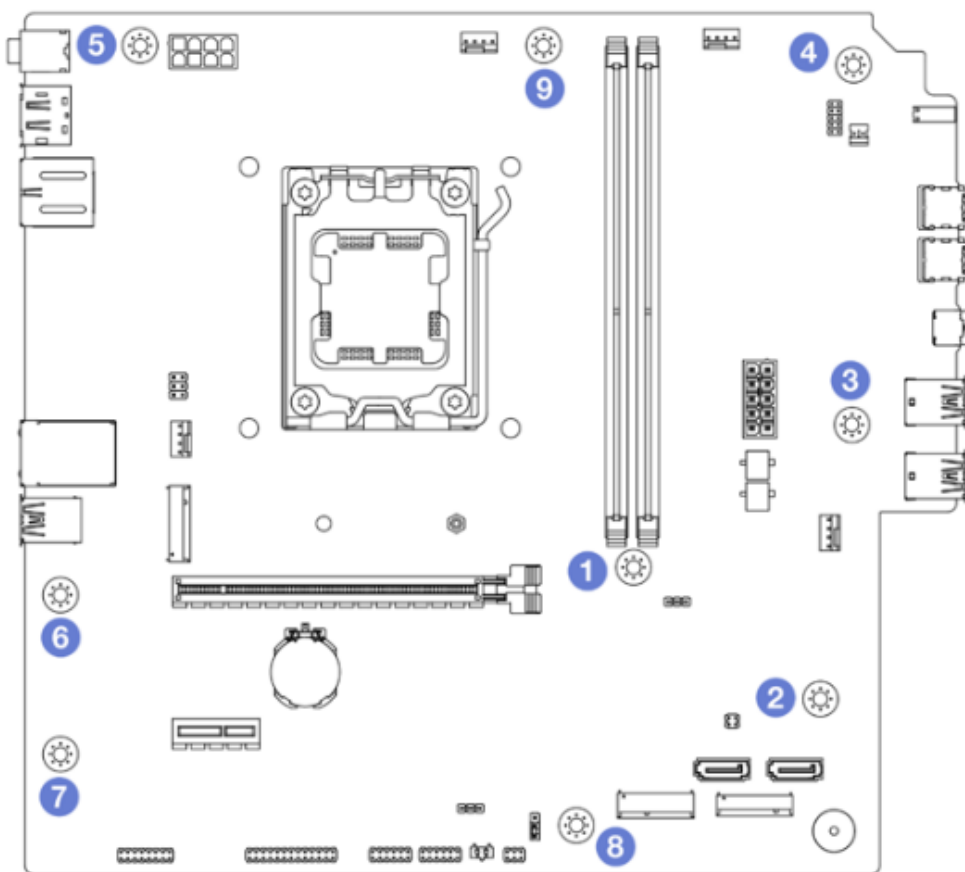
Scenario 1: Removing a fan to be reinstalled later



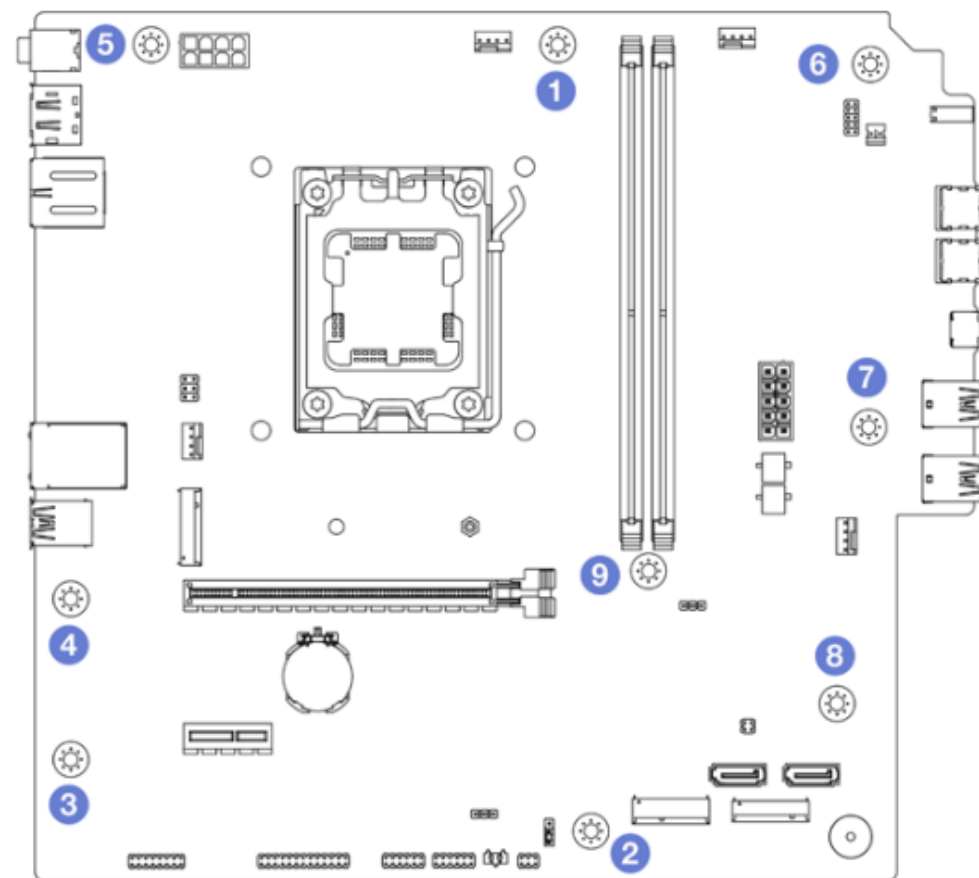
Scenario 2: Removing a failed fan that will not be reinstalled

# Replacing a system board

When replacing a system board, follow the screw removal and installation sequences set out in the ST45 V3 User Guide.



Removal sequence

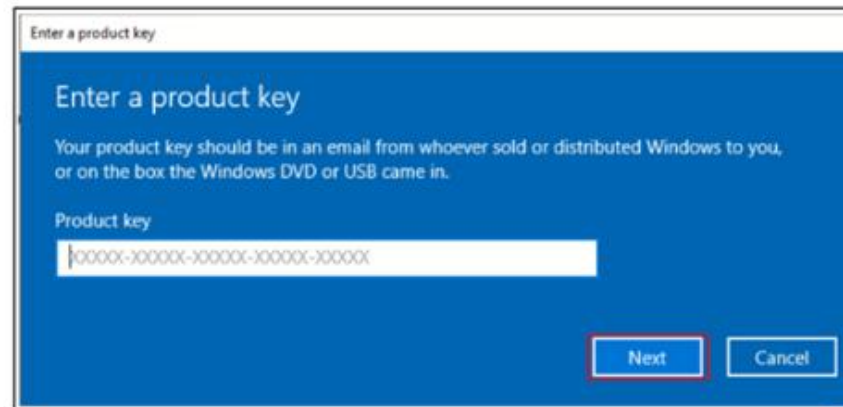


Installation sequence



# Windows 2022 activation

The ST45 V3 supports a pre-installed configuration of Windows 2022. A Certificate of Authenticity (COA) label will be attached to the top of the chassis. If you replace a drive in an ST45 V3 and need to reinstall and re-activate Windows 2022, check the COA label for the Windows 2022 product key. If the COA label is damaged or missing and the customer is not able to provide the product key, follow the OEM Microsoft Windows Server Damaged COA Replacement Process to get the new COA label. You will find instructions for the process on the course landing page.



## Updating the VPD

After replacing a system board, servicers must work through the following procedures:

1. Prepare a USB key (at least 1 GB capacity) and format it as FAT32
2. Download the Lenovo ST45 V3 update files from the Lenovo Support website
3. Modify the VPD data information in the chipset files by following the instructions in the Lenovo internal technical tip, and copy the files to a USB key
4. Use the USB key as a boot drive to initiate the VPD update process
5. Follow the instructions in the Lenovo internal technical tip and use shell commands to update the VPD

For the complete ST45 V3 VPD update procedures and for information on where to download the related files, refer to the following Lenovo internal tips:

<https://datacentersupport.lenovo.com/us/en/solutions/tt2403>

**Note:**

The ST45 V3 VPD update procedures and VPD update files are confidential. Do not share them with customers.

# Summary

This course enabled you to:

- Describe the ThinkSystem ST45 V3 and its components
- List the ST45 V3 specifications
- Describe the ST45 V3 configurations and block diagrams
- Describe the ST45 V3 management tools
- Describe the problem determination steps and explain how to troubleshoot issues with the ST45 V3