# Service Procedure:

## Thermal Gel and Grease Replacement

May 2026
Rev. A00

DELL Technologies

## Notes, cautions, and warnings

**NOTE:** A NOTE indicates important information that helps you make better use of your product.

**CAUTION: A CAUTION indicates either potential damage to hardware or loss of data and tells you how to avoid the problem.**

**WARNING: A WARNING indicates a potential for property damage, personal injury, or death.**

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# 1

# Thermal Gel and Grease Replacement

Depending on your computer, you may need to clean off and reapply the thermal gel and grease to either the system board or the heat sink. To determine whether this procedure is required, inspect the heat sink installed in the computer.

**NOTE:** The images in this document are for reference only and are used to show the procedures. The actual system board and heat sink may look differ from the images.

For computers installed with the heat sink shown (with an area for CPU-grease only), follow the standard procedures to clean the system board or heat sink.




**Figure 1. Heat sink (with an area for CPU-grease only)**

For computers installed with the heat sink shown (with areas for CPU-gel and grease), follow the procedures to clean the system board or heat sink.

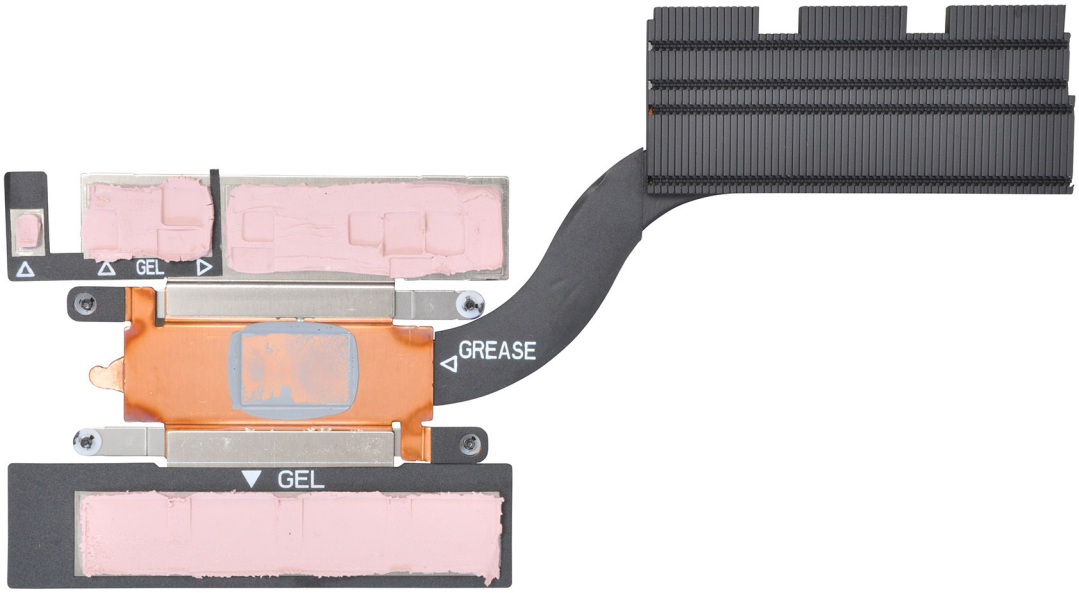


**Figure 2. Heat sink (with areas for CPU gel and grease)**

# Cleaning the thermal gel and grease for heat sink replacement

**NOTE:** The thermal gel and grease are pre-applied to the replacement heat sink.

Before you install the replacement heat sink, follow the steps to clean off any gel and grease from the system board:

1. Use the tapered edge of the rubber scraper provided with the replacement heat sink to remove the residue gel and grease from the areas on the system board shown in the image [1 > 2 > 3].

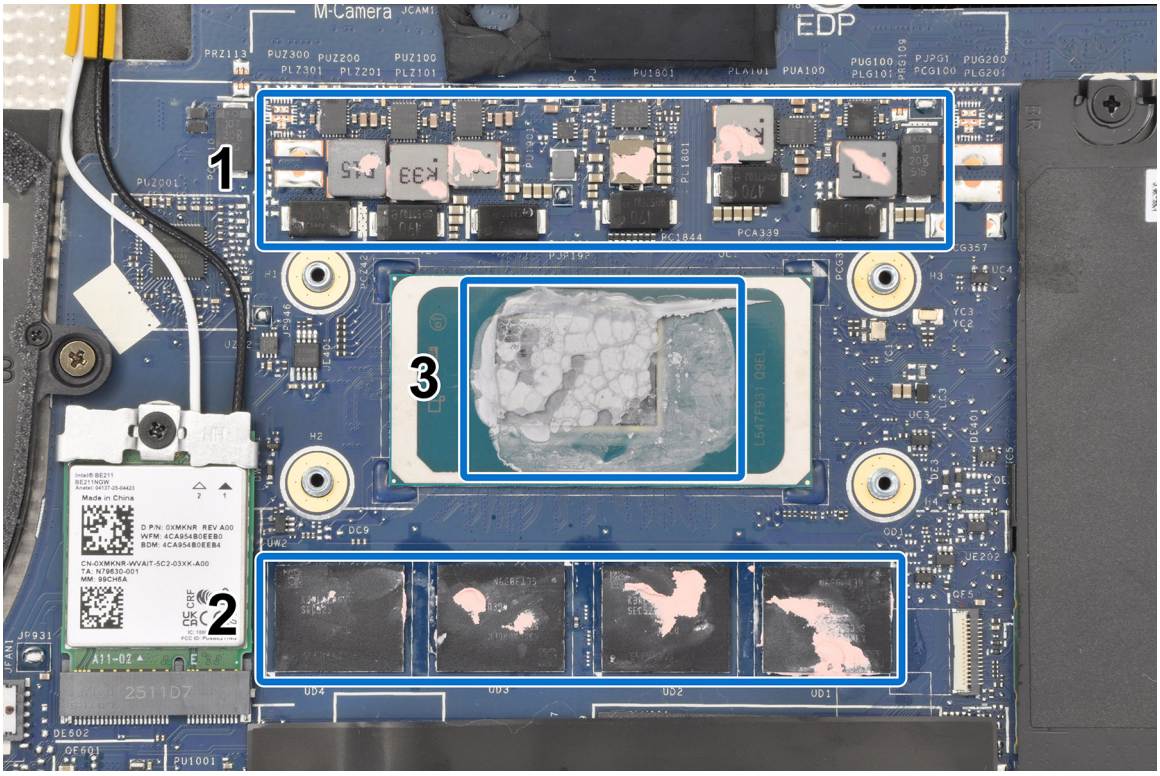


**Figure 3. Cleaning the thermal gel and grease on the system board**

2. When cleaning with the rubber scraper, use the motion that is shown in the image.

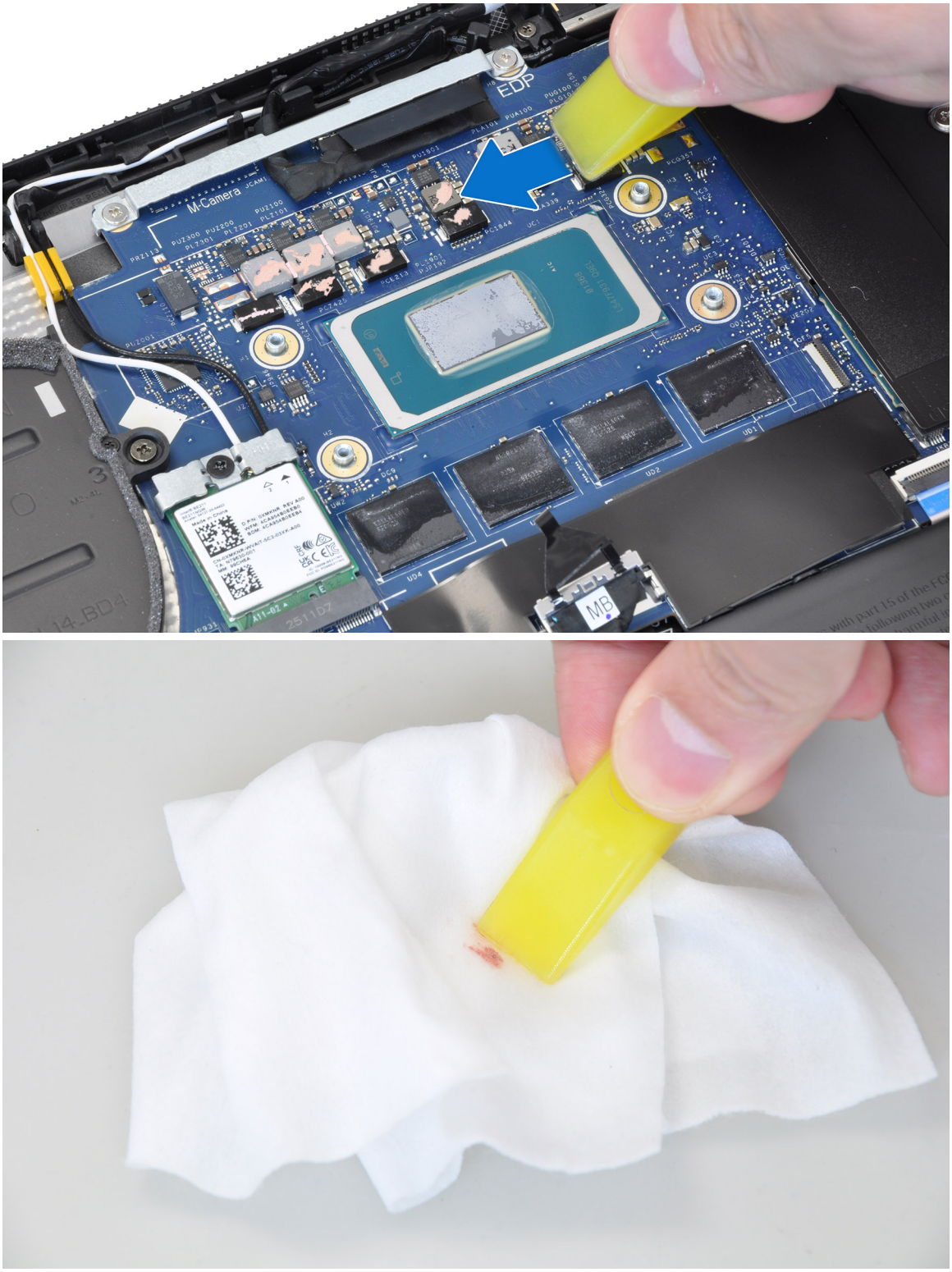


**Figure 4. Cleaning the thermal gel and grease on the system board**

3. After scraping off some of the gel or grease, clean the scraper with an alcohol wipe, and then continue until all the residue is removed.



**Figure 5. Cleaning the thermal gel and grease on the scraper**

4. Once you have finished scraping the system board, use a clean alcohol wipe to wipe down the surface of the system board.

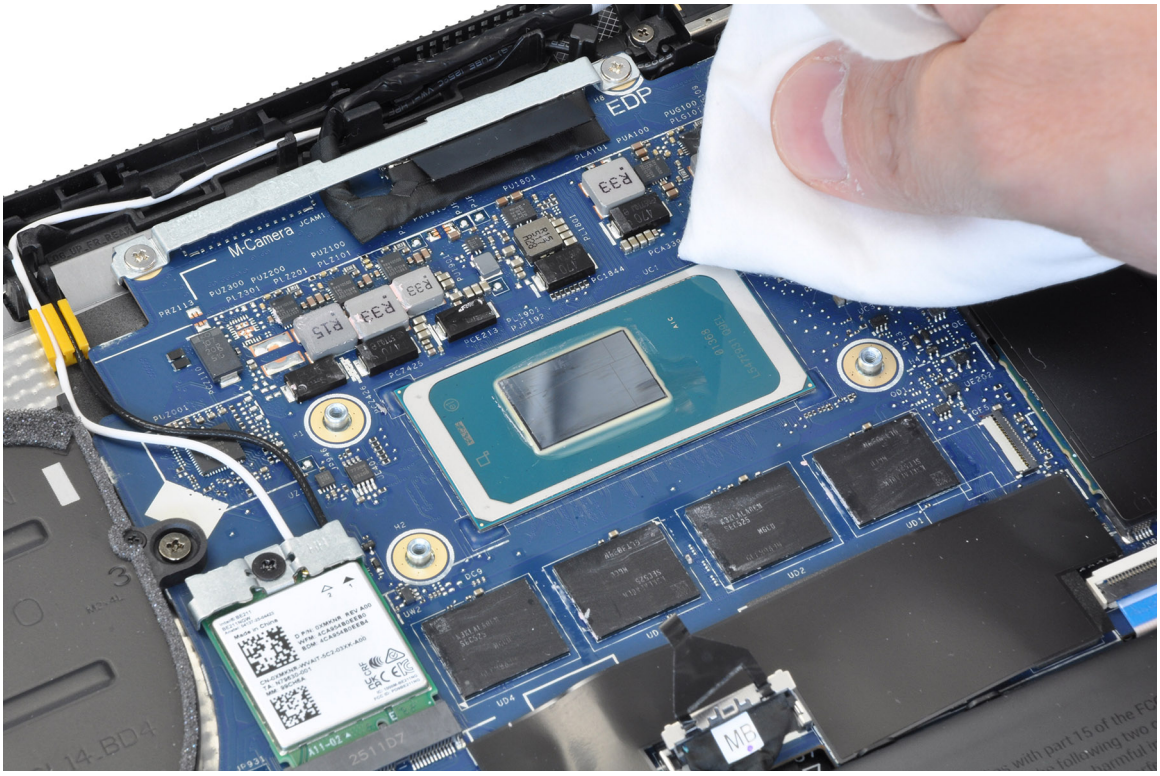


**Figure 6. Wiping the thermal gel and grease on the system board**

# Cleaning the thermal gel and grease for system board replacement

1. For instructions on how to remove the system board from your computer, see the Service Manual for your computer at the Dell Support site.
2. Transfer the M.2 SSD thermal pad and any applicable absorbers from the faulty system board to the replacement system board.
3. Prepare the faulty system board for return by adhering the CPU mylar sticker directly onto the system board in the indicated area. Ensure that the CPU and all thermal gel and grease residue are covered completely.

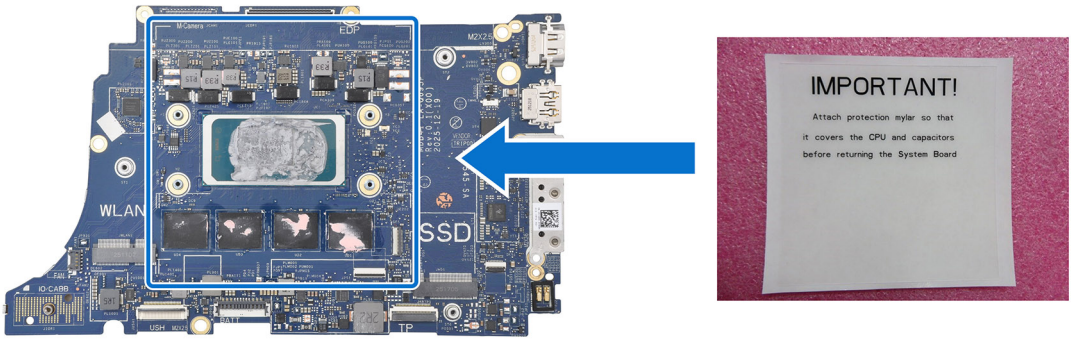


**Figure 7. Thermal gel and grease mylar sticker**

4. Using the tapered edge of the rubber scraper (provided with the replacement system board), remove the gel and grease residue from the specified areas of the heat sink by following the indicated sequence [1 > 2 > 3].

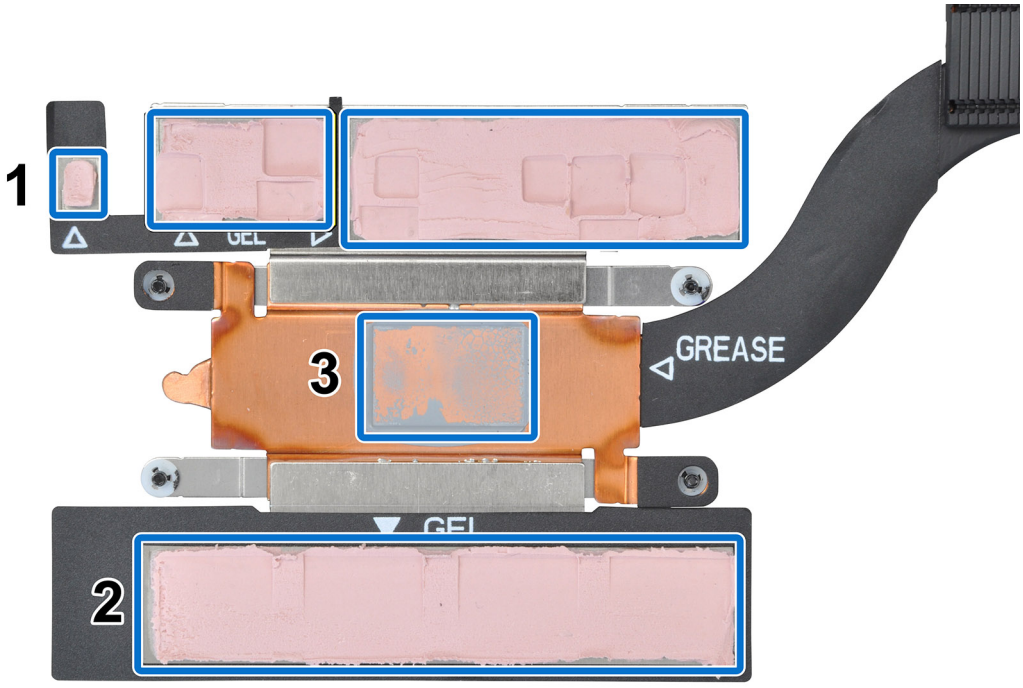


**Figure 8. Thermal gel and grease area on the heat sink**

When cleaning with the rubber scraper, use the motion demonstrated below. After scraping off some of the gel or grease, clean the scraper with an alcohol wipe, then continue until all the residue is removed.

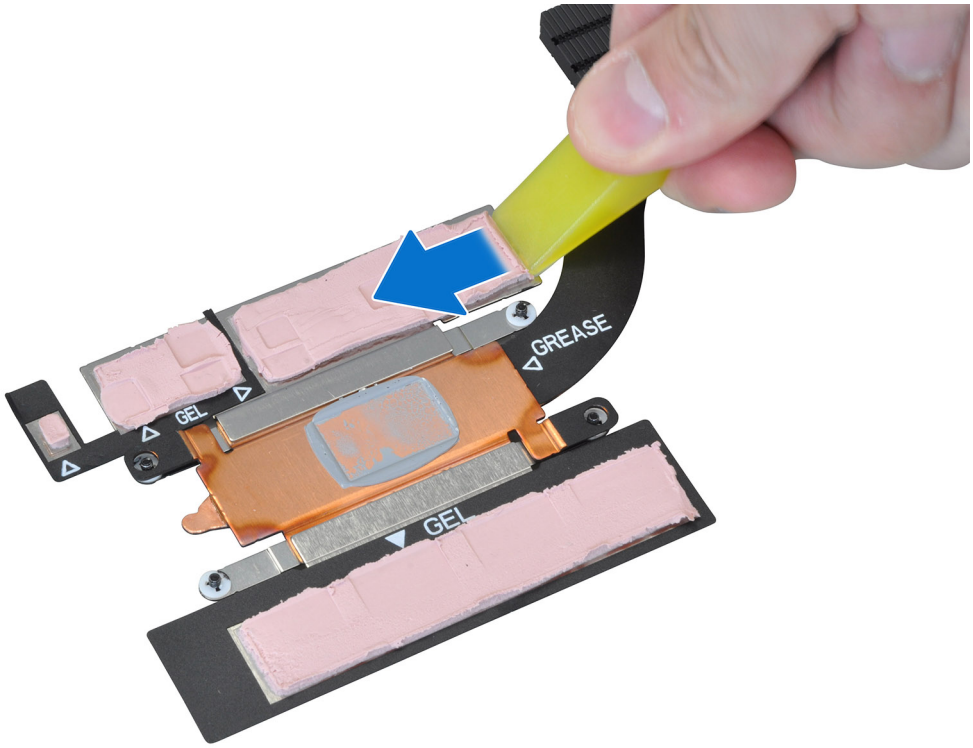


**Figure 9. Cleaning the thermal gel and grease on the heat sink**



**Figure 10. Cleaning the gel and grease on the scraper**

5. Once the scraping process is complete use a clean alcohol wipe to clean the surface of the heat sink.

# Applying the thermal gel and grease for system board replacement

1. Using the syringe containing the pink thermal gel, apply a continuous line of gel along each area on the heat sink marked GEL. Ensure that each marked line is fully and evenly covered.
2. Using the syringe containing the gray thermal grease, apply the grease to the copper area on the heat sink marked GREASE in an X-shaped pattern.

**NOTE:** This image is provided for reference only to indicate the location of each respective area. The appearance of the actual heat sink may differ from the image.

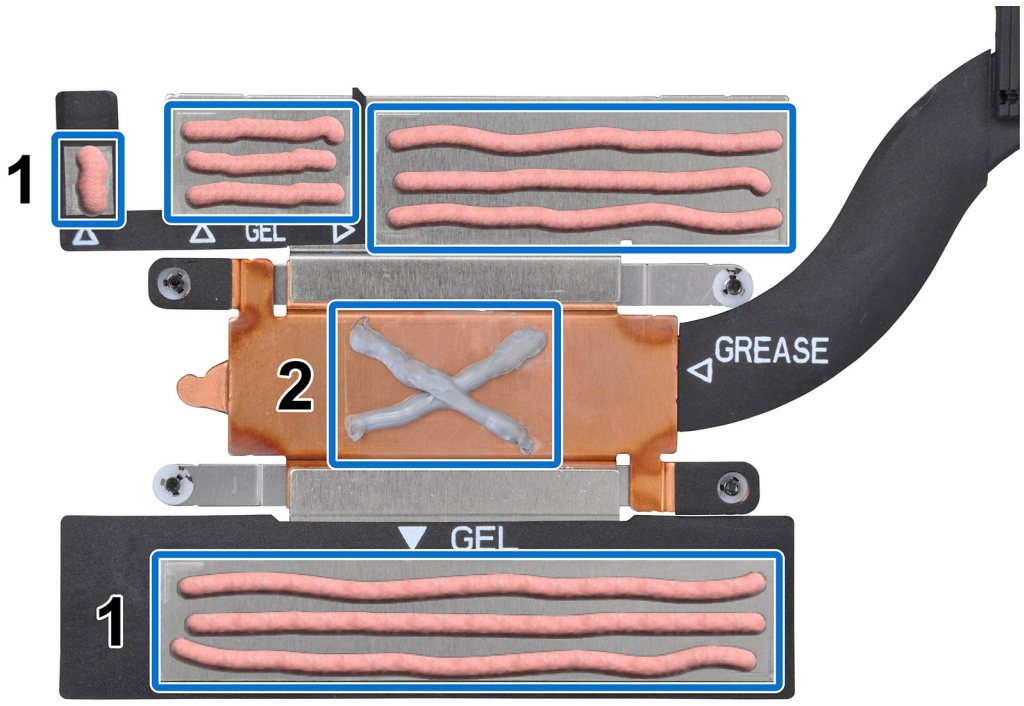


**Figure 11. Applying the thermal gel and grease on a heat sink**

3. For instructions on how to install the replacement system board into your computer, see the Service Manual for your computer at the Dell Support site.

# 2

# Revision history

Tracks all updates that are made to the document. It typically includes the date of change, version number, and a brief description of the modification. This log helps maintain transparency, accountability, and a clear timeline of progress.

**Table 1. Revision history**

| Revision | Date | Description |
|---|---|---|
| A00 | May 2026 | Original publish date. |