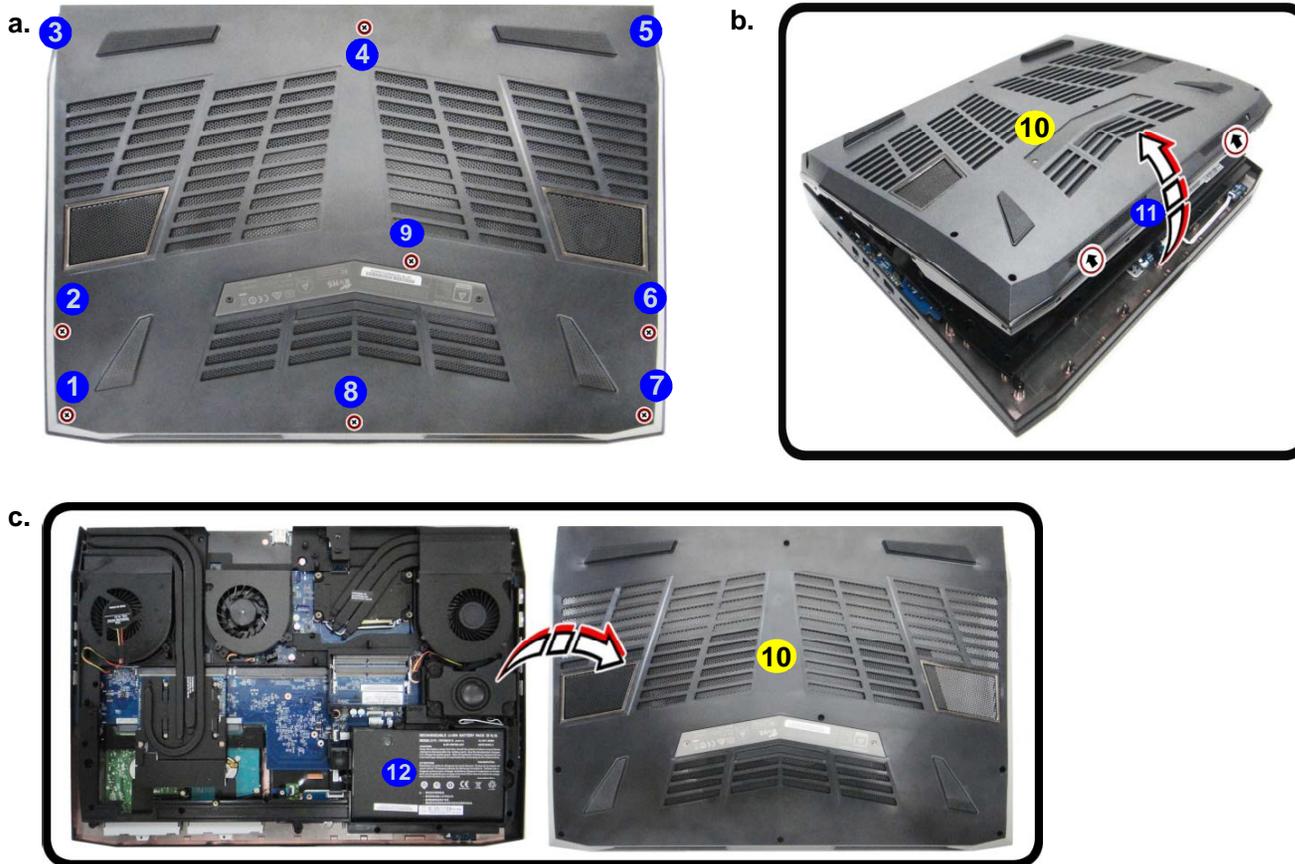


## Removing the Battery

1. Turn the computer **off**, and turn it over.
2. Remove the screws **1** - **9** (*Figure 1a*).
3. Carefully lift the bottom case **10** up in the direction of the arrow **11** and remove it (*Figure 1b*).
4. The battery will be visible at point **12** on the computer (*Figure 1c*).

*Figure 1*  
**Battery Removal**

- a. Remove the screws.
- b. Remove the bottom case.
- c. Locate the battery.



  
10. Bottom Case

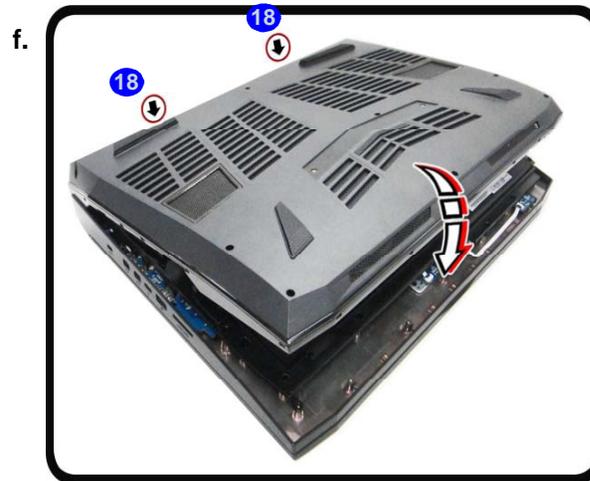
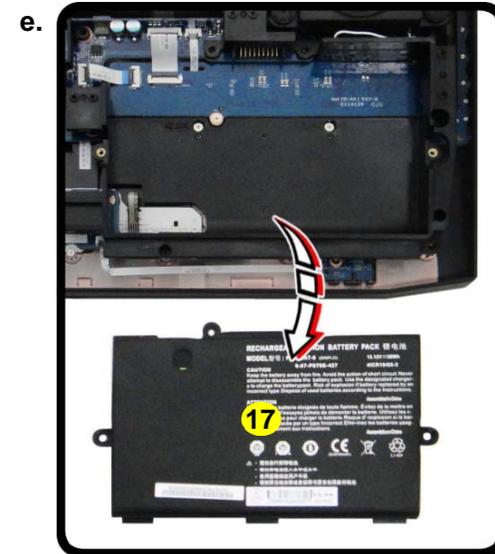
- 9 Screws

## Disassembly

### Figure 2 Battery Removal (cont'd.)

- d. Remove the screws.
- e. Lift the battery off the computer.
- f. Reinsert the bottom case and tighten the screws.

5. Carefully remove screws **13** - **16** (*Figure 2b*).
6. Lift the battery **17** off the computer (*Figure 2e*).
7. Reinsert the bottom case starting from point **18** as shown (*Figure 2f*) to avoid damaging the rear eSATA/USB 3.0 port. Tighten the screws to secure the bottom case in place.



17. Battery

- 4 Screws

## Disassembly

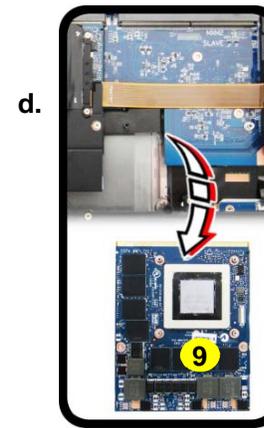
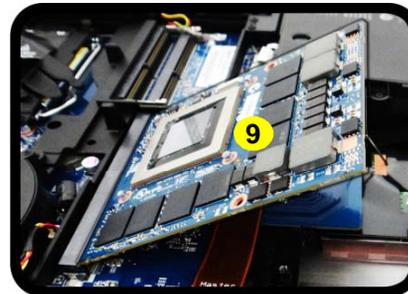
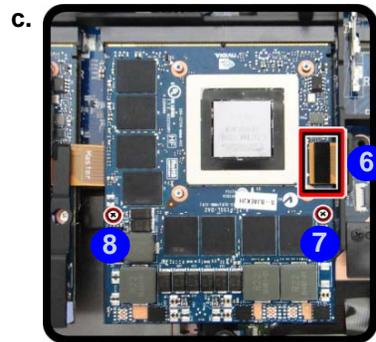
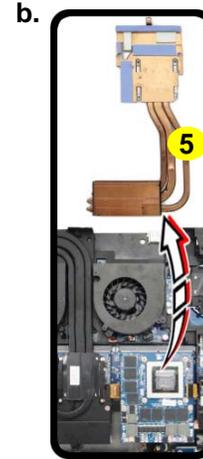
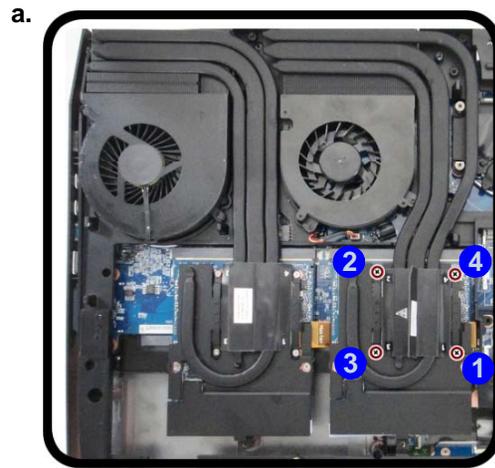
### Figure 9 Video Card-2 Removal Procedure

- Remove the screws in the correct order.
- Carefully remove the heat sink units.
- Remove the video card cable connector and screws. The video card will pop up.
- Remove the video card.

## Removing and Installing the Video Card

### Video Card-2 Removal Procedure

- Turn **off** the computer, turn it over and remove the battery ([page 2 - 5](#)).
- Remove screws **1** - **4** from the heat sink unit in the order indicated on the label (i.e screw **4** first through to screw **1** last) ([Figure 9a](#)).
- Carefully (**it may be hot**) remove the heat sink unit **5** ([Figure 9b](#)).
- Remove the connector **6** and screws **7** & **8** from the video card. The video card **9** will pop up.
- Remove the video card **9** ([Figure 9d](#)).



#### Caution

The heat sink, and video card area in general, contains parts which are subject to high temperatures. Allow the area time to cool before removing these parts.



- 5. Heat Sink Unit
- 9. Video Card

- 6 Screws



#### Heat Sink Screw Removal and Insertion

Remove the screws from the heat sink in the order indicated here: 4-3-2-1.

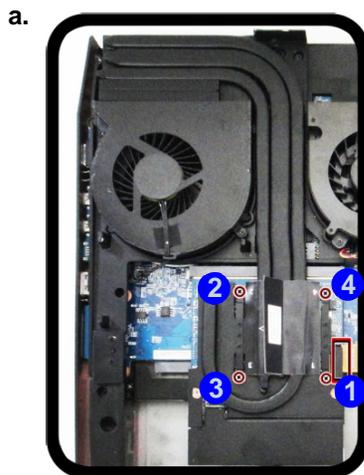
When tightening the screws, make sure that they are tightened in the order: 1-2-3-4.

**Video Card-1 Removal Procedure**

1. Turn **off** the computer, turn it over and remove the battery ([page 2 - 5](#)) and Video card-2 ([page 2 - 14](#)).
2. Remove screws **1** - **4** from the heat sink unit in the order indicated on the label (i.e screw **4** first through to screw **1** last) ([Figure 10a](#)).
3. Carefully (**it may be hot**) remove the heat sink unit **5** ([Figure 10b](#)).
4. Remove connector **6** (in case of two video cards) and screws **7** & **8** from the video card. The video card **9** will pop up ([Figure 10c](#)).
5. Remove the video card **9** ([Figure 10d](#)).

*Figure 10*  
**Video Card-1 Removal Procedure**

- a. Remove the screws in the correct order.
- b. Carefully remove the heat sink units.
- c. Remove the video card cable connector and screws. The video card will pop up.
- d. Remove the video card.



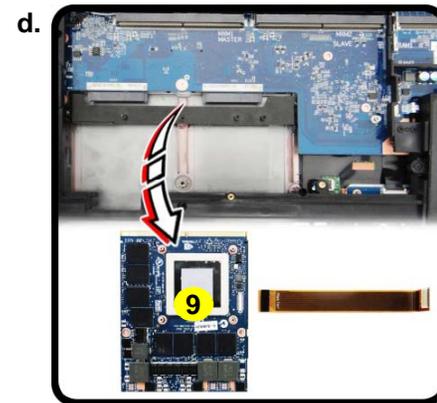
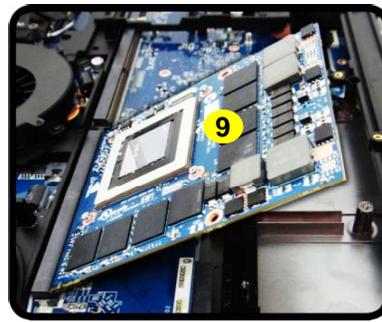
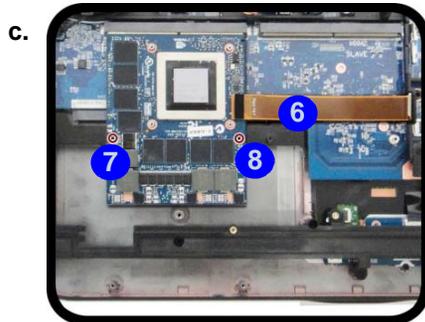
**Heat Sink Screw Removal and Insertion**

Remove the screws from the heat sink in the order indicated here: **4-3-2-1**.

When tightening the screws, make sure that they are tightened in the order: **1-2-3-4**.

**Caution**

The heat sink, and video card area in general, contains parts which are subject to high temperatures. Allow the area time to cool before removing these parts.



**5. Heat Sink Unit**  
**9. Video Card**

- 6 Screws

## Disassembly

### Figure 11 Video Card-3 Removal Procedure

- Remove the screws in the correct order.
- Carefully remove the heat sink units.
- Remove the video card cable connector and screws. The video card will pop up.
- Remove the video card.



#### Caution

The heat sink, and video card area in general, contains parts which are subject to high temperatures. Allow the area time to cool before removing these parts.



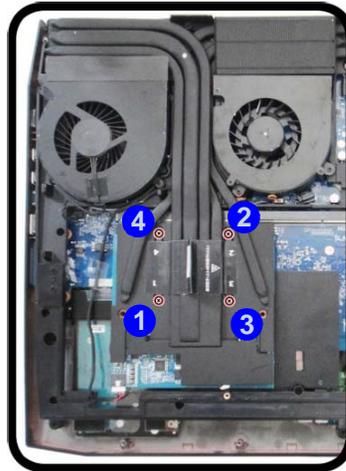
- 5. Heat Sink Unit
- 9. Video Card

- 6 Screws

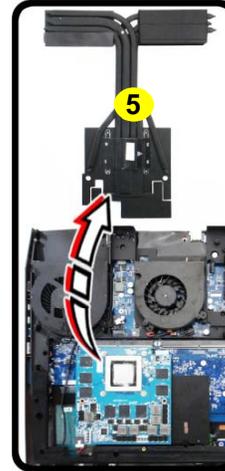
### Video Card-3 Removal Procedure

- Turn **off** the computer, turn it over and remove the battery ([page 2 - 5](#)) and Video card-2 ([page 2 - 14](#)).
- Remove screws **1** - **4** from the heat sink unit in the order indicated on the label (i.e screw **4** first through to screw **1** last) ([Figure 10a](#)).
- Carefully (**it may be hot**) remove the heat sink unit **5** ([Figure 10b](#)).
- Remove connector **6** and screws **7** & **8** from the video card. The video card **9** will pop up ([Figure 10c](#)).
- Remove the video card **9** ([Figure 10d](#)).

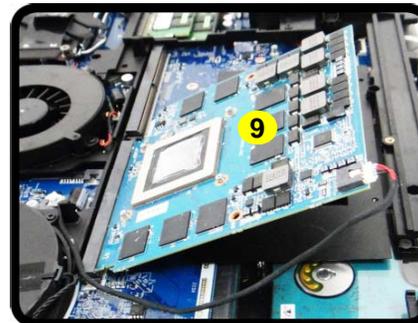
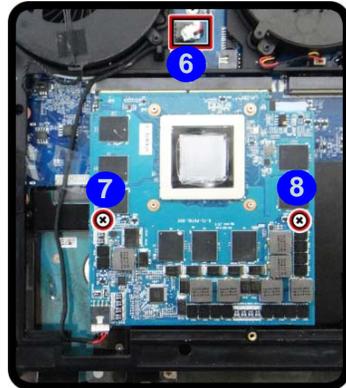
a.



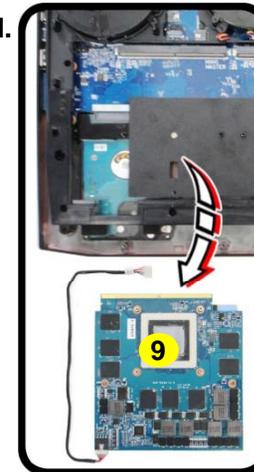
b.



c.



d.



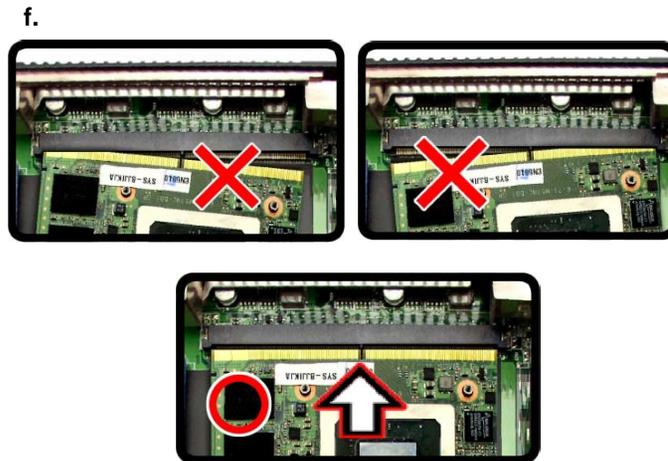
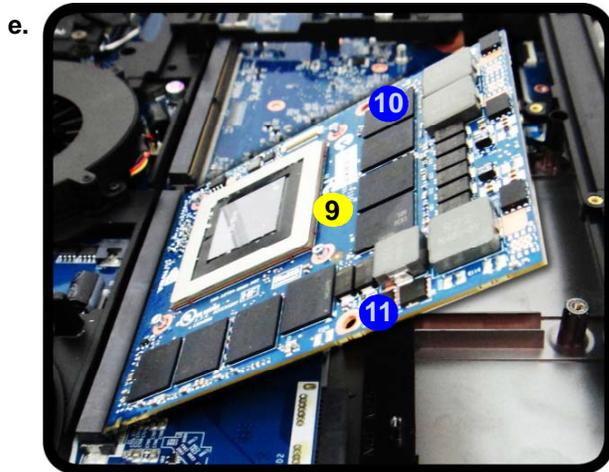
#### Heat Sink Screw Removal and Insertion

Remove the screws from the heat sink in the order indicated here: 4-3-2-1.

When tightening the screws, make sure that they are tightened in the order: 1-2-3-4.

### Installing a New Video Card

1. Prepare to fit the video card **9** into the slot by holding it at about a 30° angle (*Figure 12e*).
2. The card needs to be fully into the slot, and the video card and socket have a guide-key and pin which align to allow the card to fit securely (*Figure 12f*).
3. Fit the connectors firmly into the socket, straight and evenly.



4. DO NOT attempt to push one end of the card in ahead of the other.
5. The card's pin alignment will allow it to only fit one way. **Make sure the module is seated as far into the socket as it will go.** DO NOT FORCE the card; it should fit without much pressure.
6. Secure the card with screws **10** & **11** (*Figure 10 on page 2 - 15*).
7. Place the heat sink back on the card, and secure the screws in the order indicated in *Figure 10 on page 2 - 15*.
8. Reinsert the component bay cover, and secure with the screws as indicated in *Figure 2 on page 2 - 6*.

*Figure 12*  
**Installing a New Video Card**

- e. Insert the video card at a 30 degree angle.
- f. Fit the connectors straight and even, and secure the card with the screws.



**Caution**

The heat sink, and video card area in general, contains parts which are subject to high temperatures. Allow the area time to cool before removing these parts.



9. Video Card

- 2 Screws