Lenovo V330

V330-14ARR

Hardware Maintenance Manual

Note:

- Before using this information and the product it supports, be sure to read the general information under “Notices” on page 88.

First Edition (February 2018)

© Copyright Lenovo 2018. All rights reserved.

LIMITED AND RESTRICTED RIGHTS NOTICE: If data or software is delivered pursuant a General Services Administration “GSA” contract, use, reproduction, or disclosure is subject to restrictions set forth in Contract No. GS-35F-05925.

© 2018 Lenovo

Contents

About this manual iv

Safety information 1
General safety 2
Electrical safety 3
Safety inspection guide 5
Handling devices that are sensitive to electrostatic discharge 6
Grounding requirements 6
Safety notices: multilingual translations 7
Laser compliance statement 14

Important service information 16
Strategy for replacing FRUs 16
- Strategy for replacing a hard disk drive 17
- Important notice for replacing a system board 17

Important information about replacing RoHS compliant FRUs 18

General checkout 19
What to do first 20
Power system checkout 21
- Checking the AC adapter 21
- Checking operational charging 22
- Checking the battery pack 22

Related service information 23
Restoring the factory contents 23
- Restore of factory default 23

Passwords 24
- Power-on password 24
- Hard-disk password 24
- Administrator password 24

Power management 25
- Putting the computer to sleep or shutting it down 25
- Putting your computer to sleep 25
- Shutting down the computer 26

Lenovo V330-14ARR 27
Specifications 27
Status indicators 29
Hotkeys 30
FRU replacement notices 31
- Screw notices 31

Removing and replacing an FRU 32
- 1010 Base cover and dummy case 33
- 1020 Battery pack 37
- 1030 PCI Express Mini Card for wireless LAN 39
- 1040 SSD card 41
- 1050 Hard disk drive 43
- 1060 DIMM 45
- 1070 Fan and heat sink 47
- 1080 Upper case 50
- 1090 Backup battery and RJ-45 cover 53
- 1100 System board 55
- 1110 Touch pad and fingerprint module 57
- 1120 Speakers 59
- 1130 LCD unit 60
- 1140 Integrated camera 63

Locations 66
- Front view and right-side view 66
- Bottom and Left-side view 67

Parts list 68
- Overall 69
- LCD FRUs 84
- Miscellaneous parts 86
- AC adapters 86
- Screws 87

Notices 88
Trademarks 89

About this manual

This manual contains service and reference information for the following Lenovo product:

Lenovo V330-14ARR

The illustrations and descriptions in this manual may differ from the actual product. Please refer to the actual product.

The manual is divided into the following sections:

- The common sections provide general information, guidelines, and safety information required for servicing computers.
- The product-specific section includes service, reference, and product-specific parts information.

Important:

This manual is intended only for trained servicers who are familiar with Lenovo products. Use this manual to troubleshoot problems effectively.

Before servicing a Lenovo product, make sure to read all the information under "Safety information" on page 1 and "Important service information" on page 16.

Safety information

This chapter presents the following safety information that you need to get familiar with before you service a Lenovo V330-14ARR computer:

- “General safety” on page 2
- “Electrical safety” on page 3
- “Safety inspection guide” on page 5
- “Handling devices that are sensitive to electrostatic discharge” on page 6
- “Grounding requirements” on page 6
- “Safety notices: multilingual translations” on page 7
- “Laser compliance statement” on page 14

General safety

Follow these rules below to ensure general safety:

- Observe a good housekeeping in the area where the machines are put during and after the maintenance.
- When lifting any heavy object:
  1. Make sure that you can stand safely without slipping.
  2. Distribute the weight of the object equally between your feet.
  3. Use a slow lifting force. Never move suddenly or twist when you attempt to lift it.
  4. Lift it by standing or pushing up with your leg muscles; this action could avoid the strain from the muscles in your back. Do not attempt to lift any object that weighs more than 16 kg (35 lb) or that you think is too heavy for you.
- Do not perform any action that causes hazards to the customer, or that makes the machine unsafe.
- Before you start the machine, make sure that other service representatives and the customer are not in a hazardous position.
- Please remove covers and other parts in a safe place, away from all personnel, while you are servicing the machine.
- Keep your toolcase away from walk areas so that other people will not trip over it.
- Do not wear loose clothing that can be trapped in the moving parts of the machine. Make sure that your sleeves are fastened or rolled up above your elbows. If your hair is long, fasten it.
- Insert the ends of your necktie or scarf inside clothing or fasten it with the nonconductive clip, about 8 centimeters (3 inches) from the end.
- Do not wear jewelry, chains, metal-frame eyeglasses, or metal fasteners for your clothing.

  Attention: Metal objects are good electrical conductors.
- Wear safety glasses when you are hammering, drilling, soldering, cutting wire, attaching springs, using solvents, or working in any other conditions that may be hazardous to your eyes.
- After service, reinstall all safety shields, guards, labels, and ground wires. Replace any safety device that is worn or defective.
- Reinstall all covers correctly before returning the machine to the customer.
- Fan louvers on the machine help to prevent the overheating of internal components. Do not obstruct fan louvers or cover them with labels or stickers.

Electrical safety

Observe the following rules when working on electrical equipments.

Important:

Use only approved tools and test equipments. Some hand tools have handles covered with a soft material that does not insulate you when working with live electrical currents.

Many customers have rubber floor mats near their machines that contain small conductive fibers to decrease electrostatic discharges. Do not use such kind of mat to protect yourself from electrical shock.

- Find the room emergency power-off (EPO) switch, disconnecting switch or electrical outlet. If an electrical accident occurs, you can then operate the switch or unplug the power cord quickly.
- Do not work alone under hazardous conditions or near the equipment that has hazardous voltages.
- Disconnect all power before:
  - Performing a mechanical inspection
  - Working near power supplies
  - Removing or installing main units
- Before you start to work on the machine, unplug the power cord. If you cannot unplug it, ask the customer to power-off the wall box that supplies power to the machine, and to lock the wall box in the off position.
- If you need to work on a machine that has exposed electrical circuits, observe the following precautions:
  - Ensure that another person, familiar with the power-off controls, is near you.

    Attention: Another person must be there to switch off the power, if necessary.
  - Use only one hand when working with powered-on electrical equipment; keep the other hand in your pocket or behind your back.

    Attention: An electrical shock can occur only when there is a complete circuit. By observing the above rule, you may prevent a current from passing through your body.
  - When using testers, set the controls correctly and use the approved probe leads and accessories for that tester.
  - Stand on suitable rubber mats (obtained locally, if necessary) to insulate you from grounds such as metal floor strips and machine frames.

Observe the special safety precautions when you work with very high voltages; instructions for these precautions are in the safety sections of maintenance information. Be extremely careful when you measure the high voltages.

- Regularly inspect and maintain your electrical hand tools for safe operational condition.
- Do not use worn or broken tools and testers.
- Never assume that power has been disconnected from a circuit. First, check it to make sure that it has been powered off.

- Always look carefully for possible hazards in your work area. Examples of these hazards are moist floors, nongrounded power extension cables, power surges, and missing safety grounds.
- Do not touch live electrical circuits with the reflective surface of a plastic dental mirror. The surface is conductive; such touching can cause personal injury and machine damage.
- Do not service the following parts with the power on when they are removed from their normal operating places in a machine:
  - Power supply units
  - Pumps
  - Blowers and fans
  - Motor generators

  and similar units. (This practice ensures correct grounding of the units.)
- If an electrical accident occurs:
  - Caution: do not become a victim yourself.
  - Switch off the power.
  - Send the victim to get medical aid.

Safety inspection guide

The purpose of this inspection guide is to assist you in identifying potential unsafe conditions. As each machine was designed and built, required safety items were installed to protect users and service personnel from injury. This guide addresses only those items. You should use good judgment to identify potential safety hazards according to the attachment of non-Lenovo features or options not covered by this inspection guide.

If any unsafe conditions are present, you must determine how serious the apparent hazard could be and whether you can continue without first correcting the problem.

Consider these conditions and the safety hazards they present:

- Electrical hazards, especially primary power (primary voltage on the frame can cause serious or fatal electrical shock)
- Explosive hazards, such as a damaged CRT face or a bulging capacitor
- Mechanical hazards, such as loose or missing hardware

To determine whether there are any potential unsafe conditions, use the following checklist at the beginning of every service task. Begin the checks with the power off, and the power cord disconnected.

Checklist:

1. Check exterior covers for damage (loose, broken, or sharp edges).
2. Turn off the computer. Disconnect the power cord.
3. Check the power cord for:
   a. A third-wire ground connector in good condition. Use a meter to measure third-wire ground continuity for 0.1 ohm or less between the external ground pin and the frame ground.
   b. The power cord should be the type specified in the parts list.
   c. Insulation must not be frayed or worn.
4. Check for cracked or bulging batteries.
5. Remove the cover.
6. Check for any obvious non-Lenovo alterations. Use good judgment as to the safety of any non-Lenovo alterations.
7. Check inside the unit for any obvious unsafe conditions, such as metal filings, contamination, water or other liquids, or signs of fire or smoke damage.
8. Check for worn, frayed, or pinched cables.
9. Check that the power-supply cover fasteners (screws or rivets) have not been removed or tampered with.

Handling devices that are sensitive to electrostatic discharge

Any computer part containing transistors or integrated circuits (ICs) should be considered sensitive to electrostatic discharge (ESD). ESD damage can occur when there is a difference in charge between objects. Protect against ESD damage by equalizing the charge so that the machine, the part, the work mat, and the person handling the part are all at the same charge.

Notes:

1. Use product-specific ESD procedures when they exceed the requirements noted here.
2. Make sure that the ESD protective devices you use have been certified (ISO 9000) as fully effective.

When handling ESD-sensitive parts:

- Keep the parts in protective packages until they are inserted into the product.
- Avoid contact with other people.
- Wear a grounded wrist strap against your skin to eliminate static on your body.
- Prevent the part from touching your clothing. Most clothing is insulative and retains a charge even when you are wearing a wrist strap.
- Use the black side of a grounded work mat to provide a static-free work surface. The mat is especially useful when handling ESD-sensitive devices.
- Select a grounding system, such as those listed below, to provide protection that meets the specific service requirement.

Note:

The use of a grounding system to guard against ESD damage is desirable but not necessary.

  - Attach the ESD ground clip to any frame ground, ground braid, or green-wire ground.
  - When working on a double-insulated or battery-operated system, use an ESD common ground or reference point. You can use coax or connector-outside shells on these systems.
  - Use the round ground prong of the ac plug on ac-operated computers.

Grounding requirements

Electrical grounding of the computer is required for operator safety and correct system function. Proper grounding of the electrical outlet can be verified by a certified electrician.

Safety notices: multilingual translations

The safety notices in this section are provided in English, French, German, Hebrew, Italian, Japanese, and Spanish.

Safety notice 1

Before the computer is powered on after FRU replacement, make sure all screws, springs, and other small parts are in place and are not left loose inside the computer. Verify this by shaking the computer and listening for rattling sounds. Metallic parts or metal flakes can cause electrical shorts.

Avant de remettre l'ordinateur sous tension après remplacement d'une unité en clientèle, vérifiez que tous les ressorts, vis et autres pièces sont bien en place et bien fixées. Pour ce faire, secouez l'unité et assurez-vous qu'aucun bruit suspect ne se produit. Des pièces métalliques ou des copeaux de métal pourraient causer un court-circuit.

Bevor nach einem FRU-Austausch der Computer wieder angeschlossen wird, muß sichergestellt werden, daß keine Schrauben, Federn oder andere Kleinteile fehlen oder im Gehäuse vergessen wurden. Der Computer muß geschüttelt und auf Klappergeräusche geprüft werden. Metallteile oder-splitter können Kurzschlüsse erzeugen.

לפני הפעלת המחשב לאחר החלפת FRU יש לוודא
שכל הברגים, הקפיצים, וחלקים קטנים אחרים נמצאים
במקומם ואינם חופשיים לזוז בתוך המחשב. כדי לוודא
זאת, יש לטלטל את המחשב ולהקשיב לגילוי קולות שקשוק.
חלקי או שבבי מתכת עלולים לגרום לקצרים חשמליים.

Prima di accendere l'elaboratore dopo che é stata effettuata la sostituzione di una FRU, accertarsi che tutte le viti, le molle e tutte le altri parti di piccole dimensioni siano nella corretta posizione e non siano sparse all'interno dell'elaboratore. Verificare ciò scuotendo l'elaboratore e prestando attenzione ad eventuali rumori; eventuali parti o pezzetti metallici possono provocare cortocircuiti pericolosi.

FRU の交換後、コンピュータの電源を入れる前に、ねじ、バネ、その他の小さな部品がすべて正しい位置にあり、またコンピュータの内部で緩んでいないことを確認してください。
これを確認するには、コンピュータを振って、カチャカチャと音がしないか確かめます。金属部品や金属破片はショートの原因になることがあります。

Antes de encender el sistema despues de sustituir una FRU, compruebe que todos los tornillos, muelles y demás piezas pequeñas se encuentran en su sitio y no se encuentran sueltas dentro del sistema. Compruébelo agitando el sistema y escuchando los posibles ruidos que provocarían. Las piezas metálicas pueden causar cortocircuitos eléctricos.

Safety notice 2

⚠ DANGER

Some standby batteries contain a small amount of nickel and cadmium. Do not disassemble a standby battery, recharge it, throw it into fire or water, or short-circuit it. Dispose of the battery as required by local ordinances or regulations. Use only the battery in the appropriate parts listing. Use of an incorrect battery can result in ignition or explosion of the battery.

Certaines batteries de secours contiennent du nickel et du cadmium. Ne les démontez pas, ne les rechargez pas, ne les exposez ni au feu ni à l'eau. Ne les mettez pas en court-circuit. Pour les mettre au rebut, conformez-vous à la réglementation en vigueur. Lorsque vous remplacez la pile de sauvegarde ou celle de l'horloge temps réel, veillez à n'utiliser que les modèles cités dans la liste de pièces détachées adéquate. Une batterie ou une pile inappropriée risque de prendre feu ou d'exploser.

Die Bereitschaftsbatterie, die sich unter dem Diskettenlaufwerk befindet, kann geringe Mengen Nickel und Cadmium enthalten. Sie darf nicht zerlegt, wiederaufgeladen, kurzgeschlossen, oder Feuer oder Wasser ausgesetzt werden. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Beim Ersetzen der Bereitschafts-oder Systembatterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

סוללות המתנה מסוימות מכילות כמות קטנה
של ניקל וקדמיום. אין לפרק סוללת המתנה,
לטעון אותה מחדש, להשליך אותה לאש או
למים או לקצר אותה. יש לסלק את הסוללה
כנדרש על ידי התקנות והחוקים המקומיים. יש
להשתמש רק בסוללה המופיעה ברשימת החלקים
המתאימה. שימוש בסוללה לא מתאימה עלול
לגרום להצתה או התפוצצות של הסוללה.

Alcune batterie di riserva contengono una piccola quantità di nichel e cadmio. Non smontarle, ricaricarle, gettarle nel fuoco o nell'acqua né cortocircuitarle. Smaltirle secondo la normativa in vigore (DPR 915/82, successive disposizioni e disposizioni locali). Quando si sostituisce la batteria dell'RTC (real time clock) o la batteria di supporto, utilizzare soltanto i tipi inseriti nell'appropriato Catalogo parti. L'impiego di una batteria non adatta potrebbe determinare l'incendio o l'esplosione della batteria stessa.

予備バッテリーの中には少量のニッケルとカドミウムが含まれているものがあります。したがって、予備バッテリーの分解、再充電、火または水の中への投棄、またはショートさせることは決して行わないでください。バッテリーを廃棄する場合は地方自治体の条例に従ってください。適切なパーツ・リストにあるバッテリーだけを使用してください。誤ったバッテリーを使用すると、バッテリーが発火したり、爆発したりすることがあります。

Algunas baterías de reserva contienen una pequeña cantidad de níquel y cadmio. No las desmonte, ni recargue, ni las eche al fuego o al agua ni las cortocircuite. Deséchelas tal como dispone la normativa local. Utilice sólo baterías que se encuentren en la lista de piezas. La utilización de una batería no apropiada puede provocar la ignición o explosión de la misma.

Safety notice 3

⚠ DANGER

The battery pack contains small amounts of nickel. Do not disassemble it, throw it into fire or water, or short-circuit it. Dispose of the battery pack as required by local ordinances or regulations. Use only the battery in the appropriate parts listing when replacing the battery pack. Use of an incorrect battery can result in ignition or explosion of the battery.

La batterie contient du nickel. Ne la démontez pas, ne l'exposez ni au feu ni à l'eau. Ne la mettez pas en court-circuit. Pour la mettre au rebut, conformez-vous à la réglementation en vigueur. Lorsque vous remplacez la batterie, veillez à n'utiliser que les modèles cités dans la liste de pièces détachées adéquate. En effet, une batterie inappropriée risque de prendre feu ou d'exploser.

Akkus enthalten geringe Mengen von Nickel. Sie dürfen nicht zerlegt, wiederaufgeladen, kurzgeschlossen, oder Feuer oder Wasser ausgesetzt werden. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Beim Ersetzen der Batterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

מארז הסוללה מכיל כמות קטנה של ניקל
וקדמיום. אין לפרק את מארז הסוללה, להשליך
אותו לאש או למים או לקצר אותו. יש לסלק את
מארז הסוללה הסוללה כנדרש על ידי התקנות
והחוקים המקומיים. יש להשתמש רק בסוללה
המופיעה ברשימת החלקים המתאימה בזמן החלפת
מארז הסוללה. שימוש בסוללה לא מתאימה עלול
לגרום להצתה או התפוצצות של הסוללה.

La batteria contiene piccole quantità di nichel. Non smontarla, gettarla nel fuoco o nell'acqua né cortocircuitarla. Smaltirla secondo la normativa in vigore (DPR 915/82, successive disposizioni e disposizioni locali). Quando si sostituisce la batteria, utilizzare soltanto i tipi inseriti nell'appropriato Catalogo parti. L'impiego di una batteria non adatta potrebbe determinare l'incendio o l'esplosione della batteria stessa.

バッテリー・パックには少量のニッケルが含まれています。バッテリー・パックを分解したり、火または水の中に投げ込んだり、ショートさせないでください。バッテリー・パックの廃棄にあたっては、地方自治体の条例または規則に従ってください。バッテリー・パックを交換するときは、適切なパーツ・リストにあるバッテリーだけを使用してください。誤ったバッテリーを使用すると、バッテリーが発火したり、爆発したりすることがあります。

Las baterías contienen pequeñas cantidades de níquel. No las desmonte, ni recargue, ni las eche al fuego o al agua ni las cortocircuite. Deséchelas tal como dispone la normativa local. Utilice sólo baterías que se encuentren en la lista de piezas al sustituir la batería. La utilización de una batería no apropiada puede provocar la ignición o explosión de la misma.

Safety notice 4

⚠ DANGER

The lithium battery can cause a fire, an explosion, or a severe burn. Do not recharge it, remove its polarized connector, disassemble it, heat it above 100°C (212°F), incinerate it, or expose its cell contents to water. Dispose of the battery as required by local ordinances or regulations. Use only the battery in the appropriate parts listing. Use of an incorrect battery can result in ignition or explosion of the battery.

La pile de sauvegarde contient du lithium. Elle présente des risques d'incendie, d'explosion ou de brûlures graves. Ne la rechargez pas, ne retirez pas son connecteur polarisé et ne la démontez pas. Ne l'exposez pas à une temperature supérieure à 100°C, ne la faites pas brûler et n'en exposez pas le contenu à l'eau. Mettez la pile au rebut conformément à la réglementation en vigueur. Une pile inappropriée risque de prendre feu ou d'exploser.

Die Systembatterie ist eine Lithiumbatterie. Sie kann sich entzünden, explodieren oder schwere Verbrennungen hervorrufen. Batterien dieses Typs dürfen nicht aufgeladen, zerlegt, über 100 C erhitzt oder verbrannt werden. Auch darf ihr Inhalt nicht mit Wasser in Verbindung gebracht oder der zur richtigen Polung angebrachte Verbindungsstecker entfernt werden. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Beim Ersetzen der Batterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

סוללת הליתיום עלולה לגרום לשריפה, להתפוצצות או לכוויות קשות. אין לטעון אותה מחדש, לסלק את המחבר המקוטב שלה, לפרק אותה או לחמם אותה לטמפרטורה העולה על 100 מעלות צלזיוס. אין לשרוף את הסוללה ואין לחשוף את תוכן התא למים. יש לסלק את הסוללה כנדרש בתקנות ובחוקים המקומיים. יש להשתמש רק בסוללה המופיעה ברשימת החלקים המתאימים. שימוש בסוללה אחרת עלול לגרום לסכנת שריפה או התפוצצות.

La batteria di supporto e una batteria al litio e puo incendiarsi, esplodere o procurare gravi ustioni. Evitare di ricaricarla, smontarne il connettore polarizzato, smontarla, riscaldarla ad una temperatura superiore ai 100 gradi centigradi, incendiarla o gettarla in acqua. Smaltirla secondo la normativa in vigore (DPR 915/82, successive disposizioni e disposizioni locali). L'impiego di una batteria non adatta potrebbe determinare l'incendio o l'esplosione della batteria stessa.

リチウム・バッテリーは、火災、爆発、または重症のやけどを引き起こすことがあります。バックアップ・バッテリーの充電、その極性コネクターの取り外し、バッテリー本体の分解、
100 ℃ (212 ˚F) 以上への加熱、焼却、電池の中身を水に浸すことはしないでください。バッテリーを廃棄する場合は地方自治体の条例に従ってください。適切なパーツ・リストにあるバッテリーだけを使用してください。誤ったバッテリーを使用すると、バッテリーが発火したり、爆発したりすることがあります。

La batería de repuesto es una batería de litio y puede provocar incendios, explosiones o quemaduras graves. No la recargue, ni quite el conector polarizado, ni la desmonte, ni caliente por encima de los 100°C (212°F), ni la incinere ni exponga el contenido de sus celdas al agua. Deséchela tal como dispone la normativa local.

Safety notice 5

If the LCD breaks and the fluid from inside the LCD gets into your eyes or on your hands, immediately wash the affected areas with water at least for 15 minutes. Seek medical care if any symptoms caused by the fluid are present after washing.

Si le panneau d'affichage à cristaux liquides se brise et que vous recevez dans les yeux ou sur les mains une partie du fluide, rincez-les abondamment pendant au moins quinze minutes. Consultez un médecin si des symptômes persistent après le lavage.

Die Leuchtstoffröhre im LCD-Bildschirm enthält Quecksilber. Bei der Entsorgung die örtlichen Bestimmungen für Sondermüll beachten. Der LCD-Bildschirm besteht aus Glas und kann zerbrechen, wenn er unsachgemäß behandelt wird oder der Computer auf den Boden fällt. Wenn der Bildschirm beschädigt ist und die darin befindliche Flüssigkeit in Kontakt mit Haut und Augen gerät, sollten die betroffenen Stellen mindestens 15 Minuten mit Wasser abgespült und bei Beschwerden anschließend ein Arzt aufgesucht werden.

אם מסך הגביש הנוזלי (LCD) נשבר והנוזל מתוך המסך בא במגע
עם עיניכם או ידיכם, שטפו את האזורים הנגועים מיד במים במשך
15 דקות לפחות. פנו לקבלת עזרה רפואית אם תסמינים הנובעים
מהמגע עם הנוזל נמשכים לאחר השטיפה.

Nel caso che caso l'LCD si dovesse rompere ed il liquido in esso contenuto entrasse in contatto con gli occhi o le mani, lavare immediatamente le parti interessate con acqua corrente per almeno 15 minuti; poi consultare un medico se i sintomi dovessero permanere.

LCD が破損し、 LCD の中の液体が目に入ったり、手に触れたりした場合は、液体が触れた部分を少なくとも 15 分間洗い流してください。洗い流した後に、液体によって何らかの症状が現れた場合は、医師の治療を受けてください。

Si la LCD se rompe y el fluido de su interior entra en contacto con sus ojos o sus manos, lave inmediatamente las áreas afectadas con agua durante 15 minutos como mínimo. Obtenga atención medica si se presenta algún síntoma del fluido despues de lavarse.

Safety notice 6

⚠ DANGER

To avoid shock, do not remove the plastic cover that protects the lower part of the inverter card.

Afin d'éviter tout risque de choc électrique, ne retirez pas le cache en plastique protégeant la partie inférieure de la carte d'alimentation.

Aus Sicherheitsgründen die Kunststoffabdeckung, die den unteren Teil der Spannungswandlerplatine umgibt, nicht entfernen.

כדי למנוע התחשמלות, אין להסיר את מכסה הפלסטיק
המגן על חלקו התחתון של הברטיס ההפוך.

Per evitare scosse elettriche, non rimuovere la copertura in plastica che avvolge la parte inferiore della scheda invertitore.

感電を防ぐため、インバーター・カードの下部を保護しているプラスチック・カバーを外さないでください。

Para evitar descargas, no quite la cubierta de plástico que rodea la parte baja de la tarjeta invertida.

Safety notice 7

⚠ DANGER

Though the main batteries have low voltage, a shorted or grounded battery can produce enough current to burn personnel or combustible materials.

Bien que le voltage des batteries principales soit peu élevé, le court-circuit ou la mise à la masse d'une batterie peut produire suffisamment de courant pour brûler des matériaux combustibles ou causer des brûlures corporelles graves.

Obwohl Hauptbatterien eine niedrige Spannung haben, können sie doch bei Kurzschluß oder Erdung genug Strom abgeben, um brennbare Materialien zu entzünden oder Verletzungen bei Personen hervorzurufen.

אף שהסוללות הראשיות הן בעלות מתח נמוך, סוללה
מקוצרת או מוארקת עלולה להפיק זרם משפיק לגרימת
כוויות או להצתת חומרים דליקים.

Sebbene le batterie di alimentazione siano a basso voltaggio, una batteria in corto circuito o a massa può fornire corrente sufficiente da bruciare materiali combustibili o provocare ustioni ai tecnici di manutenzione.

メイン・バッテリーの電圧は低くても、ショートしたり、接地したバッテリーが、作業者にやけどを負わせたり、可燃物を燃やすだけの電流を発生させる場合があります。

Aunque las baterías principales tienen un voltaje bajo, una batería cortocircuitada o con contacto a tierra puede producir la corriente suficiente como para quemar material combustible o provocar quemaduras en el personal.

Safety notice 8

⚠ DANGER

Before removing any FRU, turn off the computer, unplug all power cords from electrical outlets, remove the battery pack, and then disconnect any interconnecting cables.

Avant de retirer une unité remplaçable en clientèle, mettez le système hors tension, débranchez tous les cordons d'alimentation des socles de prise de courant, retirez la batterie et déconnectez tous les cordons d'interface.

Die Stromzufuhr muß abgeschaltet, alle Stromkabel aus der Steckdose gezogen, der Akku entfernt und alle Verbindungskabel abgenommen sein, bevor eine FRU entfernt wird.

לפני סילוק FRU כלשהו, יש לכבות את המחשב,
לנתק את כל כבלי החשמל משקעי החשמל, להוציא
את מארז הסוללה, ואז לנתק כבלי חיבור אחרים
אם יש כאלה.

Prima di rimuovere qualsiasi FRU, spegnere il sistema, scollegare dalle prese elettriche tutti i cavi di alimentazione, rimuovere la batteria e poi scollegare i cavi di interconnessione.

FRU を取り外す前に、 ThinkPad の電源を切って、すべての電源コードをコンセントから外してください。次に、バッテリー・パックを外し、相互接続ケーブルを外してください。

Antes de quitar una FRU, apague el sistema, desenchufe todos los cables de las tomas de corriente eléctrica, quite la batería y, a continuación, desconecte cualquier cable de conexión entre dispositivos.

Laser compliance statement

Some models of Lenovo computer are equipped from the factory with an optical storage device such as a CD-ROM drive or a DVD-ROM drive. Such devices are also sold separately as options. If one of these drives is installed, it is certified in the U.S. to conform to the requirements of the Department of Health and Human Services 21 Code of Federal Regulations (DHHS 21 CFR) Subchapter J for Class 1 laser products. Elsewhere, the drive is certified to conform to the requirements of the International Electrotechnical Commission (IEC) 825 and CENELEC EN 60 825 for Class 1 laser products.

If a CD-ROM drive, a DVD-ROM drive, or another laser device is installed, note the following:

⚠ CAUTION

Use of controls or adjustments or performance of procedures other than those specified herein might result in hazardous radiation exposure.

O uso de controles, ajustes ou desempenho de procedimentos diferentes daqueles aqui especificados pode resultar em perigosa exposição à radiação.

凡未在这里指明的任何控制用法、调整、行为，
都会导致严重后果。

Pour éviter tout risque d'exposition au rayon laser, respectez les consignes de réglage et d'utilisation des commandes, ainsi que les procédures décrites.

Werden Steuer- und Einstellelemente anders als hier festgesetzt verwendet, kann gefährliche Laserstrahlung auftreten.

Az itt előírt eljárásoktól, beállításoktól és vezérlésektől
eltérni a lézersugárzás veszélye miatt kockázatos !

L'utilizzo di controlli, regolazioni o l'esecuzione di procedure diverse da quelle specificate possono provocare l'esposizione a.

Использование элементов настройки и
выполнение процедур иных, чем указано
здесь, может привести к опасному
радиационному облучению.

Použitie kontrôl, úprav alebo iných vykonaní od iných
výrobcov, ako je v tomto špecifikované, mohlo by mať
za následok nebezpečenstvo vystavenia sa vyžiarovaniu.

本書で指定された内容以外の、お客様による整備、調整、または手順を行った場合、レーザー光の放射の危険があります。

El uso de controles o ajustes o la ejecución de procedimientos distintos de los aquí especificados puede provocar la exposición a radiaciones peligrosas.

Opening the CD-ROM drive, the DVD-ROM drive, or any other optical storage device could result in exposure to hazardous laser radiation. There are no serviceable parts inside those drives. **Do not open**.

A CD-ROM drive, a DVD-ROM drive, or any other storage device installed may contain an embedded Class 3A or Class 3B laser diode. Note the following:

⚠ DANGER

Emits visible and invisible laser radiation when open. Do not stare into the beam, do not view directly with optical instruments, and avoid direct exposure to the beam.

Radiação por raio laser ao abrir. Não olhe fixo no feixe de luz, não olhe diretamente por meio de instrumentos óticos e evite exposição direta com o feixe de luz.

开启时会有激光发射时，请勿盯视激光光束，请勿直接查看
视觉仪器，并且避免直接接触在激光光束之中。

Rayonnement laser si carter ouvert. Évitez de fixer le faisceau, de le regarder directement avec des instruments optiques, ou de vous exposer au rayon.

Laserstrahlung bei geöffnetem Gerät. Nicht direkt oder über optische Instrumente in den Laserstrahl sehen und den Strahlungsbereich meiden.

Kinyitáskor lézersugár ! Ne nézzen bele se szabad szemmel, se optikai eszközökkel. Kerülje a sugárnyalábbal való érintkezést!

Aprendo l'unità vengono emesse radiazioni laser. Non fissare il fascio, non guardarlo direttamente con strumenti ottici e evitare l'esposizione diretta al fascio.

Открывая, берегитесь лазерного излучения.
Не смотрите на луч, не разглядывайте его
с помощью оптических инструментов, а также
избегайте прямого воздействия лазерного луча.

Keď je laserová jednotka otvorená. Vyhnite sa priamemu
pohľadu a nehľadte priamo s optickými nástrojmi do ľúča
a vyhnite sa priamemu vystaveniu ľúčov.

開けるとレーザー光が放射されます。光線を見つめたり、光学機械を使って直接見たりしないでください。

Radiación láser al abrir. No mire fijamente ni examine con instrumental óptico el haz de luz. Evite la exposición directa al haz.

Important service information

This chapter presents the following important service information:

- "Strategy for replacing FRUs" on page 16
  - "Strategy for replacing a hard disk drive" on page 17
  - "Important notice for replacing a system board" on page 17
- "Important information about replacing RoHS compliant FRUs" on page 18

Important:

BIOS and device driver fixes are customer-installable. The BIOS and device drivers are posted on the customer support site:
http://support.lenovo.com.

Strategy for replacing FRUs

Before replacing parts:

Make sure that all software fixes, drivers, and BIOS downloads are installed before replacing any FRUs listed in this manual.

After a system board is replaced, ensure that the latest BIOS is loaded to the system board before completing the service action.

To download software fixes, drivers, and BIOS, follow the steps below:

1. Go to http://support.lenovo.com.
2. Enter the serial number or select a product or use Lenovo smart downloading.
3. Select the BIOS/Driver/Applications and download.
4. Follow the directions on the screen and install the necessary software.

Use the following strategy to prevent unnecessary expense for replacing and servicing FRUs:

- If you are instructed to replace an FRU, but the replacement does not solve the problem, reinstall the original FRU before you continue.
- Some computers have both a processor board and a system board. If you are instructed to replace either of them, and replacing one of them does not solve the problem, reinstall that board, and then replace the other one.
- If an adapter or a device consists of more than one FRU, any of the FRUs may be the cause of the error. Before replacing the adapter or device, remove the FRUs one by one to see if the symptoms change. Replace only the FRU that changed the symptoms.

Attention: The setup configuration on the computer you are servicing may have been customized. Running Automatic Configuration may alter the settings. Note the current configuration settings (using the View Configuration option); then, when service has been completed, verify that those settings remain in effect.

Strategy for replacing a hard disk drive

Always try to run a low-level format before replacing a hard disk drive. This will cause all customer data on the hard disk to be lost. Make sure that the customer has a current backup of the data before performing this action.

Attention: The drive startup sequence in the computer you are servicing may have been changed. Be extremely careful during write operations such as copying, saving, or formatting. If you select an incorrect drive, data or programs can be overwritten.

Important notice for replacing a system board

Some components mounted on a system board are very sensitive. Improper handling can cause damage to those components, and may cause a system malfunction.

Attention: When handling a system board:

- Do not drop the system board or apply any excessive force to it.
- Avoid rough handling of any kind.
- Avoid bending the system board and hard pushing to prevent cracking at each BGA (Ball Grid Array) chipset.

Important information about replacing RoHS compliant FRUs

RoHS, The Restriction of Hazardous Substances in Electrical and Electronic Equipment Directive (2002/95/EC) is a European Union legal requirement affecting the global electronics industry. RoHS requirements must be implemented on Lenovo products placed on the market after June 2006. Products on the market before June 2006 are not required to have RoHS compliant parts. If the original FRU parts are non-compliant, replacement parts can also be non-compliant. In all cases if the original FRU parts are RoHS compliant, the replacement part must also be RoHS compliant.

Note: RoHS and non-RoHS FRU part numbers with the same fit and function are identified with unique FRU part numbers.

Lenovo plans to transit to RoHS compliance well before the implementation date and expects its suppliers to be ready to support Lenovo's requirements and schedule in the EU. Products sold in 2005 and 2006 will contain some RoHS compliant FRUs. The following statement pertains to these products and any product Lenovo produces containing RoHS compliant FRUs.

RoHS compliant FRUs have unique FRU part numbers. Before or after the RoHS implementation date, failed RoHS compliant parts must always be replaced with RoHS compliant ones, so only the FRUs identified as compliant in the system HMM or direct substitutions for those FRUs may be used.

Products marketed before June 2006		Products marketed after June 2006	
Current or original part	**Replacement FRU**	**Current or original part**	**Replacement FRU**
Non-RoHS	Can be Non-RoHS	Must be RoHS	Must be RoHS
Non-RoHS	Can be RoHS		
Non-RoHS	Can sub to RoHS		
RoHS	Must be RoHS		

Note: A direct substitution is a part with a different FRU part number that is automatically shipped by the distribution center at the time of the order.

General checkout

This chapter presents the following information:

- "What to do first" on page 20
- "Power system checkout" on page 21

Before you go to the checkout, make sure to read the following important notes:

Important notes:

- **Only certified trained personnel can service the computer.**
- **Before replacing any FRU, read the entire page on removing and replacing FRUs.**
- **Carefully remove screws for reuse when replacing FRUs.**
- **Be extremely careful during such write operations as copying, saving, or formatting.** Drives in the computer that you are servicing sequence might have been altered. If you select an incorrect drive, data or programs might be overwritten.
- **Replace an FRU only with another FRU of the correct model.** When you replace an FRU, make sure that the machine model and the FRU part number are correct by referring to the FRU parts list.
- **An FRU should not be replaced just because of a single, unreproducible failure.** Single failures can occur for a variety of reasons that have nothing to do with a hardware defect, such as cosmic radiation, electrostatic discharge, or software errors. Consider replacing an FRU only when a problem recurs. If you suspect that an FRU is defective, clear the error logs and run the test again. If the error does not recur, do not replace the FRU.
- **Be careful not to replace a nondefective FRU.**

What to do first

When you do return an FRU, you must include the following information in the parts exchange form or parts return form that you attach to it:

1. Name and phone number of servicer
2. Date of service
3. Date on which the machine failed
4. Date of purchase
5. Procedure index and page number in which the failing FRU was detected
6. Failing FRU name and part number
7. Machine type, model number, and serial number
8. Customer's name and address

Note for warranty: During the warranty period, the customer may be responsible for repair costs if the computer damage was caused by misuse, accident, modification, unsuitable physical or operating environment, or improper maintenance by the customer.

The following is a list of some common items that are not covered under warranty and some symptoms that might indicate that the system was subjected to stress beyond normal use.

Before checking problems with the computer, determine whether the damage is covered under the warranty by referring to the following list:

The following are not covered under warranty:

- LCD panel cracked from the application of excessive force or from being dropped
- Scratched (cosmetic) parts
- Distortion, deformation, or discoloration of the cosmetic parts
- Plastic parts, latches, pins, or connectors that have been cracked or broken by excessive force
- Damage caused by liquid spilled into the system
- Damage caused by the improper insertion of a PC Card or the installation of an incompatible card
- Improper disk insertion or use of an optical drive
- Diskette drive damage caused by pressure on the diskette drive cover, foreign material in the drive, or the insertion of a diskette with multiple labels
- Damaged or bent diskette eject button
- Fuses blown by attachment of a nonsupported device
- Forgotten computer password (making the computer unusable)
- Sticky keys caused by spilling a liquid onto the keyboard
- Use of an incorrect AC adapter on laptop products

The following symptoms might indicate damage caused by nonwarranted activities:

- Missing parts might be a symptom of unauthorized service or modification.
- If the spindle of a hard disk drive becomes noisy, it may have been subjected to excessive force, or dropped.

Power system checkout

To verify a symptom, follow the steps below:

1. Turn off the computer.
2. Remove the battery pack.
3. Connect the AC adapter.
4. Make sure that power is supplied when you turn on the computer.
5. Turn off the computer.
6. Disconnect the AC adapter and install the charged battery pack.
7. Make sure that the battery pack supplies power when you turn on the computer.

If you suspect a power problem, see the appropriate one of the following power supply checkouts:

- "Checking the AC adapter" on page 21
- "Checking operational charging" on page 22
- "Checking the battery pack" on page 22

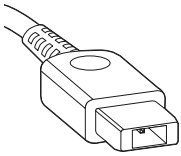
Checking the AC adapter

You are here because the computer fails only when the AC adapter is used.

- If the power-on indicator does not turn on, check the power cord of the AC adapter for correct continuity and installation.
- If the computer does not charge during operation, go to "Checking operational charging".

To check the AC adapter, follow the steps below:

1. Unplug the AC adapter cable from the computer.
2. Measure the output voltage at the plug of the AC adapter cable. See the following figure:



Pin	Voltage (V dc)
1	20V/2.25A
2	15V/3A
3	9V/2A
4	5V/2A

Note: Output voltage for the AC adapter pin No. 2 may differ from the one you are servicing.

3. If the voltage is not correct, replace the AC adapter.
4. If the voltage is acceptable, do the following:

- Replace the system board.
- If the problem persists, go to "V330-14ARR" on page 27.

Note: Noise from the AC adapter does not always indicate a defect.

Checking operational charging

To check whether the battery charges properly during operation, use a discharged battery pack or a battery pack that has less than 50% of the total power remaining when installed in the computer.

Perform operational charging. If the battery status indicator or icon does not light on, remove the battery pack and let it return to room temperature. Reinstall the battery pack. If the charge indicator or icon is still off, replace the battery pack.

If the charge indicator still does not light on, replace the system board. Then reinstall the battery pack. If it is still not charged, go to the next section.

Checking the battery pack

Battery charging does not start until the Power Meter shows that less than 95% of the total power remains; under this condition the battery pack can charge to 100% of its capacity. This protects the battery pack from being overcharged or from having a shortened life.

To check your battery, move your cursor to the Power Meter icon in the icon tray of the Windows® taskbar and wait for a moment (but do not click it), and the percentage of battery power remaining is displayed. To get detailed information about the battery, double-click the Power Meter icon.

Note: If the battery pack becomes hot, it may not be able to be charged. Remove it from the computer and leave it at room temperature for a while. After it cools down, reinstall and recharge it.

Related service information

This chapter presents the following information:

- “Restoring the factory contents” on page 23
- “Passwords” on page 24
- “Power management” on page 25

Restoring the factory contents

Restore of factory default

The Lenovo V330-14ARR computers come with pre-installed OneKey Recovery system and “Push-button reset”. In order to save application files and the initial backed up files of the system, the hard disk in a Lenovo computer includes a hidden partition when it is shipped. If you need to restore the system to the point of your first boot up, press the Novo button and run **System Recovery**. For details of OneKey Recovery system and “Push-button reset”, see the *Recovery system* in the *User Guide*.

Note: This will delete all the new data on the system partition (C drive), which is not recoverable. Make sure to back up your critical data before you perform this action.

When you use the recovery discs to boot your computer, the system will enter the user interface for system recovery automatically. Please follow the prompt to insert the backup discs to complete the whole recovery process.

Note: The recovery process might take up to 2 hours.

Passwords

As many as three passwords may be needed for any Lenovo computer: the power-on password (POP), the hard disk password (HDP), and the administrator password.

If any of these passwords has been set, a prompt for it appears on the screen whenever the computer is turned on. The computer does not start until the password is entered.

Power-on password

A power-on password (POP) protects the system from being powered on by an unauthorized person. The password must be entered before an operating system can be booted.

Hard-disk password

There are two hard-disk passwords (HDPs):

+ User HDP - for the user

+ Master HDP - for the system administrator, who can use it to get access to the hard disk drive even if the user has changed the user HDP

Attention: If the user HDP has been forgotten, check whether a master HDP has been set. If it has, it can be used for access to the hard disk drive. If no master HDP is available, neither Lenovo nor Lenovo authorized service technicians provide any services to reset either the user or the master HDP, or to recover data from the hard disk drive. The hard disk drive can be replaced for a scheduled fee.

Administrator password

Administrator password controls the access of the whole setup utility. Only after the Administrator password has been set can the User password be set. If Administrator password was cleared, the User password was cleared too.

Power management

Note: Power management modes are not supported for APM operating system.

To reduce power consumption, the computer has two power management modes: sleep (standby), and hibernation.

Putting the computer to sleep or shutting it down

When you have finished working with your computer, you can put it to sleep or shut it down.

Putting your computer to sleep

If you will be away from your computer for only a short time, put the computer to sleep.

When the computer is in sleep mode, you can quickly wake it to resume use, bypassing the startup process.

To put the computer to sleep, do one of the following:

- Close the display lid.
- Press the power button.
- Move the cursor to the lower-left corner, and then select the Start button. Select **Power** → **Sleep.**

Note: Put your computer to sleep before you move it. Moving your computer while the hard disk drive is spinning can damage the hard disk, causing loss of data.

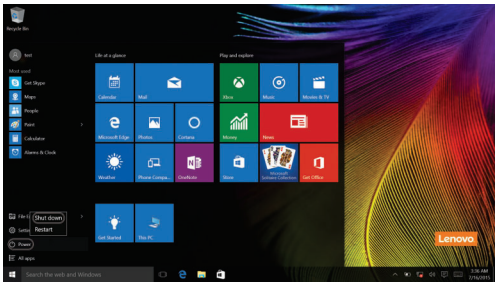
To wake up the computer, perform the following:

- Press any key on the keyboard.
- Press the power button.

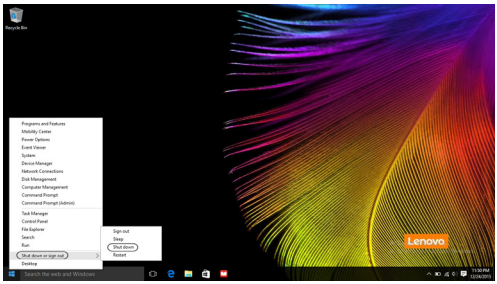
Shutting down the computer

If you are not going to use your computer for a long time, shut it down.
To shut down your computer, do one of the following:

- Move the cursor to the lower-left corner, and then select the Start button. Select **Power** → **Shut down.**



- Right-click the Start button in the lower-left corner and select **Shut down or sign out** → **Shut down.**



Lenovo V330-14ARR

This chapter presents the following product-specific service references and product-specific parts information:

- “Specifications” on page 27
- “Status indicators” on page 29
- “Hotkeys” on page 30
- “FRU replacement notices” on page 31
- “Removing and replacing an FRU” on page 32
- “Locations” on page 66
- “Parts list” on page 68

Specifications

The following table lists the specifications of the Lenovo V330-14ARR:

Table 1. Specifications

Form Factor	
Dimensions	Appr. 343 mm × 247 mm × 20.3 mm
Weight	Appr. 1.8 kg with battery
LCD size	14.0-inch
Processor	
See the system properties of your computer, you can do this as follows: Click **Control Panel**, then click **Hardware and Sound**, click **Device Manager** under **Devices and Printers** and double click **Processors**.	
Memory	
Type and speed	DDR4
Maximum supported capacity	8 GB
SSD	
Interface	PCIe
HDD	
Form factor	2.5-inch, 7 mm
Capacity	500 GB/1 TB/2 TB
Interface	SATA 3/SATA 2
Display	
Display resolution (LCD)	1,366 × 768 HD/1,920 × 1,080 pixels FHD
LCD backlight	LED

Table 1. Specifications (continued)

I/O Ports	
USB	USB 3.0 × 2, Type-C (USB 3.1) × 1
Audio	Combo audio jack × 1
Video/Audio	HDMI slot × 1
Memory card slot	4 in 1 (SD, SDHC, SDXC, MMC)
Battery pack	
Type	Li-Polymer
Cells/Capacity	2 Cell, 30/39 Wh Optional battery, 2 Cell, 39 Wh (on select models)
Note: The capacity given here is the typical or average capacity as measured in a specific test environment. Capacities measured in other environments may differ but are no lower than the rated capacity (see product label).	
AC power adapter	
Input	100-240 V, 50-60 Hz
Output voltage	20 V DC
Power	65 W
Miscellaneous	
Camera (on select models)	VGA/HD
Security	Kensington Mini Security slot × 1

Status indicators

The system status indicators below show the computer status:

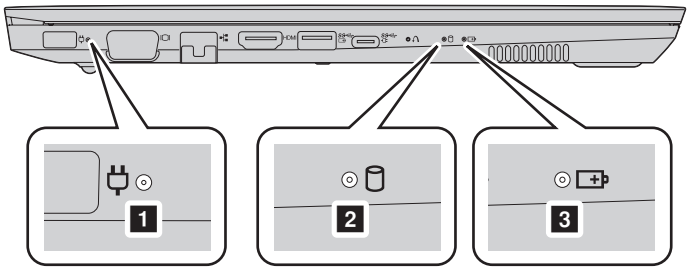


Table 2. Status indicators

■ DC-IN LED

Indicator	Indicator status	Meaning
Power status indicator	On	The computer is powered on.
	Off	The computer is powered off.

2 HDD LED

3 Battery charger status LED

AC power adapter status	Indicator status	Meaning
Disconnected	Off	The computer is in sleep mode or turned off; The battery has more than 20% charge.
	Solid amber	The battery has between 5% and 20% charge.
	Fast blinking amber	The battery has between 1% and 5% charge.
Connected	Slow blinking amber	The battery is being charged. When battery charge reaches 20%, the blinking color changes to white.
	Slow blinking white	The battery has between 20% and 80% charge and is still charging. When the battery reaches 80% charge the light will stop blinking.
	Solid white	The battery has more than 80% charge, charging will continue until the battery is fully charged.

Hotkeys

You can access certain system settings quickly by pressing the appropriate hotkeys.

Table 3. Hotkeys

	:	Mutes/unmutes the sound.		:	Enables/disables airplane mode.
	:	Decreases the volume level.		:	Enables/disables camera. (on select models)
	:	Increases the volume level.		:	Locks/unlocks the LCD screen.
	:	Enables/disables microphone. (on select models)		:	Enables the external projector or dangles the external display.
	:	Refreshes page.		:	Decreases display brightness.
	:	Enables/disables the touch pad.		:	Increases display brightness.

FRU replacement notices

This section presents notices related to removing and replacing parts. Read this section carefully before replacing any FRU.

Screw notices

Loose screws can cause a reliability problem. In the Lenovo computer, this problem is addressed with special nylon-coated screws that have the following characteristics:

- They maintain tight connections.
- They do not easily come loose, even with shock or vibration.
- They are harder to tighten.
- Each one should be used only once.

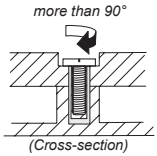
Do the following when you service this machine:

- Keep the screw kit in your tool bag.
- Carefully remove screws for reuse when replacing FRUs.
- Use a torque screwdriver if you have one.

Tighten screws as follows:

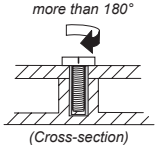
- **Plastic to plastic**

  Turn an additional 90° after the screw head touches the surface of the plastic part:



- **Logic card to plastic**

  Turn an additional 180° after the screw head touches the surface of the logic card:



- **Torque driver**

  If you have a torque screwdriver , refer to the “Torque” column for each step.
- Make sure that you use the correct screws. If you have a torque screwdriver, tighten all screws firmly to the torque shown in the table. **Carefully remove screws for reuse when replacing FRUs. Make sure that all screws are tightened firmly.**
- Ensure torque screwdrivers are calibrated correctly following country specifications.

Removing and replacing an FRU

This section presents exploded figures with the instructions to indicate how to remove and replace the FRU. Make sure to observe the following general rules:

1. Do not attempt to service any computer unless you have been trained and certified. An untrained person runs the risk of damaging parts.
2. Before replacing any FRU, review “FRU replacement notices” on page 31.
3. Begin by removing any FRUs that have to be removed before the failing FRU. Any of such FRUs are listed at the top of the page. Remove them in the order in which they are listed.
4. Follow the correct sequence in the steps to remove the FRU, as given in the figures by the numbers in square callouts.
5. When turning a screw to replace an FRU, turn it in the direction as given by the arrow in the figure.
6. When removing the FRU, move it in the direction as given by the arrow in the figure.
7. To put the new FRU in place, reverse the removal procedures and follow any of the notes that pertain to replacement. For information about connecting and arranging internal cables, see “Locations” on page 66.
8. When replacing an FRU, use the correct screw as shown in the procedures.

> **⚠ DANGER**
>
> Before removing any FRU, turn off the computer, unplug all power cords from electrical outlets, remove the battery pack, and then disconnect any of the interconnecting cables.

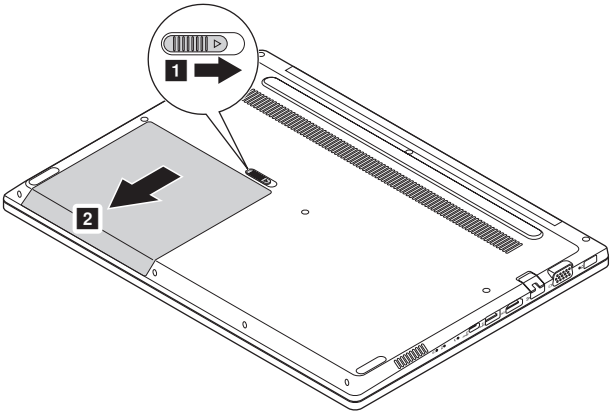
Attention: After replacing an FRU, do not turn on the computer until you have made sure that all screws, springs, and other small parts are in place and none are loose inside the computer. Verify this by shaking the computer gently and listening for rattling sounds. Metallic parts or metal flakes can cause electrical short circuits.

Attention: The system board is sensitive to, and can be damaged by, electrostatic discharge. Before touching it, establish personal grounding by touching a ground point with one hand or using an electrostatic discharge (ESD) strap (P/N 6405959) to remove potential shock reasons.

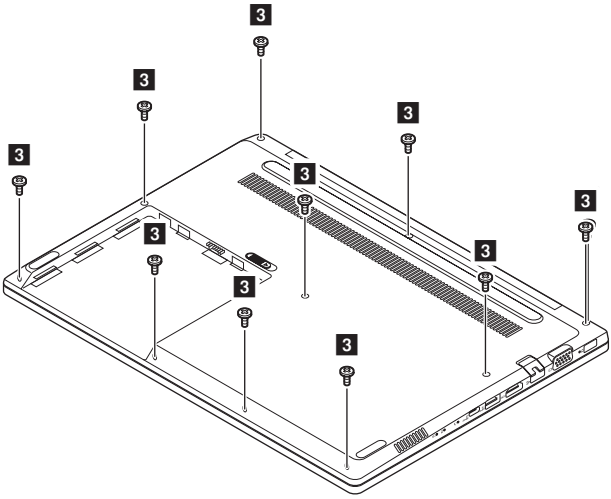
1010 Base cover and dummy case

Figure 1. Removal steps of base cover and dummy case
Remove the dummy case in the directions shown by arrows ■ and 2.

Note: For some models, a battery is used in the place of the dummy case.



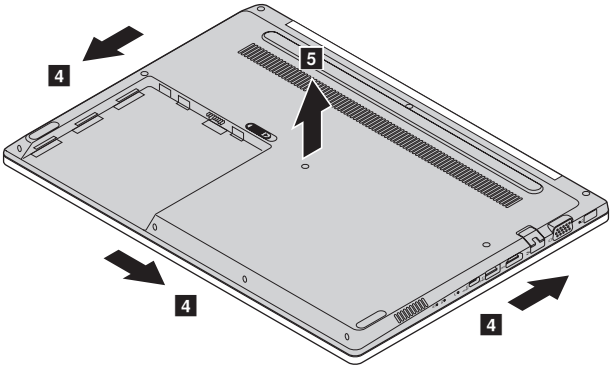
Remove the screws 3.



Step	Screw (quantity)	Color	Torque
3	M2 x L4.5mm, Phillips-head (10)	Black	1.6-2.0 kgf.cm

Figure 1. Removal steps of base cover and dummy case (continued)

Remove the base cover in the directions shown by arrows 4 and 5.



Note: Applying labels to the base cover
The new base cover FRU is shipped with a kit containing labels of several kinds. When you replace the base cover, you need to apply the following labels:

The following labels need to be peeled off from the old base cover and put on the new base cover.

For countries other than China and India:

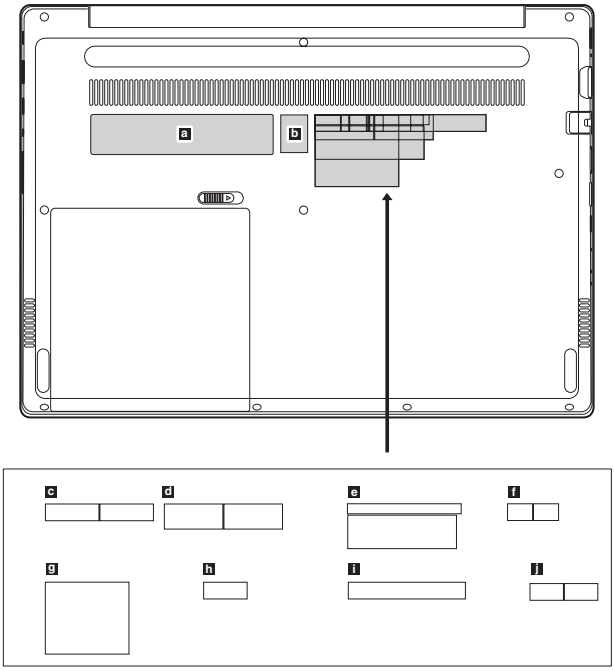
- a WW safety certification mark
- b GML label 16.077 x 22.501 mm
- c BT label and WL label 32 × 10 mm for Israel/USA/Canada/Taiwan
- d Brazil label 35 × 15 mm
- e Argentina WL label 68 × 6 mm and Argentina adapter label 65 × 20 mm
- f BT label and WL label 15 × 10 mm for Malaysia/Indonesia
- g KCC label 50 × 43 mm for Korea
- h Rating label for Indonesia 26 × 10 mm
- i Vision warning label 70 × 10 mm for Taiwan
- j South Africa label 20 × 10 mm

For China and India:

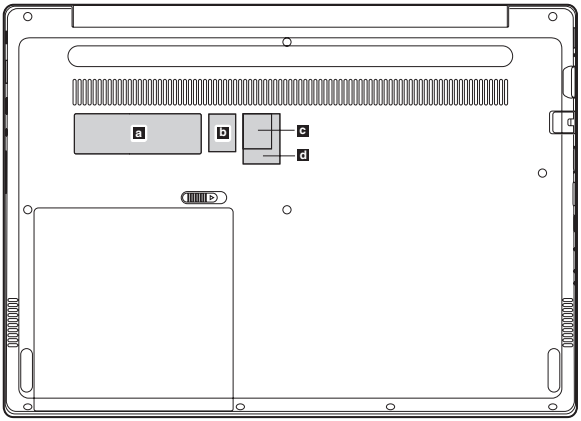
- a China or India safety certification mark
- b GML label 16.077 x 22.501 mm
- c Office label 17 x 21 mm
- d India BIS label 22 x 30 mm

For some models, you also need to apply one or two FCC labels. Check the old base cover; if it has one or two FCC labels, find duplicates of them in the label kit and apply them to the new base cover.

For the location of each label, refer to the following figures:
For countries other than China and India:



For China and India:



1020 Battery pack

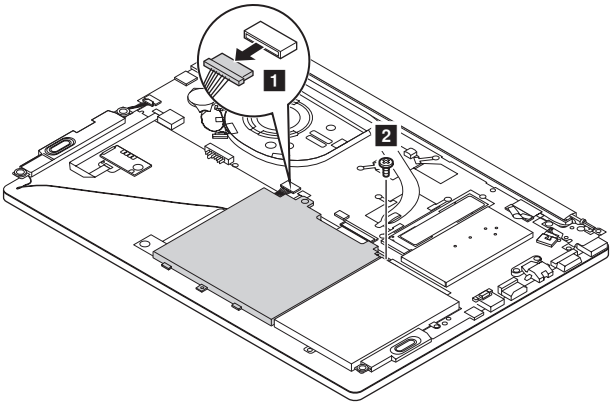
> ⚠ **DANGER**
> Only use the battery specified in the parts list for your computer. Any other battery could ignite or explode.

For access, remove these FRUs in order:

- “1010 Base cover and dummy case” on page 33

Figure 2. Removal steps of battery pack

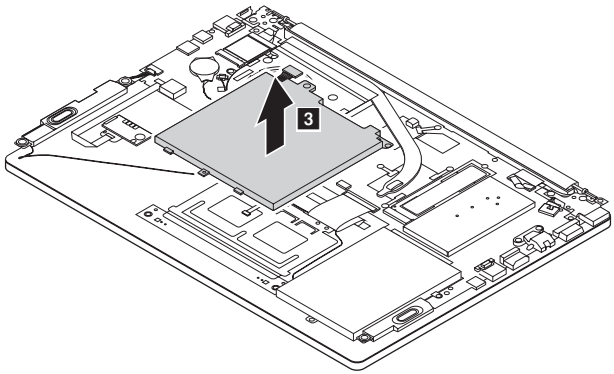
Detach the battery pack connector in the direction shown by arrow ■. Remove the screws 2.



Step	Screw (quantity)	Color	Torque
2	M2 x L4.5mm, Phillips-head (1)	Black	1.6-2.0 kgf.cm

Figure 2. Removal steps of battery pack (continued)

Remove the battery pack in the direction shown by arrow 3.



1030 PCI Express Mini Card for wireless LAN

For access, remove these FRUs in order:

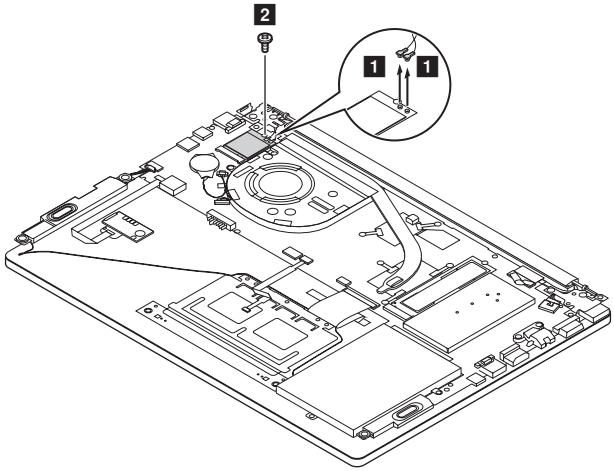
- “1010 Base cover and dummy case” on page 33
- “1020 Battery pack” on page 37

Important:

The preinstalled WLAN module may only be replaced with a Lenovo approved module in order to comply with FCC and IC regulations. Refer to Table 4 “Parts list—Overall” on page 70 for Lenovo part numbers for the approved modules.

Figure 3. Removal steps of PCI Express Mini Card for wireless LAN

Disconnect the two wireless LAN cables (black, white) ■, and then remove the screw 2.

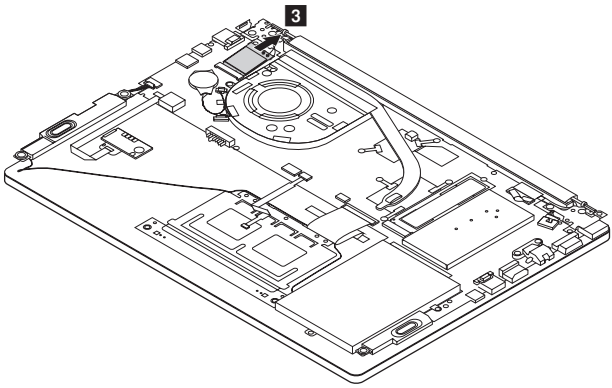


In step ■, unplug the jacks by using the removal tool antenna RF connector (P/N: 08K7159), or pick up the connectors with your fingers and gently unplug them in the direction shown by the arrows.

Step	Screw (quantity)	Color	Torque
2	M2 x L2.5mm, Phillips-head (1)	Black	1.6-2.0 kgf.cm

Figure 3. Removal steps of PCI Express Mini Card for wireless LAN (continued)

Remove the card in the direction shown by arrow 3.



When installing:
Plug the black cable into the jack labeled **MAIN**, and the white cable into the jack labeled **AUX** on the card.

1040 SSD card

For access, remove these FRUs in order:

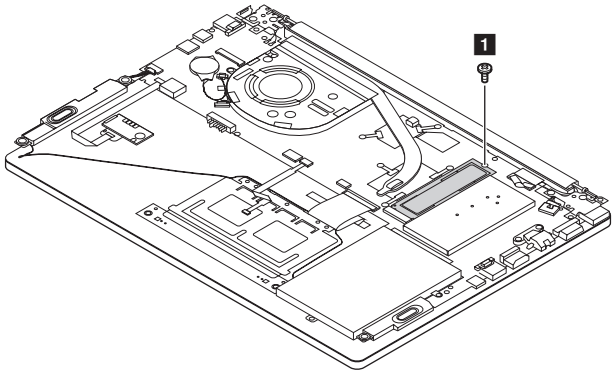
- “1010 Base cover and dummy case” on page 33
- “1020 Battery pack” on page 37
- “1030 PCI Express Mini Card for wireless LAN” on page 39

Attention:

- **Do not drop the SSD card or apply any physical shock to it.** The SSD card is sensitive to physical shock. Improper handling can cause damage and permanent loss of data.
- Before removing the SSD card, suggest the customer to backup all the information on it if possible.
- Never remove the SSD card while the system is operating or in suspend mode.

Figure 4. Removal steps of SSD card

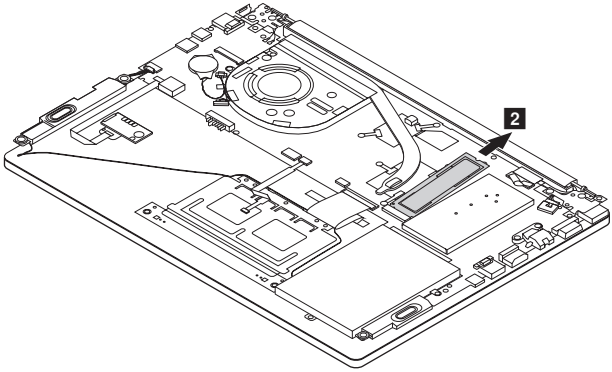
Remove the screw ■.



Step	Screw (quantity)	Color	Torque
■	M2 x L2.5mm, Phillips-head (1)	Black	1.6-2.0 kgf.cm

Figure 4. Removal steps of SSD card (continued)

Remove the SSD card in the direction shown by arrow 2.



1050 Hard disk drive

For access, remove these FRUs in order:

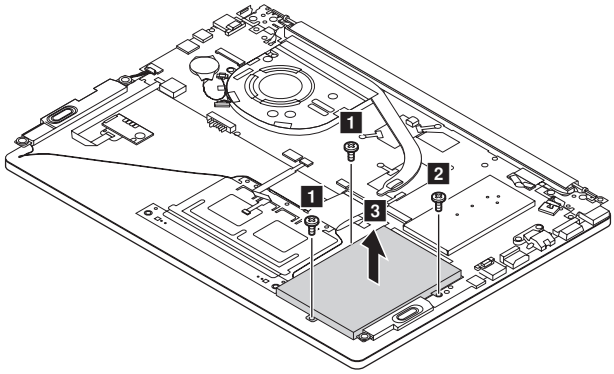
- “1010 Base cover and dummy case” on page 33
- “1020 Battery pack” on page 37
- “1030 PCI Express Mini Card for wireless LAN” on page 39
- “1040 SSD card” on page 41

Attention:

- **Do not drop the hard disk drive or apply any physical shock to it.** The hard disk drive is sensitive to physical shock. Improper handling can cause damage and permanent loss of data.
- Before removing the drive, suggest the customer to backup all the information on it if possible.
- Never remove the drive while the system is operating or in suspend mode.

Figure 5. Removal steps of hard disk drive

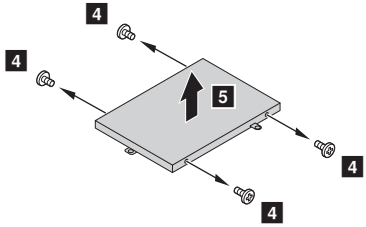
Remove the screws ■ and 2. Then remove the hard disk drive in the direction shown by arrow 3.



Step	Screw (quantity)	Color	Torque
■	M2 x L2.5mm, Phillips-head (2)	Black	1.6-2.0 kgf.cm
2	M2 x L4.5mm, Phillips-head (1)	Black	1.6-2.0 kgf.cm

Figure 5. Removal steps of hard disk drive(continued)

Remove the screws on both edges of hard disk drive in the directions shown by arrows 4. Then remove the hard disk drive bracket in the direction shown by arrow 5.



Step	Screw (quantity)	Color	Torque
4	M3 x L3mm, Phillips-head (4)	Silver	3.7-4.3 kgf.cm

1060 DIMM

For access, remove these FRUs in order:

- “1010 Base cover and dummy case” on page 33
- “1020 Battery pack” on page 37
- “1030 PCI Express Mini Card for wireless LAN” on page 39
- “1040 SSD card” on page 41
- “1050 Hard disk drive” on page 43

Figure 6 Removal steps of DIMM

Remove the DIMM cover in the direction shown by arrow ■.

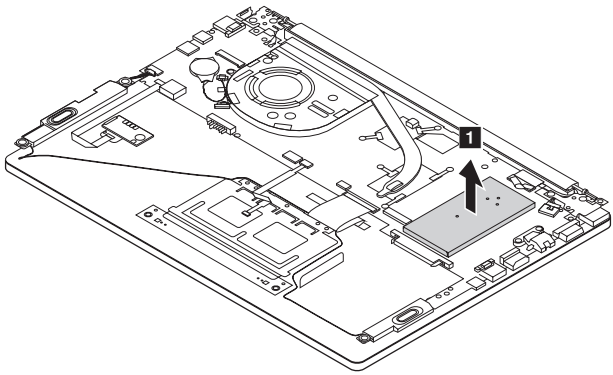
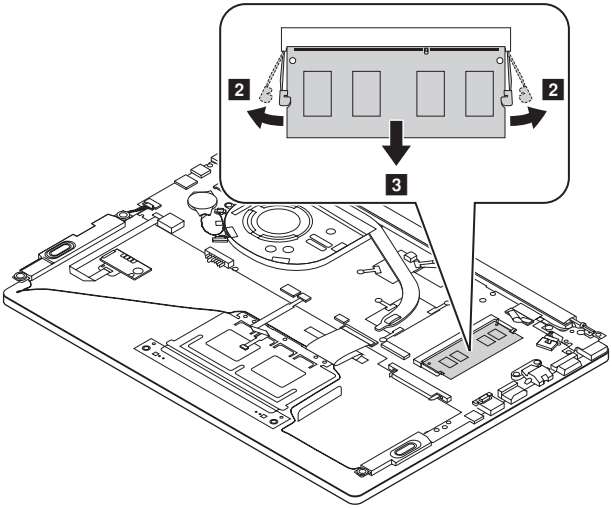


Figure 6. Removal steps of DIMM (continued)

Release the two latches on both edges of the socket at the same time in the directions shown by arrows 2. Then unplug the DIMM in the direction shown by arrow 3.



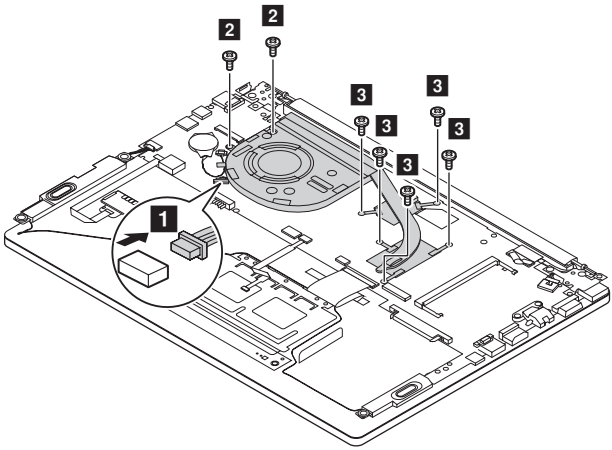
1070 Fan and heat sink

For access, remove these FRUs in order:

- “1010 Base cover and dummy case” on page 33
- “1020 Battery pack” on page 37
- “1030 PCI Express Mini Card for wireless LAN” on page 39
- “1040 SSD card” on page 41
- “1050 Hard disk drive” on page 43
- “1060 DIMM” on page 45

Figure 7. Removal steps of fan and heat sink

Unplug the fan connector in the direction shown by arrow ■. Remove the screws 2 and 3.



Step	Screw (quantity)	Color	Torque
2	M2 x L2.5mm, Phillips-head (2)	Black	1.6-2.0 kgf.cm
3	M2 x L2.5mm, Phillips-head (5)	Black	1.6-2.0 kgf.cm

When installing: Make sure that the connector(s) is attached firmly.

Figure 7. Removal steps of fan and heat sink (continued)

Remove the fan 4 and heat sink 5. Be careful not to damage the connector.

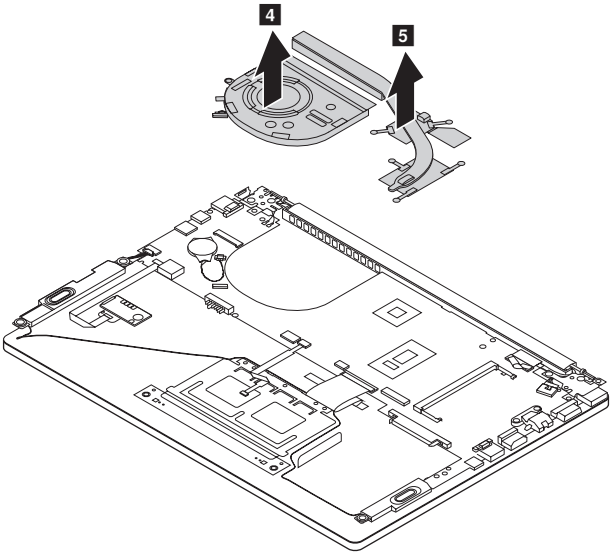
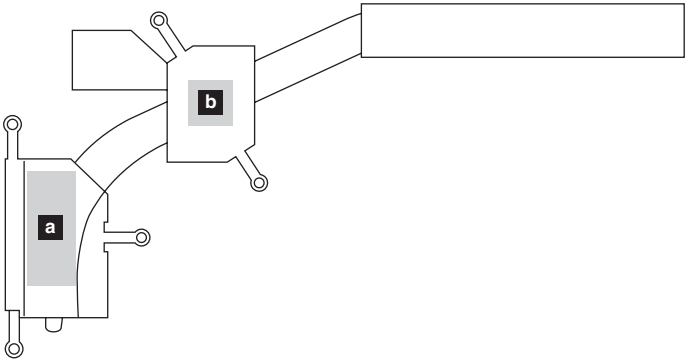


Figure 7. Removal steps of fan and heat sink (continued)



When installing: Before you attach the heat sink to the computer, apply thermal grease, at an amount of 0.2 grams, to the parts a and b shown in the figure above. Either too much or too little grease application can cause a thermal problem due to imperfect contact with a component.

1080 Upper case

For access, remove these FRUs in order:

- “1010 Base cover and dummy case” on page 33
- “1020 Battery pack” on page 37
- “1030 PCI Express Mini Card for wireless LAN” on page 39
- “1040 SSD card” on page 41
- “1050 Hard disk drive” on page 43
- “1060 DIMM” on page 45
- “1070 Fan and heat sink” on page 47

Figure 8. Removal steps of upper case

Detach the EDP cable in the direction shown by arrow ■.

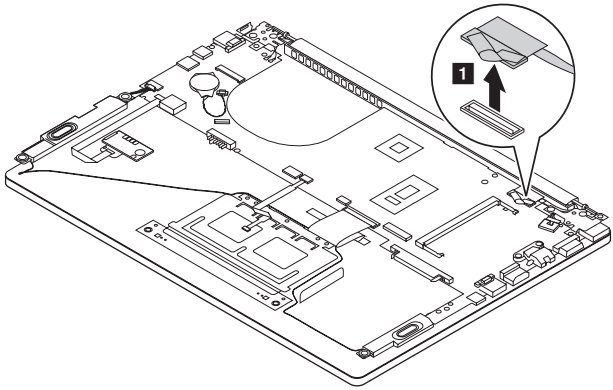
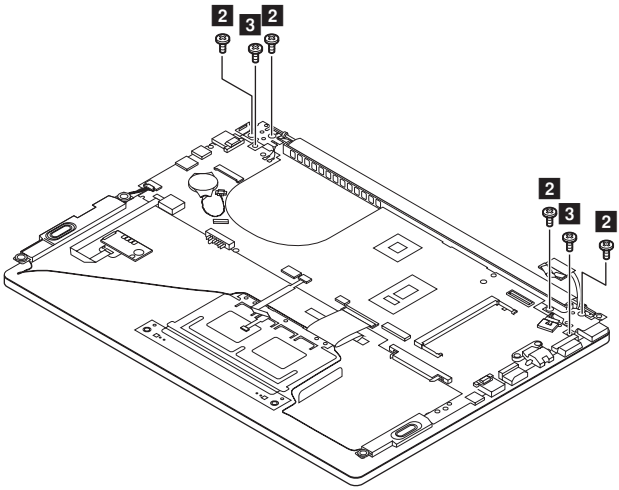


Figure 8. Removal steps of upper case (continued)

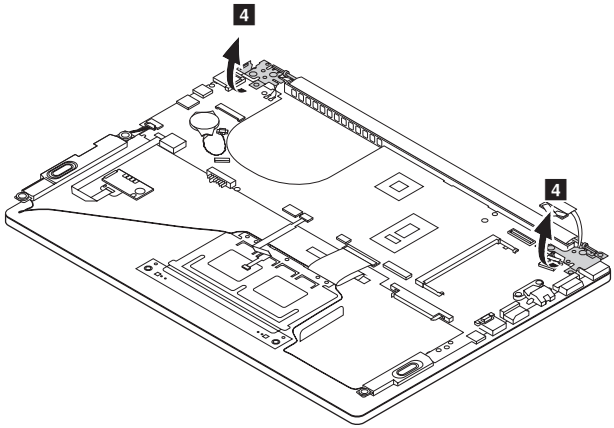
Remove the screws 2 and 3.



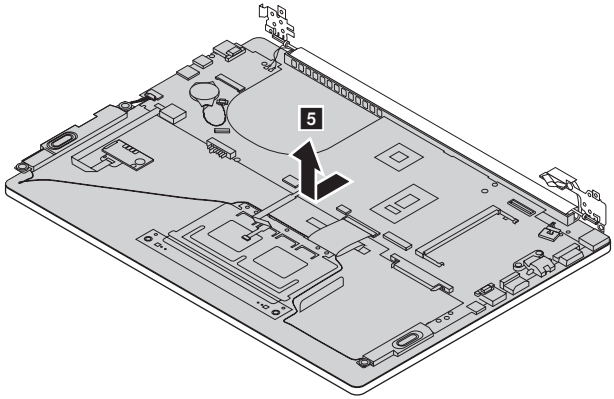
Step	Screw (quantity)	Color	Torque
2	M2.5 x L4.5mm, Phillips-head (4)	Silver	2.2-2.8 kgf.cm
3	M2 x L4.5mm, Phillips-head (2)	Black	1.6-2.0 kgf.cm

Figure 8. Removal steps of upper case (continued)

Open the hinge in the directions shown by arrows 4.



Remove the upper case from the LCD module in the direction shown by arrow 5.



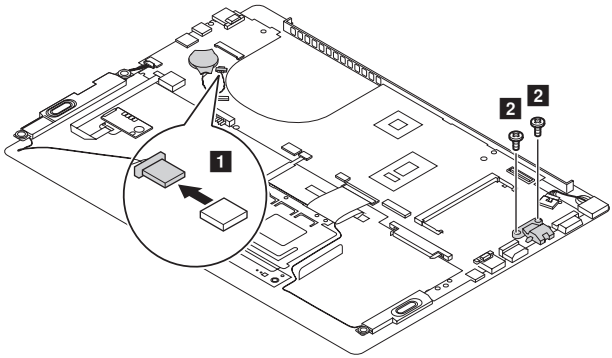
1090 Backup battery and RJ-45 cover

For access, remove these FRUs in order:

- “1010 Base cover and dummy case” on page 33
- “1020 Battery pack” on page 37
- “1030 PCI Express Mini Card for wireless LAN” on page 39
- “1040 SSD card” on page 41
- “1050 Hard disk drive” on page 43
- “1060 DIMM” on page 45
- “1070 Fan and heat sink” on page 47
- “1080 Upper case” on page 50

Figure 9. Removal steps of backup battery and RJ-45 cover

Unplug the backup battery connector in the direction shown by arrow ■. Then remove the screws 2.

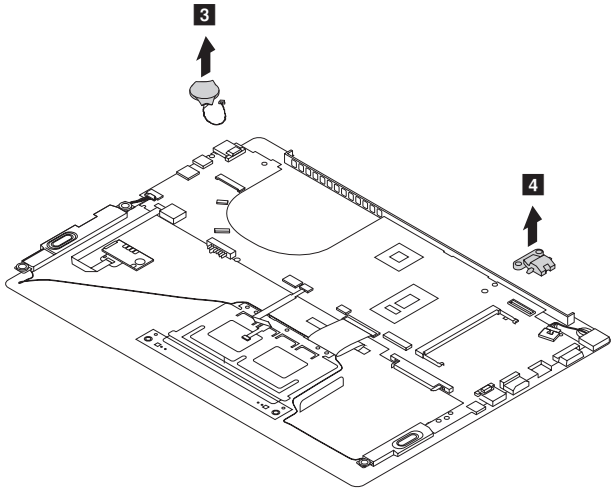


When installing: Make sure that the connector is attached firmly.

Step	Screw (quantity)	Color	Torque
2	M2 x L6mm, Phillips-head (2)	Black	1.6-2.0 kgf.cm

Figure 9. Removal steps of backup battery and RJ-45 cover (continued)

Remove the backup battery and RJ-45 cover in the direction shown by arrows 3 and 4.



1100 System board

Important notices for handling the system board:

When handling the system board, bear the following in mind.

- Be careful not to drop the system board on a bench top that has a hard surface, such as metal, wood, or composite.
- Avoid rough handling of any kind.
- During the whole process, make sure not to drop or stack the system board.
- If you put a system board down, make sure to put it only on a padded surface such as an ESD mat or conductive corrugated material.

For access, remove these FRUs in order:

- “1010 Base cover and dummy case” on page 33
- “1020 Battery pack” on page 37
- “1030 PCI Express Mini Card for wireless LAN” on page 39
- “1040 SSD card” on page 41
- “1050 Hard disk drive” on page 43
- “1060 DIMM” on page 45
- “1070 Fan and heat sink” on page 47
- “1080 Upper case” on page 50
- “1090 Backup battery and RJ-45 cover” on page 53

Figure 10. Removal steps of system board

Disconnect the speaker connector and DC IN connector in the directions shown by arrows ■ and 2, then remove the DC IN connector in the direction shown by arrow 3.
Then disconnect the fingerprint connector, touch-pad connector and LCD connector in the directions shown by arrows 4 - 9.

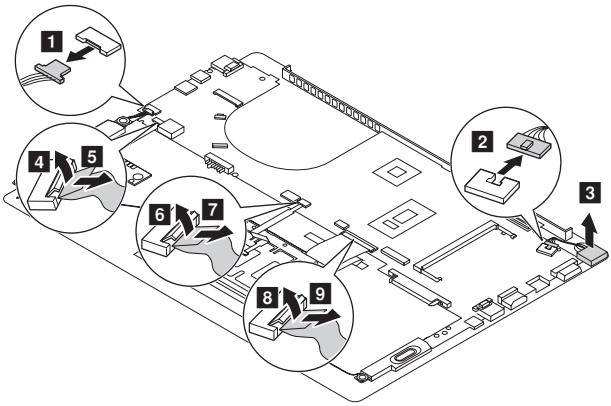
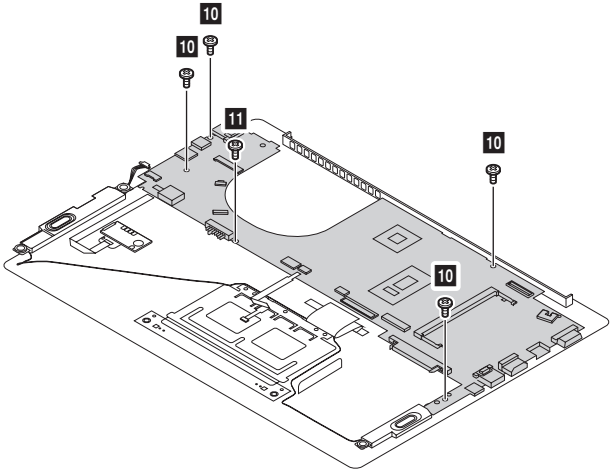


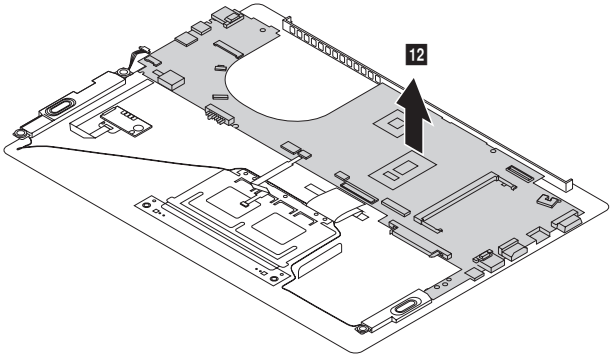
Figure 10. Removal steps of system board

Remove the screws 10 and 11.



Step	Screw (quantity)	Color	Torque
10	M2 x L4.5mm, Phillips-head (4)	Black	1.6-2.0 kgf.cm
11	M2 x L2.5mm, Phillips-head (1)	Black	1.6-2.0 kgf.cm

Remove the system board in the direction shown by arrow 12.



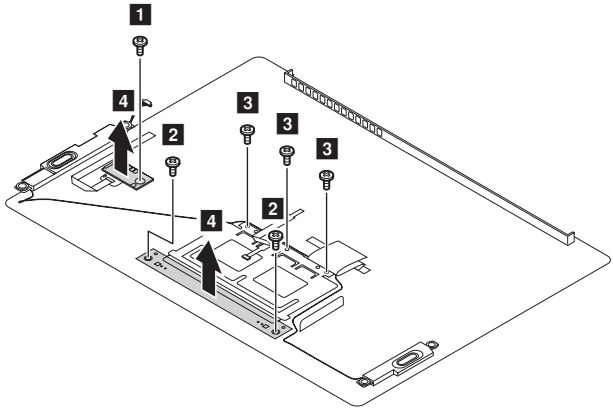
1110 Touch pad and fingerprint module

For access, remove these FRUs in order:

- “1010 Base cover and dummy case” on page 33
- “1020 Battery pack” on page 37
- “1030 PCI Express Mini Card for wireless LAN” on page 39
- “1040 SSD card” on page 41
- “1050 Hard disk drive” on page 43
- “1060 DIMM” on page 45
- “1070 Fan and heat sink” on page 47
- “1080 Upper case” on page 50
- “1090 Backup battery and RJ-45 cover” on page 53
- “1100 System board” on page 55

Figure 11. Removal steps of touch pad and fingerprint module

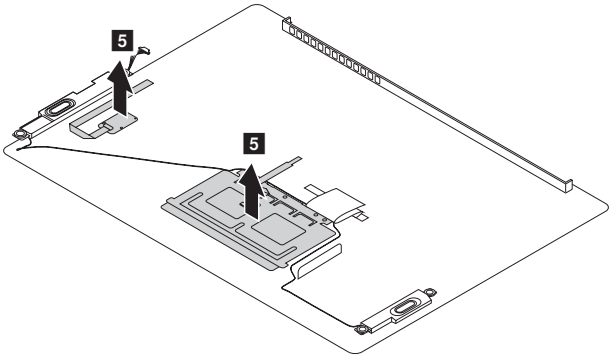
Remove the screws ■, 2 and 3. Then remove the touch-pad bar and fingerprint bracket in the direction shown by arrows 4.



Step	Screw (quantity)	Color	Torque
■	M2 x L2mm, Phillips-head (1)	Black	1.6-2.0 kgf.cm
2	M2 x L2mm, Phillips-head (2)	Black	1.6-2.0 kgf.cm
3	M2 x L2.5mm, Phillips-head (3)	Black	1.6-2.0 kgf.cm

Figure 11. Removal steps of touch pad and fingerprint module (continued)

Remove the touch pad and fingerprint module in the direction shown by arrows 5.



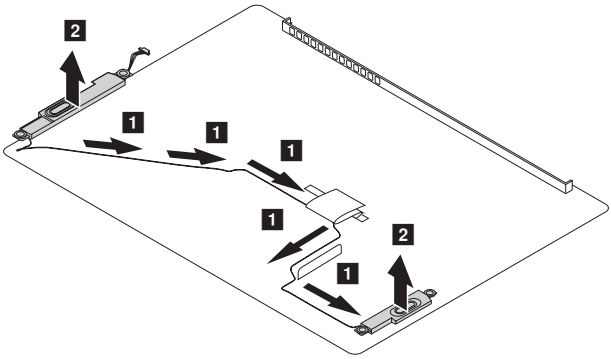
1120 Speakers

For access, remove these FRUs in order:

- “1010 Base cover and dummy case” on page 33
- “1020 Battery pack” on page 37
- “1030 PCI Express Mini Card for wireless LAN” on page 39
- “1040 SSD card” on page 41
- “1050 Hard disk drive” on page 43
- “1060 DIMM” on page 45
- “1070 Fan and heat sink” on page 47
- “1080 Upper case” on page 50
- “1090 Backup battery and RJ-45 cover” on page 53
- “1100 System board” on page 55
- “1110 Touch pad and fingerprint module” on page 57

Figure 12. Removal steps of speakers

Unplug the speaker connector. Then remove the speakers.



When installing: Make sure that the connector is attached firmly.

1130 LCD unit

For access, remove these FRUs in order:

- “1010 Base cover and dummy case” on page 33
- “1020 Battery pack” on page 37
- “1030 PCI Express Mini Card for wireless LAN” on page 39
- “1040 SSD card” on page 41
- “1050 Hard disk drive” on page 43
- “1060 DIMM” on page 45
- “1070 Fan and heat sink” on page 47
- “1080 Upper case” on page 50
- “1090 Backup battery and RJ-45 cover” on page 53
- “1100 System board” on page 55
- “1110 Touch pad and fingerprint module” on page 57
- “1120 Speakers” on page 59

Figure 13. Removal steps of LCD unit

Remove the LCD front bezel in the direction shown by arrows ■.

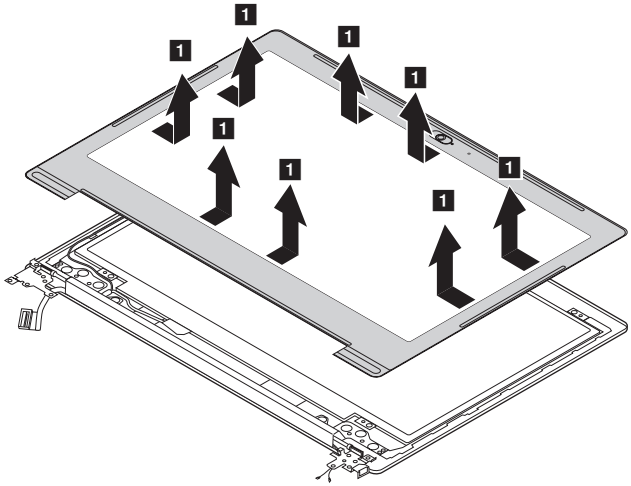
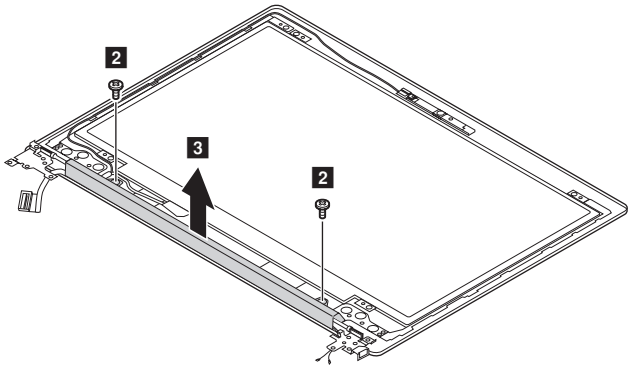


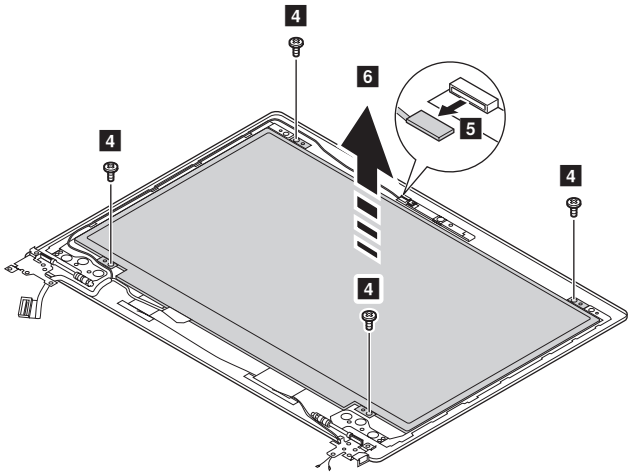
Figure 13. Removal steps of LCD unit (continued)

Remove the screws 2. Then remove the hinge cover in the direction shown by arrow 3.



Step	Screw (quantity)	Color	Torque
2	M2 x L2mm, Phillips-head (2)	Black	1.6-2.0 kgf.cm

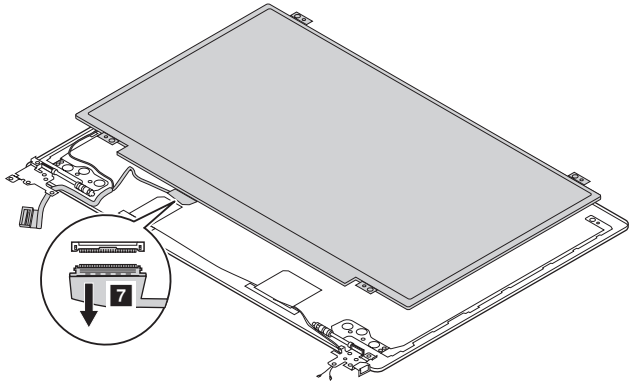
Remove the screws 4 and disconnect the connector in the direction shown by arrow 5. Then remove the LCD module in the direction shown by arrow 6.



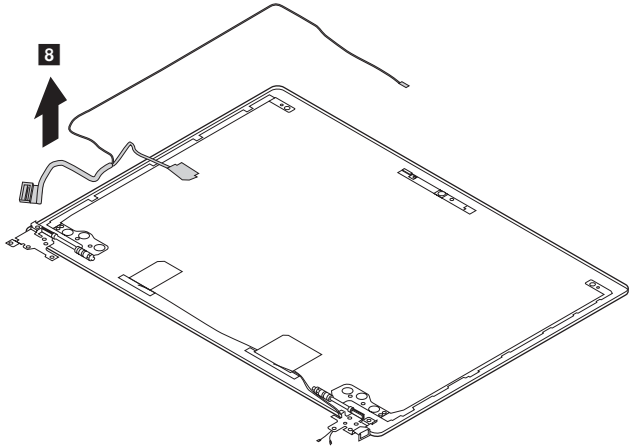
Step	Screw (quantity)	Color	Torque
4	M2 x L2.5mm, Phillips-head (4)	Black	1.6-2.0 kgf.cm

Figure 13. Removal steps of LCD unit (continued)

Disconnect the EDP connector in the direction shown by arrow 7.



Remove the EDP cable in the direction shown by arrow 8.



When installing: Make sure that the connectors are attached firmly. Route the EDP cable along the cable guides.

1140 Integrated camera

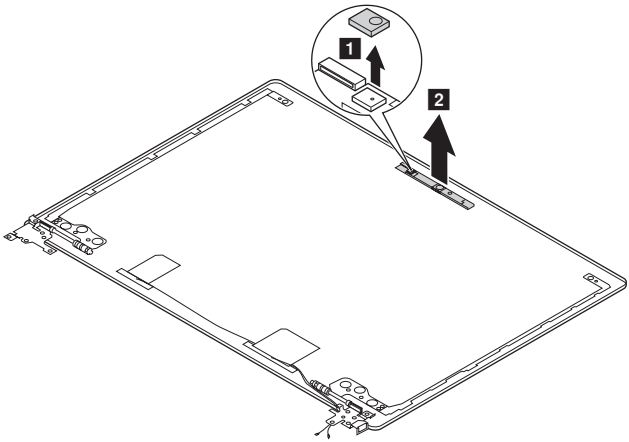
For access, remove these FRUs in order:

- “1010 Base cover and dummy case” on page 33
- “1020 Battery pack” on page 37
- “1030 PCI Express Mini Card for wireless LAN” on page 39
- “1040 SSD card” on page 41
- “1050 Hard disk drive” on page 43
- “1060 DIMM” on page 45
- “1070 Fan and heat sink” on page 47
- “1080 Upper case” on page 50
- “1090 Backup battery and RJ-45 cover” on page 53
- “1100 System board” on page 55
- “1110 Touch pad and fingerprint module” on page 57
- “1120 Speakers” on page 59
- “1130 LCD unit” on page 60

Figure 14. Removal steps of Integrated camera

Note: The integrated camera is stuck on the top center of the LCD cover.

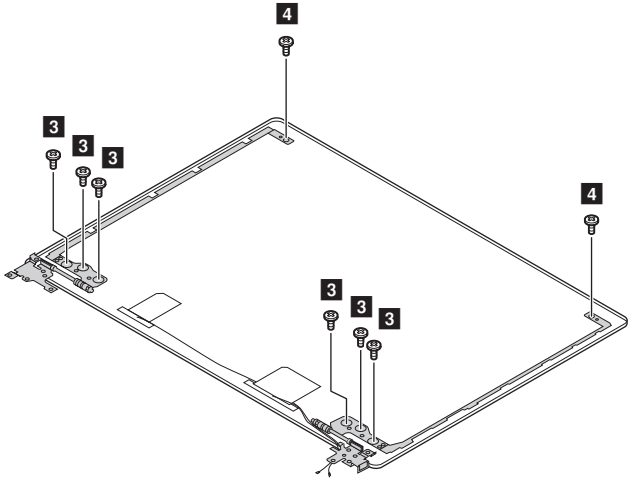
Remove the microphone rubber in the direction shown by arrow ■. Then remove the integrated camera in the direction shown by arrow 2.



When installing: Stick the integrated camera to the top center of the LCD cover and adjust its placement to make sure the connector is attached firmly.

Figure 14. Removal steps of Integrated camera (continued)

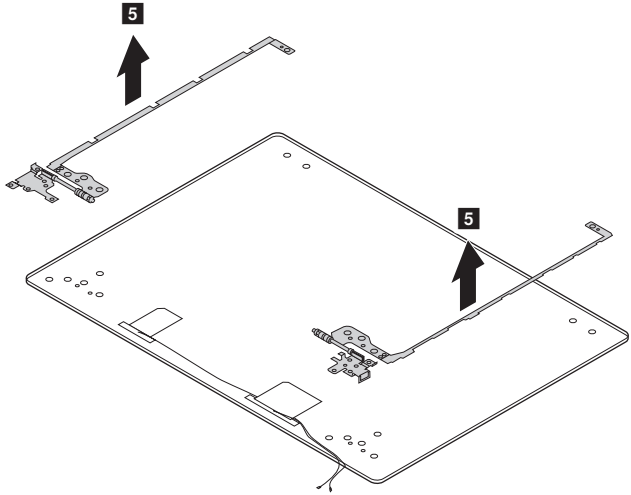
Remove the screws 3 and 4.



Step	Screw (quantity)	Color	Torque
3	M2.5 x L2mm, Phillips-head (6)	Black	2.2-2.8 kgf.cm
4	M2 x L2.5mm, Phillips-head (2)	Black	1.6-2.0 kgf.cm

Figure 14. Removal steps of Integrated camera (continued)

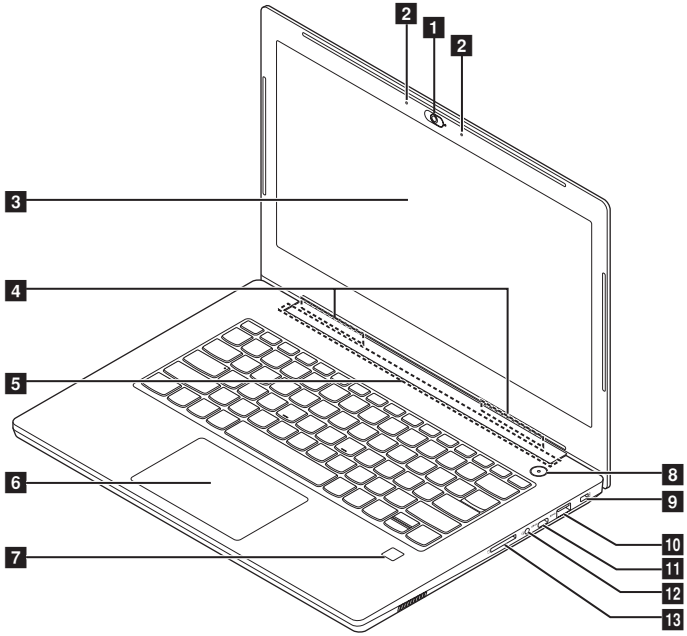
Remove the LCD hinges in the direction shown by arrows 5.



Locations

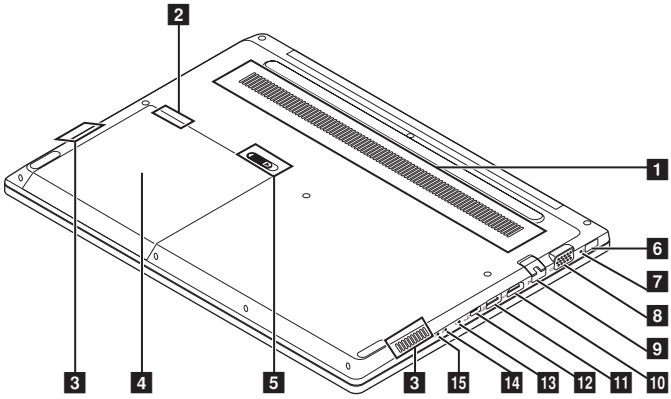
Front view and right-side view

1 Integrated camera (on select models)
2 Built-in microphone (on select models)
3 Computer display
4 Wireless LAN antennas
5 Ventilation slots
6 Touch pad
7 Fingerprint reader (on select models)
8 Power button
9 Kensington Mini Security slot
10 USB 2.0/3.0 port (on select models)
11 Type-C port (on select models)
12 Combo audio jack
13 Memory card slot



Bottom and Left-side view

1. Ventilation slots
2. USB 2.0 port (on select models)
3. Speakers
4. Battery pack (Optional)/Dummy case
5. Battery latch-spring (on select models)
6. AC power adapter jack
7. DC-IN LED
8. VGA port (on select models)
9. RJ-45 port
10. HDMI port
11. USB 3.0 port (on select models)
12. Type-C port (on select models)
13. Novo button
14. HDD LED
15. Battery charger status LED



Parts list

This section presents the following service parts:

- “Overall” on page 69
- “LCD FRUs” on page 84
- “Miscellaneous parts” on page 86
- “AC adapters” on page 86
- “Screws” on page 87

Note:

Each FRU is available for all types or models, unless specific types or models are specified.

Attention:

Do not attempt to replace an FRU on your own. If an FRU is damaged, contact a Lenovo authorized servicer or a marketing representative for replacement or repair. Only qualified technicians can inspect or repair this product.

Overall

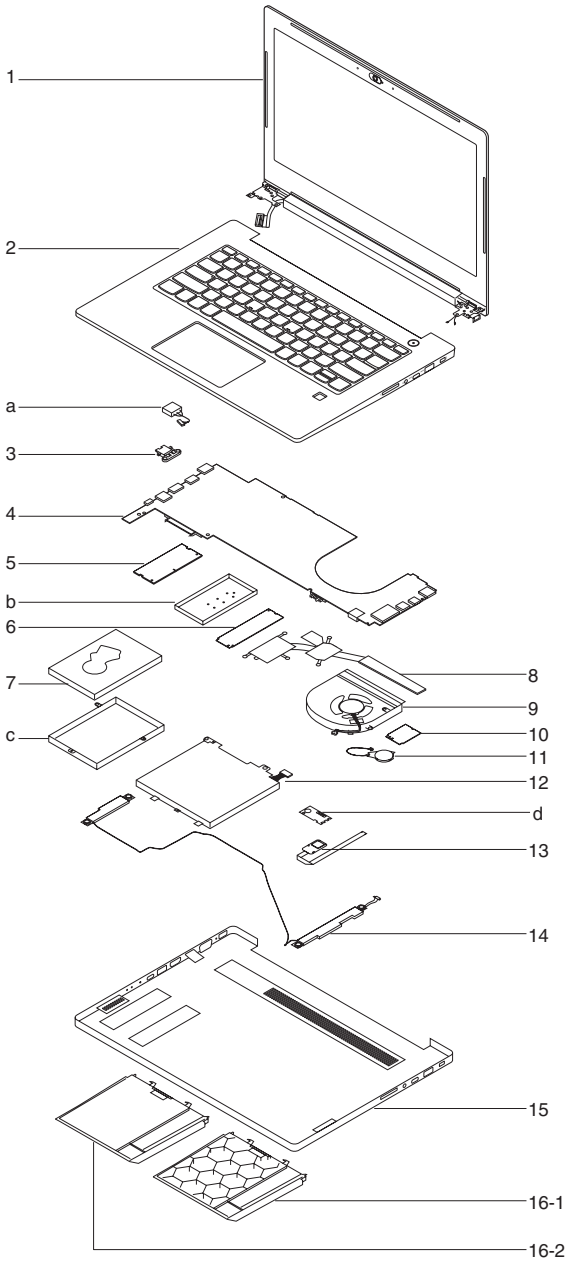


Table 4. Parts list—Overall

No.	FRU	FRU no.	CRU ID.
a-e	See “Miscellaneous parts” on page 86.		
1	LCD unit (see “LCD FRUs” on page 84).		
2	UpperCase C 81CJ IG FP BL W/KB US	5CB0Q59781	N
2	UpperCase C81AY W/KB FP BL IG GRK	5CB0Q64299	
2	UpperCaseC81AYW/KB FP BL IG INT'E	5CB0Q64211	
2	UpperCase C 81AY W/KB FP BL IG KO	5CB0Q64370	
2	UpperCase C81AYW/KB FP BL IG T-CH	5CB0Q64271	
2	UpperCase C 81AY W/KB FP BL IG RU	5CB0Q64244	
2	UpperCase C 81AY W/KB FP BL IG AR	5CB0Q64363	
2	UpperCase C 81AY W/KB FP BL IG HE	5CB0Q64353	
2	UpperCase C 81AY W/KB FP BL IG TH	5CB0Q64415	
2	UpperCaseC81AYW/KB FP BL IG INDIA	5CB0Q64358	
2	UpperCase C 81AY W/KB FP BL IG UK	5CB0Q64323	
2	UpperCase C 81AY W/KB FP BL IG IT	5CB0Q64404	
2	UpperCase C 81AY W/KB FP BL IG SP	5CB0Q64380	
2	UpperCase C 81AY W/KB FP BL IG TR	5CB0Q64413	
2	UpperCase C 81AY W/KB FP BL IG PO	5CB0Q64197	
2	UpperCase C 81AY W/KB FP BL IG LA	5CB0Q64200	
2	UpperCaseC 81AYW/KB FP BL IG CF-E	5CB0Q64318	
2	UpperCase C 81AY W/KB FP BL IG ND	5CB0Q64258	
2	UpperCase C 81AY W/KB FP BL IG FR	5CB0Q64298	
2	UpperCase C 81AY W/KB FP BL IG GR	5CB0Q64241	
2	UpperCase C 81AY W/KB FP BL IG BZ	5CB0Q64312	
2	UpperCaseC81AYW/KB FP BL IG DUTCH	5CB0Q64310	
2	UpperCase C 81AY W/KB FP BL IG HG	5CB0Q64213	
2	UpperCase C 81AY W/KB FP BL IG BE	5CB0Q64386	
2	UpperCase C81AY W/KB FP BL IG ICE	5CB0Q64355	
2	UpperCase C 81AY W/KB FP BL IG SA	5CB0Q64236	
2	UpperCase C 81AY W/KB FP BL IG SW	5CB0Q64438	
2	UpperCase C 81AY W/KB FP BL IG BU	5CB0Q64289	
2	UpperCaseC81AY W/KB FP BL IG CZSK	5CB0Q64452	
2	UpperCaseC81AYW/KB FP BL IG AR-FR	5CB0Q64407	
2	UpperCaseC 81AY W/KB FP BL IG UKR	5CB0Q64284	
2	UpperCaseC 81AY W/KB FP BL IG USA	5CB0Q64221	
2	UpperCase C 81CJ IG FP NBL W/KBUS	5CB0Q59812	
2	UpperCaseC81AY W/KB FP NBL IG GRK	5CB0Q64224	
2	UpperCaseC81AYW/KBFP NBL IG INT'E	5CB0Q64194	
2	UpperCaseC 81AY W/KB FP NBL IG KO	5CB0Q64439	
2	UpperCaseC81AYW/KB FP NBL IG T-CH	5CB0Q64450	
2	UpperCaseC 81AY W/KB FP NBL IG RU	5CB0Q64265	
2	UpperCaseC 81AY W/KB FP NBL IG AR	5CB0Q64238	
2	UpperCaseC 81AY W/KB FP NBL IG HE	5CB0Q64410	
2	UpperCaseC 81AY W/KB FP NBL IG TH	5CB0Q64208	
2	UpperCaseC81AYW/KBFP NBL IG INDIA	5CB0Q64384	
2	UpperCaseC 81AY W/KB FP NBL IG UK	5CB0Q64340	
2	UpperCaseC 81AY W/KB FP NBL IG IT	5CB0Q64255	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	UpperCaseC 81AY W/KB FP NBL IG SP	5CB0Q64392	
2	UpperCaseC 81AY W/KB FP NBL IG TR	5CB0Q64218	
2	UpperCaseC 81AY W/KB FP NBL IG PO	5CB0Q64348	
2	UpperCaseC 81AY W/KB FP NBL IG LA	5CB0Q64448	
2	UpperCaseC81AYW/KB FP NBL IG CF-E	5CB0Q64432	
2	UpperCaseC 81AY W/KB FP NBL IG ND	5CB0Q64219	
2	UpperCase C81AY W/KB FP NBL IG FR	5CB0Q64402	
2	UpperCaseC 81AY W/KB FP NBL IG GR	5CB0Q64414	
2	UpperCaseC 81AY W/KB FP NBL IG BZ	5CB0Q64315	
2	UpperCaseC81AYW/KB FPNBL IG DUTCH	5CB0Q64301	
2	UpperCaseC 81AY W/KB FP NBL IG HG	5CB0Q64374	
2	UpperCaseC 81AY W/KB FP NBL IG BE	5CB0Q64233	
2	UpperCaseC81AY W/KB FP NBL IG ICE	5CB0Q64248	
2	UpperCaseC 81AY W/KB FP NBL IG SA	5CB0Q64202	
2	UpperCaseC 81AY W/KB FP NBL IG SW	5CB0Q64335	
2	UpperCaseC 81AY W/KB FP NBL IG BU	5CB0Q64222	
2	UpperCaseC81AYW/KB FP NBL IG CZSK	5CB0Q64417	
2	UpperCaseC81AYW/KBFP NBL IG AR-FR	5CB0Q64391	
2	UpperCaseC81AY W/KB FP NBL IG UKR	5CB0Q64311	
2	UpperCase C 81CJ IG NFP BL W/KBUS	5CB0Q59796	
2	UpperCaseC81AY W/KB NFP BL IG GRK	5CB0Q64210	
2	UpperCaseC81AYW/KB NFPBL IG INT'E	5CB0Q64256	
2	UpperCase C 81AYW/KB NFP BL IG KO	5CB0Q64406	
2	UpperCase C81AYW/KBNFP BL IG T-CH	5CB0Q64297	N
2	UpperCaseC 81AY W/KB NFP BL IG RU	5CB0Q64263	
2	UpperCaseC 81AY W/KB NFP BL IG AR	5CB0Q64223	
2	UpperCaseC 81AY W/KB NFP BL IG HE	5CB0Q64292	
2	UpperCaseC 81AY W/KB NFP BL IG TH	5CB0Q64431	
2	UpperCaseC81AYW/KBNFP BL IG INDIA	5CB0Q64359	
2	UpperCaseC 81AY W/KB NFP BL IG UK	5CB0Q64331	
2	UpperCaseC 81AY W/KB NFP BL IG IT	5CB0Q64282	
2	UpperCaseC 81AY W/KB NFP BL IG SP	5CB0Q64369	
2	UpperCaseC 81AY W/KB NFP BL IG TR	5CB0Q64371	
2	UpperCaseC 81AY W/KB NFP BL IG PO	5CB0Q64375	
2	UpperCaseC 81AY W/KB NFP BL IG LA	5CB0Q64196	
2	UpperCaseC81AYW/KB NFP BL IG CF-E	5CB0Q64193	
2	UpperCase C81AY W/KB NFP BL IG ND	5CB0Q64368	
2	UpperCaseC 81AY W/KB NFP BL IG FR	5CB0Q64234	
2	UpperCaseC 81AY W/KB NFP BL IG GR	5CB0Q64453	
2	UpperCaseC 81AY W/KB NFP BL IG BZ	5CB0Q64451	
2	UpperCaseC81AYW/KBNFP BL IG DUTCH	5CB0Q64411	
2	UpperCaseC 81AY W/KB NFP BL IG HG	5CB0Q64349	
2	UpperCaseC 81AY W/KB NFP BL IG BE	5CB0Q64322	
2	UpperCaseC81AY W/KB NFP BL IG ICE	5CB0Q64334	
2	UpperCaseC 81AY W/KB NFP BL IG SA	5CB0Q64227	
2	UpperCaseC 81AY W/KB NFP BL IG SW	5CB0Q64215	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	UpperCase C 81AYW/KB NFP BL IG BU	5CB0Q64239	
2	UpperCaseC81AYW/KB NFP BL IG CZSK	5CB0Q64285	
2	UpperCaseC81AYW/KBNFP BL IG AR-FR	5CB0Q64330	
2	UpperCaseC81AY W/KB NFP BL IG UKR	5CB0Q64433	
2	UpperCaseC81AY W/KB NFP BL IG USA	5CB0Q64419	
2	UpperCaseC 81CJ IG NFP NBL W/KBUS	5CB0Q59829	
2	UpperCaseC81AY W/KB NFPNBL IG GRK	5CB0Q64302	
2	UpperCaseC81AYW/KBNFPNBL IG INT'E	5CB0Q64401	
2	UpperCaseC81AY W/KB NFP NBL IG KO	5CB0Q64201	
2	UpperCaseC81AYW/KB NFPNBL IG T-CH	5CB0Q64364	
2	UpperCaseC81AY W/KB NFP NBL IG RU	5CB0Q64309	
2	UpperCaseC81AY W/KB NFP NBL IG AR	5CB0Q64286	
2	UpperCaseC81AY W/KB NFP NBL IG HE	5CB0Q64275	
2	UpperCaseC81AY W/KB NFP NBL IG TH	5CB0Q64294	
2	UpperCaseC81AYW/KBNFPNBL IG INDIA	5CB0Q64412	
2	UpperCaseC81AY W/KB NFP NBL IG UK	5CB0Q64381	
2	UpperCaseC81AY W/KB NFP NBL IG IT	5CB0Q64379	
2	UpperCaseC81AY W/KB NFP NBL IG SP	5CB0Q64430	
2	UpperCaseC81AY W/KB NFP NBL IG TR	5CB0Q64264	
2	UpperCaseC81AY W/KB NFP NBL IG PO	5CB0Q64337	
2	UpperCaseC81AY W/KB NFP NBL IG LA	5CB0Q64260	
2	UpperCaseC 81AYW/KBNFPNBL IG CF-E	5CB0Q64240	
2	UpperCaseC81AY W/KB NFP NBL IG ND	5CB0Q64446	
2	UpperCaseC81AY W/KB NFP NBL IG FR	5CB0Q64225	N
2	UpperCaseC81AY W/KB NFP NBL IG GR	5CB0Q64445	
2	UpperCaseC81AY W/KB NFP NBL IG BZ	5CB0Q64319	
2	UpperCaseC81AYW/KBNFPNBL IG DUTCH	5CB0Q64328	
2	UpperCaseC81AY W/KB NFP NBL IG HG	5CB0Q64352	
2	UpperCaseC81AY W/KB NFP NBL IG BE	5CB0Q64321	
2	UpperCaseC81AY W/KBNFP NBL IG ICE	5CB0Q64400	
2	UpperCaseC81AY W/KB NFP NBL IG SA	5CB0Q64300	
2	UpperCaseC81AY W/KB NFP NBL IG SW	5CB0Q64365	
2	UpperCaseC81AY W/KB NFP NBL IG BU	5CB0Q64428	
2	UpperCaseC81AYW/KBNFP NBL IG CZSK	5CB0Q64378	
2	UpperCaseC81AYW/KBNFPNBL IG AR-FR	5CB0Q64198	
2	UpperCaseC 81AYW/KBNFP NBL IG UKR	5CB0Q64416	
2	UpperCase C81AY W/KB FP BL MR US	5CB0Q64261	
2	UpperCase C81AY W/KB FP BL MR GRK	5CB0Q64336	
2	UpperCaseC81AYW/KB FP BL MR INT'E	5CB0Q64277	
2	UpperCase C 81AY W/KB FP BL MR KO	5CB0Q64408	
2	UpperCase C81AYW/KB FP BL MR T-CH	5CB0Q64308	
2	UpperCase C 81AY W/KB FP BL MR RU	5CB0Q64341	
2	UpperCase C 81AY W/KB FP BL MR AR	5CB0Q64390	
2	UpperCase C 81AY W/KB FP BL MR HE	5CB0Q64251	
2	UpperCase C 81AY W/KB FP BL MR TH	5CB0Q64290	
2	UpperCaseC81AYW/KB FP BL MR INDIA	5CB0Q64316	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	UpperCase C 81AY W/KB FP BL MR UK	5CB0Q64326	
2	UpperCase C 81AY W/KB FP BL MR IT	5CB0Q64399	
2	UpperCase C 81AY W/KB FP BL MR SP	5CB0Q64344	
2	UpperCase C 81AY W/KB FP BL MR TR	5CB0Q64405	
2	UpperCase C 81AY W/KB FP BL MR PO	5CB0Q64329	
2	UpperCase C 81AY W/KB FP BL MR LA	5CB0Q64283	
2	UpperCaseC 81AYW/KB FP BL MR CF-E	5CB0Q64249	
2	UpperCase C 81AY W/KB FP BL MR ND	5CB0Q64229	
2	UpperCase C 81AY W/KB FP BL MR FR	5CB0Q64247	
2	UpperCase C 81AY W/KB FP BL MR GR	5CB0Q64387	
2	UpperCase C 81AY W/KB FP BL MR BZ	5CB0Q64306	
2	UpperCaseC81AYW/KB FP BL MR DUTCH	5CB0Q64304	
2	UpperCase C 81AY W/KB FP BL MR HG	5CB0Q64212	
2	UpperCase C 81AY W/KB FP BL MR BE	5CB0Q64327	
2	UpperCase C81AY W/KB FP BL MR ICE	5CB0Q64214	
2	UpperCase C 81AY W/KB FP BL MR SA	5CB0Q64231	
2	UpperCase C 81AY W/KB FP BL MR SW	5CB0Q64373	
2	UpperCase C 81AY W/KB FP BL MR BU	5CB0Q64377	
2	UpperCaseC81AY W/KB FP BL MR CZSK	5CB0Q64333	
2	UpperCaseC81AYW/KB FP BL MR AR-FR	5CB0Q64396	
2	UpperCaseC 81AY W/KB FP BL MR UKR	5CB0Q64351	
2	UpperCaseC 81AY W/KB FP BL MR USA	5CB0Q64268	
2	UpperCase C81AY W/KB FP NBL MR US	5CB0Q64449	
2	UpperCaseC81AY W/KB FP NBL MR GRK	5CB0Q64242	N
2	UpperCaseC81AYW/KBFP NBL MR INT'E	5CB0Q64207	
2	UpperCaseC81AY W/KB FP NBL MR KO	5CB0Q64243	
2	UpperCaseC81AYW/KB FP NBL MR T-CH	5CB0Q64339	
2	UpperCaseC81AY W/KB FP NBL MR RU	5CB0Q64313	
2	UpperCaseC81AY W/KB FP NBL MR AR	5CB0Q64262	
2	UpperCaseC81AY W/KB FP NBL MR HE	5CB0Q64362	
2	UpperCaseC81AY W/KB FP NBL MR TH	5CB0Q64426	
2	UpperCaseC81AYW/KBFP NBL MR INDIA	5CB0Q64394	
2	UpperCaseC81AY W/KB FP NBL MR UK	5CB0Q64305	
2	UpperCaseC81AY W/KB FP NBL MR IT	5CB0Q64204	
2	UpperCaseC81AY W/KB FP NBL MR SP	5CB0Q64435	
2	UpperCaseC81AY W/KB FP NBL MR TR	5CB0Q64418	
2	UpperCaseC81AY W/KB FP NBL MR PO	5CB0Q64376	
2	UpperCaseC81AY W/KB FP NBL MR LA	5CB0Q64422	
2	UpperCaseC 81AYW/KBFP NBL MR CF-E	5CB0Q64246	
2	UpperCaseC81AY W/KB FP NBL MR ND	5CB0Q64354	
2	UpperCaseC81AY W/KB FP NBL MR FR	5CB0Q64278	
2	UpperCaseC81AY W/KB FP NBL MR GR	5CB0Q64276	
2	UpperCaseC81AY W/KB FP NBL MR BZ	5CB0Q64288	
2	UpperCaseC81AYW/KBFP NBL MR DUTCH	5CB0Q64393	
2	UpperCaseC81AY W/KB FP NBL MR HG	5CB0Q64382	
2	UpperCaseC81AY W/KB FP NBL MR BE	5CB0Q64254	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	UpperCase C81AY W/KBFP NBL MR ICE	5CB0Q64252	N
2	UpperCaseC81AY W/KB FP NBL MR SA	5CB0Q64420	
2	UpperCaseC81AY W/KB FP NBL MR SW	5CB0Q64423	
2	UpperCaseC81AY W/KB FP NBL MR BU	5CB0Q64383	
2	UpperCaseC81AYW/KB FP NBL MR CZSK	5CB0Q64237	
2	UpperCaseC81AYW/KBFP NBL MR AR-FR	5CB0Q64357	
2	UpperCaseC 81AYW/KB FP NBL MR UKR	5CB0Q64216	
2	UpperCase C81AY W/KB NFP BL MR US	5CB0Q64269	
2	UpperCaseC81AYW/KB NFP BL MR GRK	5CB0Q64434	
2	UpperCaseC81AYW/KBNFP BL MR INT'E	5CB0Q64372	
2	UpperCaseC81AY W/KB NFP BL MR KO	5CB0Q64230	
2	UpperCase C81AYW/KBNFP BL MR T-CH	5CB0Q64385	
2	UpperCaseC81AY W/KB NFP BL MR RU	5CB0Q64250	
2	UpperCaseC81AY W/KB NFP BL MR AR	5CB0Q64203	
2	UpperCaseC81AY W/KB NFP BL MR HE	5CB0Q64266	
2	UpperCaseC81AY W/KB NFP BL MR TH	5CB0Q64320	
2	UpperCaseC81AYW/KBNFP BL MR INDIA	5CB0Q64338	
2	UpperCaseC81AY W/KB NFP BL MR UK	5CB0Q64437	
2	UpperCaseC81AY W/KB NFP BL MR IT	5CB0Q64279	
2	UpperCaseC81AY W/KB NFP BL MR SP	5CB0Q64205	
2	UpperCaseC81AY W/KB NFP BL MR TR	5CB0Q64317	
2	UpperCaseC81AY W/KB NFP BL MR PO	5CB0Q64257	
2	UpperCaseC81AY W/KB NFP BL MR LA	5CB0Q64267	
2	UpperCaseC81AYW/KB NFP BL MR CF-E	5CB0Q64307	
2	UpperCaseC81AY W/KB NFP BL MR ND	5CB0Q64314	
2	UpperCaseC81AY W/KB NFP BL MR FR	5CB0Q64206	
2	UpperCaseC81AY W/KB NFP BL MR GR	5CB0Q64280	
2	UpperCaseC81AY W/KB NFP BL MR BZ	5CB0Q64440	
2	UpperCaseC81AYW/KBNFP BL MR DUTCH	5CB0Q64441	
2	UpperCaseC81AY W/KB NFP BL MR HG	5CB0Q64332	
2	UpperCaseC81AY W/KB NFP BL MR BE	5CB0Q64228	
2	UpperCase C81AYW/KB NFP BL MR ICE	5CB0Q64443	
2	UpperCaseC81AY W/KB NFP BL MR SA	5CB0Q64388	
2	UpperCaseC81AY W/KB NFP BL MR SW	5CB0Q64346	
2	UpperCaseC81AY W/KB NFP BL MR BU	5CB0Q64424	
2	UpperCaseC81AYW/KB NFP BL MR CZSK	5CB0Q64281	
2	UpperCaseC81AYW/KBNFP BL MR AR-FR	5CB0Q64226	
2	UpperCaseC81AY W/KB NFP BL MR UKR	5CB0Q64325	
2	UpperCaseC81AY W/KB NFP BL MR USA	5CB0Q64425	
2	UpperCaseC81AY W/KB NFP NBL MR US	5CB0Q64195	
2	UpperCaseC81AYW/KB NFP NBL MR GRK	5CB0Q64199	
2	UpperCaseC81AYW/KBNFPNBL MR INT'E	5CB0Q64259	
2	UpperCaseC81AY W/KB NFP NBL MR KO	5CB0Q64347	
2	UpperCaseC81AYW/KBNFP NBL MR T-CH	5CB0Q64350	
2	UpperCaseC81AY W/KB NFP NBL MR RU	5CB0Q64436	
2	UpperCaseC81AY W/KB NFP NBL MR AR	5CB0Q64303	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	UpperCaseC81AY W/KB NFP NBL MR HE	5CB0Q64345	N
2	UpperCaseC81AY W/KB NFP NBL MR TH	5CB0Q64232	
2	UpperCaseC81AYW/KBNFPNBL MR INDIA	5CB0Q64403	
2	UpperCaseC81AY W/KB NFP NBL MR UK	5CB0Q64444	
2	UpperCaseC81AY W/KB NFP NBL MR IT	5CB0Q64287	
2	UpperCaseC81AY W/KB NFP NBL MR SP	5CB0Q64270	
2	UpperCaseC81AY W/KB NFP NBL MR TR	5CB0Q64356	
2	UpperCaseC81AY W/KB NFP NBL MR PO	5CB0Q64291	
2	UpperCaseC81AY W/KB NFP NBL MR LA	5CB0Q64447	
2	UpperCaseC81AYW/KBNFP NBL MR CF-E	5CB0Q64324	
2	UpperCaseC81AY W/KB NFP NBL MR ND	5CB0Q64395	
2	UpperCaseC81AY W/KB NFP NBL MR FR	5CB0Q64253	
2	UpperCaseC81AY W/KB NFP NBL MR GR	5CB0Q64366	
2	UpperCaseC81AY W/KB NFP NBL MR BZ	5CB0Q64235	
2	UpperCaseC81AYW/KBNFPNBL MR DUTCH	5CB0Q64274	
2	UpperCaseC81AY W/KB NFP NBL MR HG	5CB0Q64397	
2	UpperCaseC81AY W/KB NFP NBL MR BE	5CB0Q64273	
2	UpperCase C81AYW/KBNFP NBL MR ICE	5CB0Q64209	
2	UpperCaseC81AY W/KB NFP NBL MR SA	5CB0Q64409	
2	UpperCaseC81AY W/KB NFP NBL MR SW	5CB0Q64429	
2	UpperCaseC81AY W/KB NFP NBL MR BU	5CB0Q64293	
2	UpperCaseC81AYW/KBNFP NBL MR CZSK	5CB0Q64296	
2	UpperCaseC81AYW/KBNFPNBL MR AR-FR	5CB0Q64442	
2	UpperCaseC81AYW/KB NFP NBL MR UKR	5CB0Q64421	
2	US80KeyPC4CBChiconyGreyKBacklightKB	SN20M61649	
2	US80KeyPC4CBChiconyGreyKBacklightKB-forUSA	SN20M61736	
2	UK81KeyPC4CBChiconyGreyKBacklightKB	SN20M61624	
2	Italian81KeyPC4CBChiconyGreyKBacklightKB	SN20M61607	
2	Spanish81KeyPC4CBChiconyGreyKBacklightKB	SN20M61562	
2	Turkish81KeyPC4CBChiconyGreyKBacklightKB	SN20M61635	
2	Thailand80KeyPC4CBChiconyGreyKBacklightKB	SN20M61642	
2	Portugue81KeyPC4CBChiconyGreyKBacklightKB	SN20M61523	
2	LatinSpa81KeyPC4CBChiconyGreyKBacklightKB	SN20M61756	
2	CanadFrEn81KeyPC4CBChiconyGreyKBacklightKB	SN20M61703	
2	Korean80KeyPC4CBChiconyGreyKBacklightKB	SN20M61734	
2	TradChine80KeyPC4CBChiconyGreyKBacklightKB	SN20M61534	
2	Russian80KeyPC4CBChiconyGreyKBacklightKB	SN20M61568	
2	French81KeyPC4CBChiconyGreyKBacklightKB	SN20M61766	
2	German81KeyPC4CBChiconyGreyKBacklightKB	SN20M61690	
2	Arabic80KeyPC4CBChiconyGreyKBacklightKB	SN20M61753	
2	Brazilian81KeyPC4CBChiconyGreyKBacklightKB	SN20M61739	
2	Japanese84KeyPC4CBChiconyGreyKBacklightKB	SN20M61715	
2	Dutch81KeyPC4CBChiconyGreyKBacklightKB	SN20M61666	
2	Greek80KeyPC4CBChiconyGreyKBacklightKB	SN20M61660	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	Hebrew80KeyPC4CBChiconyGreyKBacklightKB	SN20M61737	
2	Hungarian81KeyPC4CBChiconyGreyKBacklightKB	SN20M61601	
2	Nordic81KeyPC4CBChiconyGreyKBacklightKB	SN20M61712	
2	Belgian81KeyPC4CBChiconyGreyKBacklightKB	SN20M61738	
2	Iceland81KeyPC4CBChiconyGreyKBacklightKB	SN20M61608	
2	Slovenian81KeyPC4CBChiconyGreyKBacklightKB	SN20M61730	
2	Swiss81KeyPC4CBChiconyGreyKBacklightKB	SN20M61546	
2	USInter80KeyPC4CBChiconyGreyKBacklightKB	SN20M61685	
2	Czh-Slk81KeyPC4CBChiconyGreyKBacklightKB	SN20M61560	
2	Bulgarian81KeyPC4CBChiconyGreyKBacklightKB	SN20M61719	
2	India80KeyPC4CBChiconyGreyKBacklightKB	SN20M61692	
2	FrenchArabic81KeyPC4CBChiconyGreyKBacklightKB	SN20M61527	
2	Ukrainia80keyPC4CBChiconyGreyKBacklightKB	SN20M67678	
2	US80KeyPC4CBLiteonGreyKBacklightKB	SN20M61716	
2	US80KeyPC4CBLiteonGreyKBacklightKB-forUSA	SN20M61705	
2	UK81KeyPC4CBLiteonGreyKBacklightKB	SN20M61728	
2	Italian81KeyPC4CBLiteonGreyKBacklightKB	SN20M61727	
2	Spanish81KeyPC4CBLiteonGreyKBacklightKB	SN20M61569	
2	Turkish81KeyPC4CBLiteonGreyKBacklightKB	SN20M61640	
2	Thailand80KeyPC4CBLiteonGreyKBacklightKB	SN20M61612	
2	Portugue81KeyPC4CBLiteonGreyKBacklightKB	SN20M61761	
2	LatinSpa81KeyPC4CBLiteonGreyKBacklightKB	SN20M61709	
2	CanadFrEn81KeyPC4CBLiteonGreyKBacklightKB	SN20M61541	N
2	Korean80KeyPC4CBLiteonGreyKBacklightKB	SN20M61602	
2	TradChine80KeyPC4CBLiteonGreyKBacklightKB	SN20M61564	
2	Russian80KeyPC4CBLiteonGreyKBacklightKB	SN20M61694	
2	French81KeyPC4CBLiteonGreyKBacklightKB	SN20M61717	
2	German81KeyPC4CBLiteonGreyKBacklightKB	SN20M61542	
2	Arabic80KeyPC4CBLiteonGreyKBacklightKB	SN20M61744	
2	Brazilian81KeyPC4CBLiteonGreyKBacklightKB	SN20M61555	
2	Japanese84KeyPC4CBLiteonGreyKBacklightKB	SN20M61581	
2	Dutch81KeyPC4CBLiteonGreyKBacklightKB	SN20M61675	
2	Greek80KeyPC4CBLiteonGreyKBacklightKB	SN20M61535	
2	Hebrew80KeyPC4CBLiteonGreyKBacklightKB	SN20M61754	
2	Hungarian81KeyPC4CBLiteonGreyKBacklightKB	SN20M61575	
2	Nordic81KeyPC4CBLiteonGreyKBacklightKB	SN20M61751	
2	Belgian81KeyPC4CBLiteonGreyKBacklightKB	SN20M61578	
2	Iceland81KeyPC4CBLiteonGreyKBacklightKB	SN20M61710	
2	Slovenian81KeyPC4CBLiteonGreyKBacklightKB	SN20M61548	
2	Swiss81KeyPC4CBLiteonGreyKBacklightKB	SN20M61700	
2	USInter80KeyPC4CBLiteonGreyKBacklightKB	SN20M61664	
2	Czh-Slk81KeyPC4CBLiteonGreyKBacklightKB	SN20M61758	
2	Bulgarian81KeyPC4CBLiteonGreyKBacklightKB	SN20M61573	
2	India80KeyPC4CBLiteonGreyKBacklightKB	SN20M61616	
2	French-Arabic81KeyPC4CBLiteonGreyKBacklightKB	SN20M61637	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	Ukrainia80keyPC4CBLiteonGreyKBacklightKB	SN20M67680	
2	US80KeyPC4CBSunrexGreyKBacklightKB	SN20M61732	
2	US80KeyPC4CBSunrexGreyKBacklightKB-forUSA	SN20M61767	
2	UK81KeyPC4CBSunrexGreyKBacklightKB	SN20M61641	
2	Italian81KeyPC4CBSunrexGreyKBacklightKB	SN20M61528	
2	Spanish81KeyPC4CBSunrexGreyKBacklightKB	SN20M61531	
2	Turkish81KeyPC4CBSunrexGreyKBacklightKB	SN20M61619	
2	Thailand80KeyPC4CBSunrexGreyKBacklightKB	SN20M61614	
2	Portugue81KeyPC4CBSunrexGreyKBacklightKB	SN20M61697	
2	LatinSpa81KeyPC4CBSunrexGreyKBacklightKB	SN20M61598	
2	CanadFrEn81KeyPC4CBSunrexGreyKBacklightKB	SN20M61576	
2	Korean80KeyPC4CBSunrexGreyKBacklightKB	SN20M61687	
2	TradChine80KeyPC4CBSunrexGreyKBacklightKB	SN20M61735	
2	Russian80KeyPC4CBSunrexGreyKBacklightKB	SN20M61762	
2	French81KeyPC4CBSunrexGreyKBacklightKB	SN20M61549	
2	German81KeyPC4CBSunrexGreyKBacklightKB	SN20M61547	
2	Arabic80KeyPC4CBSunrexGreyKBacklightKB	SN20M61748	
2	Brazilian81KeyPC4CBSunrexGreyKBacklightKB	SN20M61757	
2	Japanese84KeyPC4CBSunrexGreyKBacklightKB	SN20M61587	
2	Dutch81KeyPC4CBSunrexGreyKBacklightKB	SN20M61533	
2	Greek80KeyPC4CBSunrexGreyKBacklightKB	SN20M61606	
2	Hebrew80KeyPC4CBSunrexGreyKBacklightKB	SN20M61631	
2	Hungarian81KeyPC4CBSunrexGreyKBacklightKB	SN20M61545	N
2	Nordic81KeyPC4CBSunrexGreyKBacklightKB	SN20M61672	
2	Belgian81KeyPC4CBSunrexGreyKBacklightKB	SN20M61554	
2	Iceland81KeyPC4CBSunrexGreyKBacklightKB	SN20M61747	
2	Slovenian81KeyPC4CBSunrexGreyKBacklightKB	SN20M61570	
2	Swiss81KeyPC4CBSunrexGreyKBacklightKB	SN20M61764	
2	USInter80KeyPC4CBSunrexGreyKBacklightKB	SN20M61657	
2	Czh-Slk81KeyPC4CBSunrexGreyKBacklightKB	SN20M61610	
2	Bulgarian81KeyPC4CBSunrexGreyKBacklightKB	SN20M61544	
2	India80KeyPC4CBSunrexGreyKBacklightKB	SN20M61670	
2	French-Arabic81KeyPC4CBSunrexGreyKBacklightKB	SN20M61699	
2	Ukrainia80keyPC4CBSunrexGreyKBacklightKB	SN20M67701	
2	US80KeyPC4CBDarfonGreyKBacklightKB	SN20M61708	
2	US80KeyPC4CBDarfonGreyKBacklightKB-forUSA	SN20M61588	
2	UK81KeyPC4CBDarfonGreyKBacklightKB	SN20M61704	
2	Italian81KeyPC4CBDarfonGreyKBacklightKB	SN20M61536	
2	Spanish81KeyPC4CBDarfonGreyKBacklightKB	SN20M61567	
2	Turkish81KeyPC4CBDarfonGreyKBacklightKB	SN20M61653	
2	Thailand80KeyPC4CBDarfonGreyKBacklightKB	SN20M61643	
2	Portugue81KeyPC4CBDarfonGreyKBacklightKB	SN20M61532	
2	LatinSpa81KeyPC4CBDarfonGreyKBacklightKB	SN20M61686	
2	CanadFrEn81KeyPC4CBDarfonGreyKBacklightKB	SN20M61582	
2	Korean80KeyPC4CBDarfonGreyKBacklightKB	SN20M61613	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	TradChine80KeyPC4CBDarfonGreyKBacklightKB	SN20M61621	
2	Russian80KeyPC4CBDarfonGreyKBacklightKB	SN20M61537	
2	French81KeyPC4CBDarfonGreyKBacklightKB	SN20M61558	
2	German81KeyPC4CBDarfonGreyKBacklightKB	SN20M61689	
2	Arabic80KeyPC4CBDarfonGreyKBacklightKB	SN20M61561	
2	Brazilian81KeyPC4CBDarfonGreyKBacklightKB	SN20M61595	
2	Japanese84KeyPC4CBDarfonGreyKBacklightKB	SN20M61750	
2	Dutch81KeyPC4CBDarfonGreyKBacklightKB	SN20M61682	
2	Greek80KeyPC4CBDarfonGreyKBacklightKB	SN20M61609	
2	Hebrew80KeyPC4CBDarfonGreyKBacklightKB	SN20M61676	
2	Hungarian81KeyPC4CBDarfonGreyKBacklightKB	SN20M61706	
2	Nordic81KeyPC4CBDarfonGreyKBacklightKB	SN20M61654	
2	Belgian81KeyPC4CBDarfonGreyKBacklightKB	SN20M61597	
2	Iceland81KeyPC4CBDarfonGreyKBacklightKB	SN20M61540	
2	Slovenian81KeyPC4CBDarfonGreyKBacklightKB	SN20M61522	
2	Swiss81KeyPC4CBDarfonGreyKBacklightKB	SN20M61667	
2	USInter80KeyPC4CBDarfonGreyKBacklightKB	SN20M61711	
2	Czh-Slk81KeyPC4CBDarfonGreyKBacklightKB	SN20M61749	
2	Bulgarian81KeyPC4CBDarfonGreyKBacklightKB	SN20M61673	
2	India80KeyPC4CBDarfonGreyKBacklightKB	SN20M61707	
2	French-Arabic81KeyPC4CBDarfonGreyKBacklightKB	SN20M61604	
2	Ukrainia80keyPC4CBDarfonGreyKBacklightKB	SN20M67697	
2	US80KeyPC4CChiconyGreyKNormalKB	SN20M61591	N
2	UK81KeyPC4CChiconyGreyKNormalKB	SN20M61563	
2	Italian81KeyPC4CChiconyGreyKNormalKB	SN20M61593	
2	Spanish81KeyPC4CChiconyGreyKNormalKB	SN20M61583	
2	Turkish81KeyPC4CChiconyGreyKNormalKB	SN20M61659	
2	Thailand80KeyPC4CChiconyGreyKNormalKB	SN20M61647	
2	Portugue81KeyPC4CChiconyGreyKNormalKB	SN20M61755	
2	LatinSpa81KeyPC4CChiconyGreyKNormalKB	SN20M61565	
2	CanadFrEn81KeyPC4CChiconyGreyKNormalKB	SN20M61677	
2	Korean80KeyPC4CChiconyGreyKNormalKB	SN20M61553	
2	TradChine80KeyPC4CChiconyGreyKNormalKB	SN20M61592	
2	Russian80KeyPC4CChiconyGreyKNormalKB	SN20M61620	
2	French81KeyPC4CChiconyGreyKNormalKB	SN20M61615	
2	German81KeyPC4CChiconyGreyKNormalKB	SN20M61743	
2	Arabic80KeyPC4CChiconyGreyKNormalKB	SN20M61768	
2	Brazilian81KeyPC4CChiconyGreyKNormalKB	SN20M61731	
2	Japanese84KeyPC4CChiconyGreyKNormalKB	SN20M61656	
2	Dutch81KeyPC4CChiconyGreyKNormalKB	SN20M61633	
2	Greek80KeyPC4CChiconyGreyKNormalKB	SN20M61701	
2	Hebrew80KeyPC4CChiconyGreyKNormalKB	SN20M61520	
2	Hungarian81KeyPC4CChiconyGreyKNormalKB	SN20M61752	
2	Nordic81KeyPC4CChiconyGreyKNormalKB	SN20M61721	
2	Belgian81KeyPC4CChiconyGreyKNormalKB	SN20M61556	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	Iceland81KeyPC4CChiconyGreyKNormalKB	SN20M61669	
2	Slovenian81KeyPC4CChiconyGreyKNormalKB	SN20M61674	
2	Swiss81KeyPC4CChiconyGreyKNormalKB	SN20M61652	
2	USInter80KeyPC4CChiconyGreyKNormalKB	SN20M61529	
2	Czh-Slk81KeyPC4CChiconyGreyKNormalKB	SN20M61644	
2	Bulgarian81KeyPC4CChiconyGreyKNormalKB	SN20M61627	
2	India80KeyPC4CChiconyGreyKNormalKB	SN20M61638	
2	French-Arabic81KeyPC4CChiconyGreyKNormalKB	SN20M61741	
2	Ukrainia80keyPC4CChiconyGreyKNormalKB	SN20M67674	
2	US80KeyPC4CPrimaxGreyKNormalKB	SN20M61622	
2	UK81KeyPC4CPrimaxGreyKNormalKB	SN20M61648	
2	Italian81KeyPC4CPrimaxGreyKNormalKB	SN20M61646	
2	Spanish81KeyPC4CPrimaxGreyKNormalKB	SN20M61639	
2	Turkish81KeyPC4CPrimaxGreyKNormalKB	SN20M61585	
2	Thailand80KeyPC4CPrimaxGreyKNormalKB	SN20M61702	
2	Portugue81KeyPC4CPrimaxGreyKNormalKB	SN20M61632	
2	LatinSpa81KeyPC4CPrimaxGreyKNormalKB	SN20M61698	
2	CanadFrEn81KeyPC4CPrimaxGreyKNormalKB	SN20M61668	
2	Korean80KeyPC4CPrimaxGreyKNormalKB	SN20M61683	
2	TradChine80KeyPC4CPrimaxGreyKNormalKB	SN20M61651	
2	Russian80KeyPC4CPrimaxGreyKNormalKB	SN20M61634	
2	French81KeyPC4CPrimaxGreyKNormalKB	SN20M61678	
2	German81KeyPC4CPrimaxGreyKNormalKB	SN20M61713	N
2	Arabic80KeyPC4CPrimaxGreyKNormalKB	SN20M61679	
2	Brazilian81KeyPC4CPrimaxGreyKNormalKB	SN20M61680	
2	Japanese84KeyPC4CPrimaxGreyKNormalKB	SN20M61594	
2	Dutch81KeyPC4CPrimaxGreyKNormalKB	SN20M61626	
2	Greek80KeyPC4CPrimaxGreyKNormalKB	SN20M61589	
2	Hebrew80KeyPC4CPrimaxGreyKNormalKB	SN20M61566	
2	Hungarian81KeyPC4CPrimaxGreyKNormalKB	SN20M61636	
2	Nordic81KeyPC4CPrimaxGreyKNormalKB	SN20M61726	
2	Belgian81KeyPC4CPrimaxGreyKNormalKB	SN20M61759	
2	Iceland81KeyPC4CPrimaxGreyKNormalKB	SN20M61688	
2	Slovenian81KeyPC4CPrimaxGreyKNormalKB	SN20M61552	
2	Swiss81KeyPC4CPrimaxGreyKNormalKB	SN20M61629	
2	USInter80KeyPC4CPrimaxGreyKNormalKB	SN20M61742	
2	Czh-Slk81KeyPC4CPrimaxGreyKNormalKB	SN20M61696	
2	Bulgarian81KeyPC4CPrimaxGreyKNormalKB	SN20M61618	
2	India80KeyPC4CPrimaxGreyKNormalKB	SN20M61720	
2	French-Arabic81KeyPC4CPrimaxGreyKNormalKB	SN20M61579	
2	Ukrainia80keyPC4CPrimaxGreyKNormalKB	SN20M67703	
2	US80KeyPC4CLiteonGreyKNormalKB	SN20M61625	
2	UK81KeyPC4CLiteonGreyKNormalKB	SN20M61763	
2	Italian81KeyPC4CLiteonGreyKNormalKB	SN20M61746	
2	Spanish81KeyPC4CLiteonGreyKNormalKB	SN20M61600	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	Turkish81KeyPC4CLiteonGreyKNormalKB	SN20M61603	
2	Thailand80KeyPC4CLiteonGreyKNormalKB	SN20M61543	
2	Portugue81KeyPC4CLiteonGreyKNormalKB	SN20M61733	
2	LatinSpa81KeyPC4CLiteonGreyKNormalKB	SN20M61769	
2	CanadFrEn81KeyPC4CLiteonGreyKNormalKB	SN20M61645	
2	Korean80KeyPC4CLiteonGreyKNormalKB	SN20M61671	
2	TradChine80KeyPC4CLiteonGreyKNormalKB	SN20M61605	
2	Russian80KeyPC4CLiteonGreyKNormalKB	SN20M61655	
2	French81KeyPC4CLiteonGreyKNormalKB	SN20M61724	
2	German81KeyPC4CLiteonGreyKNormalKB	SN20M61684	
2	Arabic80KeyPC4CLiteonGreyKNormalKB	SN20M61740	
2	Brazilian81KeyPC4CLiteonGreyKNormalKB	SN20M61695	
2	Japanese84KeyPC4CLiteonGreyKNormalKB	SN20M61691	
2	Dutch81KeyPC4CLiteonGreyKNormalKB	SN20M61693	
2	Greek80KeyPC4CLiteonGreyKNormalKB	SN20M61518	
2	Hebrew80KeyPC4CLiteonGreyKNormalKB	SN20M61760	
2	Hungarian81KeyPC4CLiteonGreyKNormalKB	SN20M61729	
2	Nordic81KeyPC4CLiteonGreyKNormalKB	SN20M61530	
2	Belgian81KeyPC4CLiteonGreyKNormalKB	SN20M61725	
2	Iceland81KeyPC4CLiteonGreyKNormalKB	SN20M61538	
2	Slovenian81KeyPC4CLiteonGreyKNormalKB	SN20M61745	
2	Swiss81KeyPC4CLiteonGreyKNormalKB	SN20M61550	
2	USInter80KeyPC4CLiteonGreyKNormalKB	SN20M61577	N
2	Czh-Slk81KeyPC4CLiteonGreyKNormalKB	SN20M61663	
2	Bulgarian81KeyPC4CLiteonGreyKNormalKB	SN20M61574	
2	India80KeyPC4CLiteonGreyKNormalKB	SN20M61526	
2	French-Arabic81KeyPC4CLiteonGreyKNormalKB	SN20M61662	
2	Ukrainia80keyPC4CLiteonGreyKNormalKB	SN20M67682	
2	US80KeyPC4CDarfonGreyKNormalKB	SN20M61630	
2	UK81KeyPC4CDarfonGreyKNormalKB	SN20M61596	
2	Italian81KeyPC4CDarfonGreyKNormalKB	SN20M61557	
2	Spanish81KeyPC4CDarfonGreyKNormalKB	SN20M61665	
2	Turkish81KeyPC4CDarfonGreyKNormalKB	SN20M61722	
2	Thailand80KeyPC4CDarfonGreyKNormalKB	SN20M61571	
2	Portugue81KeyPC4CDarfonGreyKNormalKB	SN20M61658	
2	LatinSpa81KeyPC4CDarfonGreyKNormalKB	SN20M61580	
2	CanadFrEn81KeyPC4CDarfonGreyKNormalKB	SN20M61723	
2	Korean80KeyPC4CDarfonGreyKNormalKB	SN20M61611	
2	TradChine80KeyPC4CDarfonGreyKNormalKB	SN20M61521	
2	Russian80KeyPC4CDarfonGreyKNormalKB	SN20M61519	
2	French81KeyPC4CDarfonGreyKNormalKB	SN20M61650	
2	German81KeyPC4CDarfonGreyKNormalKB	SN20M61586	
2	Arabic80KeyPC4CDarfonGreyKNormalKB	SN20M61539	
2	Brazilian81KeyPC4CDarfonGreyKNormalKB	SN20M61525	
2	Japanese84KeyPC4CDarfonGreyKNormalKB	SN20M61590	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	Dutch81KeyPC4CDarfonGreyKNormalKB	SN20M61584	
2	Greek80KeyPC4CDarfonGreyKNormalKB	SN20M61718	
2	Hebrew80KeyPC4CDarfonGreyKNormalKB	SN20M61572	
2	Hungarian81KeyPC4CDarfonGreyKNormalKB	SN20M61628	
2	Nordic81KeyPC4CDarfonGreyKNormalKB	SN20M61551	
2	Belgian81KeyPC4CDarfonGreyKNormalKB	SN20M61765	
2	Iceland81KeyPC4CDarfonGreyKNormalKB	SN20M61599	
2	Slovenian81KeyPC4CDarfonGreyKNormalKB	SN20M61661	
2	Swiss81KeyPC4CDarfonGreyKNormalKB	SN20M61524	
2	USInter80KeyPC4CDarfonGreyKNormalKB	SN20M61559	
2	Czh-Slk81KeyPC4CDarfonGreyKNormalKB	SN20M61617	
2	Bulgarian81KeyPC4CDarfonGreyKNormalKB	SN20M61681	
2	India80KeyPC4CDarfonGreyKNormalKB	SN20M61623	
2	French-Arabic81KeyPC4CDarfonGreyKNormalKB	SN20M61714	
2	Ukrainia80keyPC4CDarfonGreyKNormalKB	SN20M67675	
3	RJ45 Cover C 81CJ Iron Grey	5M20Q59798	
3	RJ45 Cover C 81AY MG	5CB0Q64220	
4	MBC81B0 NOK I58250U DIS 4G NFTC	5B20Q64675	
4	MBC81B0 WIN I58250U DIS 4G NFTC	5B20Q64678	
4	MBC81B0 NOK I78550U DIS 4G NFTC	5B20Q64677	
4	MBC81B0 WIN I78550U DIS 4G NFTC	5B20Q64673	
4	MBC81B0 NOK I58250U UMA 4G NFTC	5B20Q64676	
4	MBC81B0 WIN I58250U UMA 4G NFTC	5B20Q64672	N
4	MBC81B0 NOK I78550U UMA 4G NFTC	5B20Q64679	
4	MBC81B0 WIN I78550U UMA 4G NFTC	5B20Q64674	
4	MB C81CJ NOK I58250U DIS 4G FTC	5B20Q59833	
4	MB C81CJ WIN I58250U DIS 4G FTC	5B20Q59784	
4	MB C81CJ NOK I78550U DIS 4G FTC	5B20Q59788	
4	MB C81CJ WIN I78550U DIS 4G FTC	5B20Q59804	
4	MB C81CJ NOK I58250U UMA 4G FTC	5B20Q59816	
4	MB C81CJ WIN I58250U UMA 4G FTC	5B20Q59791	
4	MB C81CJ NOK I78550U UMA 4G FTC	5B20Q59800	
4	MB C81CJ WIN I78550U UMA 4G FTC	5B20Q59771	
5	K4A8G165WC-BCRC(C/8Gb/18nm /SDP)	SM30N71798	
5	8Gbx16 D4 CP MT40A512M16JY-083E:B	SM30L08877	
5	8Gbx16 D4 CP H5AN8G6NAFR-UHC	SM30L08875	
5	2GB DDR4 2400 SoDIMM	SM30K25304	
5	2GB D4S RMSA3270MB76H8F-2400	SM30G16503	
5	2GB D4S MTA4ATF25664HZ-2G3B1	SM30G16502	
5	4GB D4 S M471A5244CB0-CRC	SM30M49902	
5	4GB D4S HMA851S6AFR6N-UH	SM30G16505	
5	4GB D4S RMSA3270MB86H9F-2400	SM30G16507	
5	4GB D4S MTA4ATF51264HZ-2G3B1	SM30G16506	
5	8GB D4 S M471A1K43CB1-CRC	SM30M49901	
5	8GB D4S HMA81GS6AFR8N-UH	SM30G16509	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
5	8GB D4 26S RMSA3260MH78HAF-2666	SM30K25294	
5	8GB D4 26S MTA8ATF1G64HZ-2G6H1	SM30K25288	
5	16GB DDR4 2400 SoDIMM	SM30M49903	
5	16GB D4S HMA82GS6AFR8N-UH	SM30G16513	
5	16GB D4 26S RMSA3300MH78HBF-2666	SM30K25295	
5	16GB D4 26S MTA16ATF2G64HZ-2G6H1	SM30K25289	
5	2GB D4S M471A5644EB0-CRC	SM30G16500	
5	4GB DDR4 26S M471A5244CB0-CTD	SM30N76487	
5	4GB D4 26S MTA4ATF51264HZ-2G6E1	SM30K25318	
6	PM961 MZVLW128HEGR PCIE 128G SSD	5SD0L73445	
6	128 Toshiba XG4 128G M.2 2280 PCIe-NVMe THNSN5128GPUK	5SD0M56301	
6	Liteon CA1-8D128 M.2 2280 128GB PCIe 3C07110170 SSD	5SD0N04881	
6	PM961 MZVLW256HEHP PCIE 256G SSD	5SD0L73444	
6	Toshiba XG5 256GB M.2 2280 PCIe KXG50ZNV256G SSD	SSD0P31684	
6	Lenovo AM6671 M.2 2280 256GB PCIe LENSE20256GMSP34MEAT2TA SSD	5SD0N26459	
6	PM961 MZVLW512HMJP PCIE 512G SSD	5SD0L73443	
6	SAM PM981 512GB M.2 2280 PCIe	SSD0P20906	
6	Toshiba XG5 512GB M.2 2280 PCIe KXG50ZNV512G SSD	SSD0P31682	
6	Lenovo AM6671 M.2 2280 512GB PCIe LENSE20512GMSP34MEAT2TA SSD	5SD0N26460	
7	ST500LT012 6G 7mm 5.4K 500G HDD	16200383	
7	MQ01ABF050 6G 7mm 5.4K 500G HDD	5H20L34560	
7	WD WD5000LPCX-24VHAT0 7mm 5400rpm 500G HDD	5H20J35762	N
7	ST500LM021 7mm 7200rpm 500G HDD	5H20K22136	
7	WD5000LPLX-24ZNTT0 7mm 7200rpm 500G HDD	5H20L07579	
7	Seagate ST1000LM035 1T 2.5" 7mm 5400rpm HDD	5H20L22184	
7	WD10SPZX-24Z10T0 1TB 2.5" SATA 7mm 5400rpm HDD for ideapad	SH20P18627	
7	Toshiba MQ04ABF100 1TB 2.5" SATA 7mm 5400rpm HDD for ideapad	SH20N91550	
7	Seagate Rosewood1D ST1000LM049 1TB 2.5" SATA 7mm 7200rpm HDD for ideapad	SHD0Q10717	
7	Seagate Rosewood2D ST2000LM007 2TB 2.5" SATA 6Gb/S 7mm 5400rpm HDD	5H20M37521	
7	Seagate ST500LM030 500GB 2.5" SATA 7mm 5400rpm HDD	SH20P18518	
8	Heatsink C 81CJ UMA	5H40Q59803	
8	Heatsink C 81CJ DIS	5H40Q59778	
9	Fan C 81CJ	5F10Q59785	
10	Intel 3165 1x1AC+BT PCIE M.2 WLAN	SW10H24486	
10	CBT RTL8821CE 1x1AC+BT4.1 Combo M.2	SW10K97462	
10	Ltn NFA435A 1x1AC+BT4.0 PCIE M.2 WLAN	SW10K97461	
10	Intel 8265 2x2AC+BT PCIE M.2 WLAN NV	SW10K97453	
10	Foxconn RTL8822BE 2*2ac+BT PCIE M.2 WLAN module	SW10K97464	
11	RTC Battery C 81CJ	5B10Q59777	
12	V/E LG L17L2PB1 7.6V30Wh2cell bty	5B10P54006	
12	V/E SP/A L17M2PB1 7.5V30Wh2cell bty	5B10P54001	
12	V/E CP/C L17C2PB1 7.6V30Wh2cell bty	5B10P53997	
13	FP Board C 81CJ IG W/FFC (on select models)	5C50Q59810	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
13	FingerprintModuleC81AY W/CableMG (on select models)	5C50Q64360	
13	JYAA063A-Iron Grey (on select models)	SF30M82343	
13	MLE3M3-Iron Gray (on select models)	SF30M97437	
13	JYAA079A-Mineral Grey 8*8 (on select models)	SF30N19778	
13	MLE3M7-Mineral Grey 8*8 (on select models)	SF30N19777	
14	Speaker C 81CJ L+R	5SB0Q59819	N
14	Speaker C 81AY Right	5SB0Q64245	
15	Lower Case C 81AY W/FTC IG	5CB0Q64342	
15	Lower Case C 81AY WO/FTC L IG	5CB0Q64272	
15	Lower Case C 81AY W/FTC MG	5CB0Q64367	
15	Lower Case C 81AY WO/FTC L MG	5CB0Q64343	
16-1	Dummy Second Battery C 81AY MG (on select models)	5M20Q64361	
16-1	2ND Battery Dummy C 81CJ IG (on select models)	5M20Q59776	
16-2	V/E LG L17L2PB2 7.72V39Wh2cell bty (on select models)	5B10P54002	
16-2	V/E SP/A L17M2PB2 7.68V39Wh2cell bty (on select models)	5B10P53996	
16-2	V/E CP/C L17C2PB2 7.7V39Wh2cell bty (on select models)	5B10P54003	*
16-2	V/E MG SP/A L17M2PB5 7.68V39Wh2cell bty (on select models)	5B10P98183	
16-2	V/E MG LG L17L2PB5 7.72V39Wh2cell bty (on select models)	5B10P98186	
16-2	V/E IG SP/A L17M2PB5 7.68V39Wh2cell bty (on select models)	5B10P98184	
16-2	V/E IG LG L17L2PB5 7.72V39Wh2cell bty (on select models)	5B10P98187	

LCD FRUs

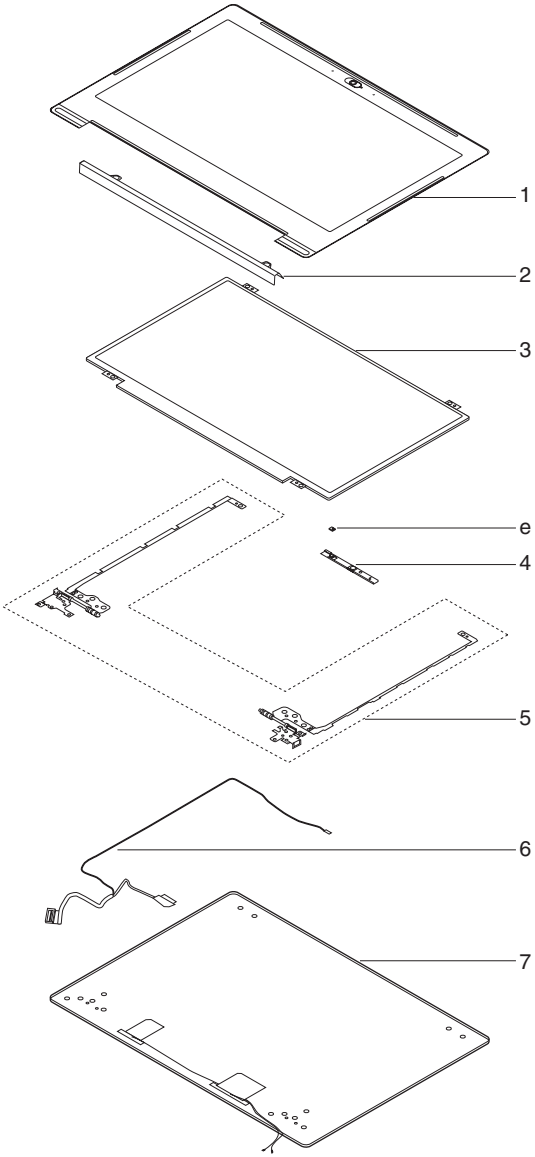


Table 5. Parts list—LCD FRUs

No.	FRU	FRU no.	CRU ID.
1	LCD Bezel C 81CJ W/CMOS	5B30Q59802	
2	Hinge Cover C 81CJ Iron Grey	5CB0Q59826	
2	Hinge Cover C 81AY MINERAL GRAY	5CB0Q64389	
3	INX N140BGA-EA3 C1 HD AG S NB	5D10K85755	
3	BO NT140WHM-N41 HDT AG S NB	5D10K81099	
3	AU B140XTN02.E HWCA HD AG S NB	5D10P54235	
3	IV M140NWR6 R1 HDT AG S NB	5D10K81644	
3	AU B140HTN01.E 2A FHDT AG S NB	5D10L08701	
3	BO NT140FHM-N41 V8.0 FHDT AG S NB	5D10L01874	
3	IN N140HGE-EAA C4 FHDT AG S NB	5D10K93439	
4	Comn Camera A HD720P 2MIC Bsn (on select models)	SC20F27066	
4	Comn Camera A HD720P 2MIC Chy (on select models)	SC20F27067	N
4	Comn Camera A HD720P 2MIC Ltn (on select models)	SC20F27068	
4	Comn Camera B HD720P 1MIC Bsn (on select models)	SC20P24411	
4	Comn Camera B HD720P 1MIC Chy (on select models)	SC20P24410	
4	Comn Camera B HD720P 1MIC AVC (on select models)	SC20P24556	
4	Comn Camera C 0.3M 1MIC Bsn (on select models)	SC20P24555	
4	Comn Camera C 0.3M 1MIC Chy (on select models)	SC20P24559	
4	Comn Camera C 0.3M 1MIC AVC (on select models)	SC20P24554	
5	Hinge C 81AY R+L	5H50Q64295	
6	EDP Cable C 81CJ W/CMOS	5C10Q59818	
7	LCDCover C 81AY W/Antenna IRONGRAY	5CB0Q64427	
7	LCDCover C 81AY W/Antenna MG	5CB0Q64398	

Miscellaneous parts

Table 6. Parts list—Miscellaneous parts

FRU	FRU no.	CRU ID.
System miscellaneous parts: • (a) DC-IN Cable C 81CJ • (b) Dimm Emi Shielding C 81CJ • (c) HDD Bracket C 81CJ • (d) FP Bracket C 81CJ (on select models) • (e) Camera MIC Rubber C 81CJ	 5C10Q59809 5S60Q59830 5B40Q59805 5B40Q59808 5R60Q59811	N
Note: Letters in parentheses are references to the exploded view in "Overall" on page 69 and "LCD FRUs" on page 84.		

AC adapters

Table 7. Parts list—AC adapters

FRU	FRU no.	CRU ID.
Acbel ADLX45NAC3A 20V2.25A COO	SA10M42789	*
Delta ADLX45NDC3A 20V2.25A COO	SA10M42787	
Liteon ADLX45DLC3A 20V2.25A COO	SA10M42529	
Chicony ADLX45NCC3A 20V2.25A COO	SA10M42722	
Chicony PD 3.0 USB-C 45W 3pin	SA10E75843	
Liteon PD 3.0 USB-C 45W 3pin	SA10E75841	
Delta PD 3.0 USB-C 45W 3pin	SA10E75839	
Acbel PD 3.0 USB-C 45W 3pin	SA10E75845	
Delta ADLX65NDC3A 20V3.25A COO	SA10M42728	
Chicony ADLX65NCC3A 20V3.25A COO	SA10M42777	
Liteon ADLX65NLC3A 20V3.25A AD BIS	5A10J75114	
Chicony ADLX65YCC3A 20V3.25A adapter	SA10M13950	
Liteon ADLX65YLC3A 20V3.25A adapter	SA10M13945	
Delta ADLX65YDC3A 20V3.25A adapter	SA10M13946	
Acbel ADLX65YAC3A 20V3.25A adapter	SA10M13943	

Screws

Table 8. Parts list—screws

FRU	P/N	CRU ID.
Screw Kits C 81AY	5S10Q64217	N

Notices

Lenovo may not offer the products, services, or features discussed in this document in all countries. Consult your local Lenovo representative for information on the products and services currently available in your area. Any reference to a Lenovo product, program, or service is not intended to state or imply that only that Lenovo product, program, or service may be used. Any functionally equivalent product, program, or service that does not infringe any Lenovo intellectual property right may be used instead. However, it is the user's responsibility to evaluate and verify the operation of any other product, program, or service.

Lenovo may have patents or pending patent applications covering subject matter described in this document. The furnishing of this document does not give you any license to these patents.

LENOVO GROUP LTD. PROVIDES THIS PUBLICATION "AS IS" WITHOUT WARRANTY OF ANY KIND, EITHER EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF NON-INFRINGEMENT, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. Some jurisdictions do not allow disclaimer of express or implied warranties in certain transactions, therefore, this statement may not apply to you.

This information could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein; these changes will be incorporated in new editions of the publication. Lenovo may make improvements and/or changes in the product(s) and/or the program(s) described in this publication at any time without notice.

The products described in this document are not intended for use in implantation or other life support applications where malfunction may result in injury or death to persons. The information contained in this document does not affect or change Lenovo product specifications or warranties. Nothing in this document shall operate as an express or implied license or indemnity under the intellectual property rights of Lenovo or third parties. All information contained in this document was obtained in specific environments and is presented as an illustration. The result obtained in other operating environments may vary.

Lenovo may use or distribute any of the information you supply in any way it believes appropriate without incurring any obligation to you.

Any references in this publication to non-Lenovo Web sites are provided for convenience only and do not in any manner serve as an endorsement of those Web sites. The materials at those Web sites are not part of the materials for this Lenovo product, and use of those Web sites is at your own risk.

Any performance data contained herein was determined in a controlled environment. Therefore, the result obtained in other operating environments may vary significantly. Some measurements may have been made on development-level systems and there is no guarantee that these measurements will be the same on generally available systems. Furthermore, some measurements may have been estimated through extrapolation. Actual results may vary. Users of this document should verify the applicable data for their specific environment.

Trademarks

The following terms are trademarks or registered trademarks of Lenovo in the United States, other countries, or both.

Lenovo
OneKey

Microsoft and Windows are trademarks of Microsoft Corporation in the United States, other countries, or both.

Other company, products, or service names may be trademarks or service marks of others.