

Lenovo ideapad 330S

ideapad 330S-15ARR

ideapad 330S-15ARR U

ideapad 330S-15ARR D

Hardware Maintenance Manual

Lenovo[™]

Note:

- Before using this information and the product it supports, be sure to read the general information under “Notices” on page 75.

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About this manual

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

Lenovo ideapad 330S-15ARR/ideapad 330S-15ARR U/ideapad 330S-15ARR D

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

Use this manual to troubleshoot problems.

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 ideapad 330S-15ARR/ideapad 330S-15ARR U/ideapad 330S-15ARR D 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 toolbox 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 generatorsand 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 כמויות קטנות של ניקל וקדמיום. אין לפרק סוללות המתנה, לטעון אותה מחדש, להשליך אותה לאש או למים או לקצר אותה. יש לשלוק את הסוללה בנדרש על ידי התקנות והחוקים המקומיים. יש להשתמש רק בסוללה המומיפה 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请使用してください。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, veuillez 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.

מאזו הסוללה מכיל כמות קטנה של ניקל וקדמיום. אין לפרק את מאזו הסוללה, להשליך אותו לאש או למים או לקצר אותו. יש לסלק את מאזו הסוללה הסוללה כנדרש על ידי התקנות החוקיים המקומיים. יש להשתמש רק בסוללה המוביעה ברשימת החלקים המתאימה בזמן החלפת מאזו 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 température 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 Systematterie ist eine Lithiumatterie. 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 לפגיעת עקשות. אין לטעון אותה מחדש, לנטות את המחובר המקוטב שלה, למרק אותה או לחמם אותה לטמפרטורה העולה על 100 מעלות צלזיוס. אין לשרוף את הסוללה ואין לחשוף את תוכן התא למים. יש לנטות את הסוללה כנדרש במקנות ובחוקים המקומיים. יש להשתמש רק בסוללה המומייעה ברשימת החלקים המתאימים. שימוש בסוללה אחרת עלול לגרום לטכנת 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°C (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 incinerar 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 for 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 הנביש הנוזלי (LCD) נשבר והנוזל מתוך המסך בא במגע עם עיניכם או ידיכם, שטפו את האזורים הנוגעים 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 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 הכרטיס 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 מוארקות עלולה להפיק זרם מספיק 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 מארזי הסוללה, וזו 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 kontrol, 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，请勿直视激光束，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 nehladte priamo s optickými nástrojmi do lúča a vyhnite sa priamemu vystaveniu lúčov.

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 21
- “Checking the battery pack” on page 22

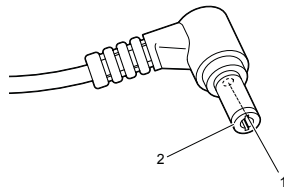
Checking the AC adapter

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	+20
2	0

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 “Lenovo ideapad 330S-15ARR/ideapad 330S-15ARR U/ideapad 330S-15ARR D” 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 by using OneKey Recovery” on page 23
- “Passwords” on page 24
- “Power management” on page 25

Restoring the factory contents by using Push-button reset

Restore of factory default

The Lenovo ideapad 330S-15ARR/ideapad 330S-15ARR U/ideapad 330S-15ARR D computers come with pre-installed 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 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 three power management modes: screen blank, sleep (standby), and hibernation.

Screen blank state

If the time set on the “Turn off monitor” timer in the operating system expires, the LCD backlight turns off. You can also turn off the LCD backlight by pressing .

To end screen blank state and resume normal operation, press any key on the keyboard.

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.
- Select the Start button, then 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.

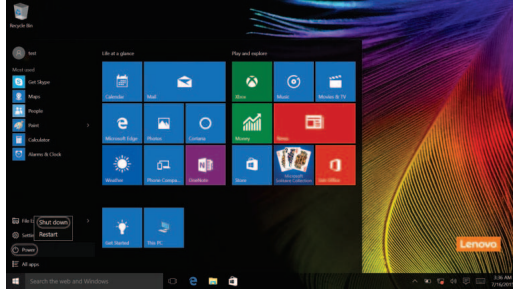
To wake up the computer, perform the following:

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

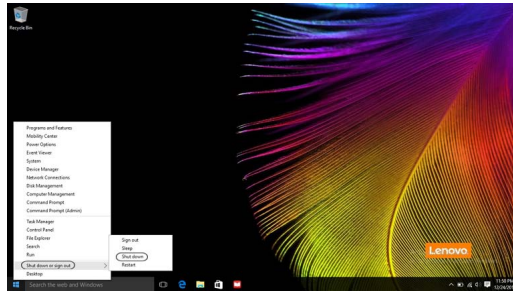
Shutting down the computer

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:

- Select the Start button, then select **Power**  → **Shut down**.



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



Lenovo ideapad 330S-15ARR/ideapad 330S-15ARR U/ideapad 330S-15ARR D

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 59
- “Parts list” on page 61

Specifications

The following table lists the specifications of the Lenovo ideapad 330S-15ARR/ideapad 330S-15ARR U/ideapad 330S-15ARR D:

Table 1. Specifications

Form Factor	
Dimensions	Appr. 358.4 mm × 244.1 mm × 19.4 mm
Weight	Appr. 1.87 kg
LCD size	15.6-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	DDR4-2400 MHz
Maximum supported capacity	4 GB + 4 GB (on board)
Slots	SODIMM × 1, on board × 1
Hard disk drive	
Form factor	2.5-inch, 7 mm
Capacity	up to 2 TB
SSD	
Capacity	up to 256 GB
Interface	PCIe
Display	
Display resolution (LCD)	1,366 × 768 pixels HD/1,920 × 1,080 pixels FHD
LCD backlight	LED

Table 1. Specifications (continued)

I/O Ports	
USB	USB 3.0 × 2, Type-C (support 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	DIS: 3 Cells, 52.5 Wh UMA: 2 Cells, 30 Wh/3 Cells, 52.5 Wh
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	DIS: 65 W UMA: 45 W/ 65 W
Miscellaneous	
Camera	HD
Security	Kensington mini security slot × 1

Status indicators

The system status indicators below show the computer status:

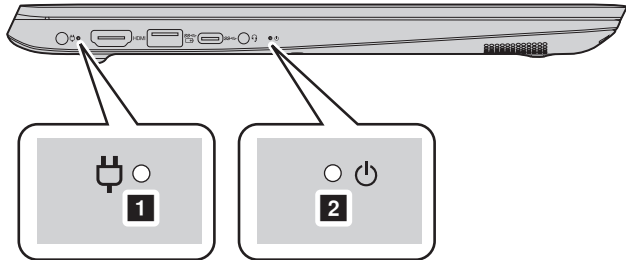


Table 2. Status indicators













AC power adapter status	Indicator status	Meaning
Disconnected	Off	The battery is not charging.
Connected	Solid amber	The battery has between 1% and 80% charge and is still charging.
	Solid white	The battery has more than 80% charge, charging will continue until the battery is fully charged.

Indicator	Indicator status	Meaning
Power status indicator	On (solid white)	The computer is powered on and the battery has between 20% and 100% charge.
	On (solid amber)	The computer is powered on and the battery has between 1% and 20% charge.
	Slow blinking amber	The computer is in sleep mode and the battery has between 1% and 20% charge.
	Slow blinking white	The computer is in sleep mode and the battery has between 20% and 100% charge.
	Off	The computer is powered off.

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.
 : Increases the volume level.	 : Locks the LCD screen.
 : Enables/disables microphone.	 : 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.

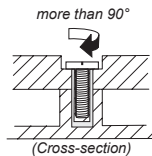
Do the following when you service this machine:

- 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:

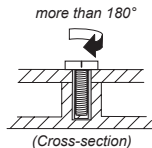
- **Plastic to plastic**

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 59.
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.

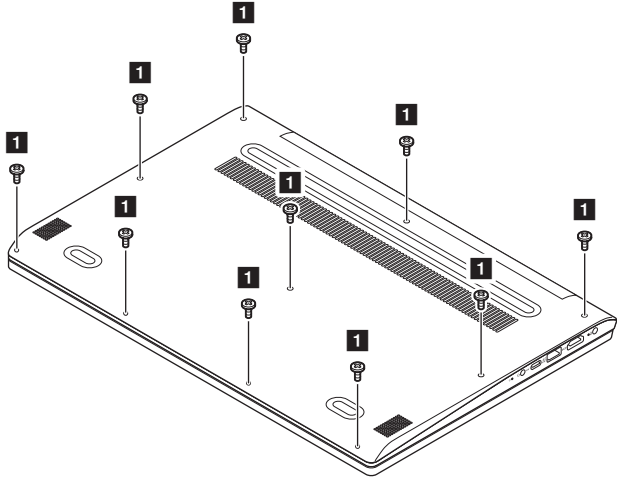
Attention: After replacing an FRU, do not turn on the computer until you have made sure that all screws, springs, and other small parts are in place and none are loose inside the computer. Verify this by shaking the computer gently and listening for rattling sounds. Metallic parts or metal flakes can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

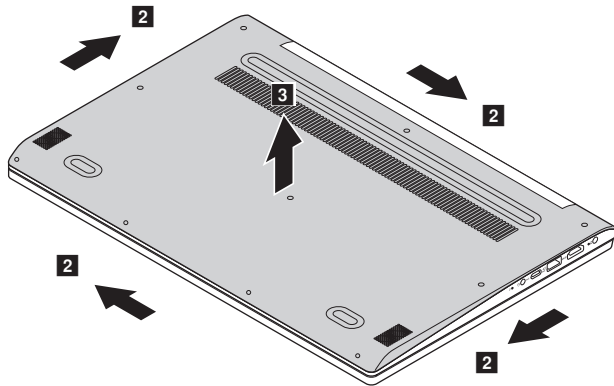
Figure 1. Removal steps of base cover

Remove the screws **1**.



Step	Screw (quantity)	Color
1	M2.0 x L5.5 mm, Phillips-head (10)	Black

Remove the base cover in the directions shown by arrows **2** and **3**.



Note: Applying labels to the base cover

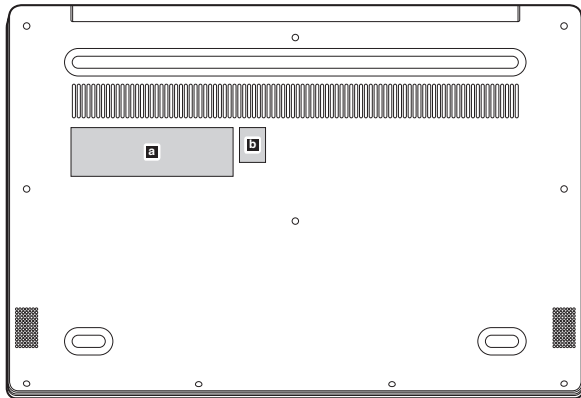
The new base cover FRU is shipped with a kit containing labels of several kinds. When you replace the base cover, you need to apply the following labels:

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

- a** Rating label
- b** Windows label

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:



1020 Battery pack

⚠ DANGER

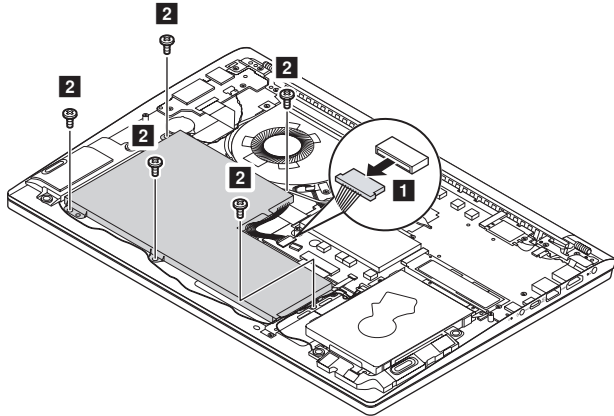
Only use the battery specified in the parts list for your computer. Any other battery could ignite or explode.

For access, remove this FRU:

- “1010 Base cover” on page 33

Figure 2. Removal steps of battery pack

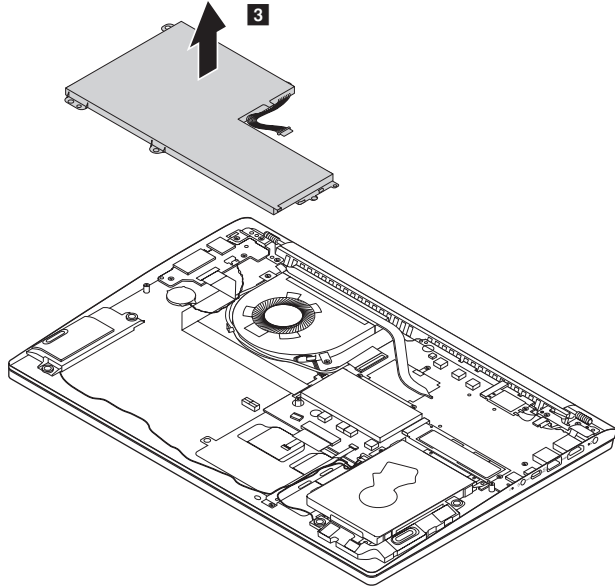
Detach the battery pack connector in the direction shown by arrow **1**, remove the screws **2**.



Step	Screw (quantity)	Color
2	M2.0 x L3.0 mm, Phillips-head (5)	Black

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:

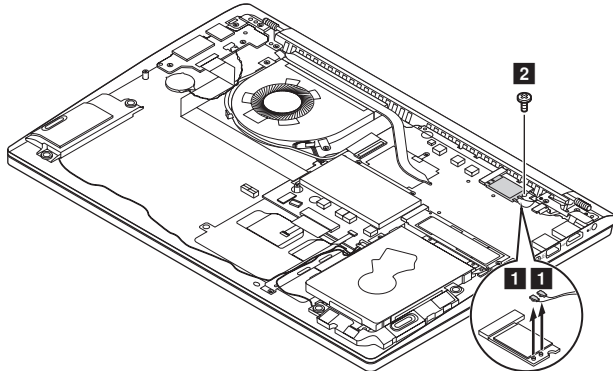
- “1010 Base cover” on page 33
- “1020 Battery pack” on page 35

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 62 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, grey) ■, and then remove the screw 2.

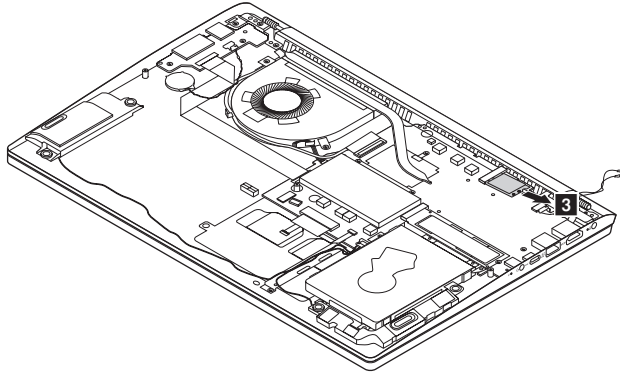


In step ■, unplug the jacks by using the removal tool antenna RF connector (P/N: 08K7159), or pick up the connectors with your fingers and gently unplug them in the direction shown by the arrows.

Step	Screw (quantity)	Color
2	M2.0 x L3.0 mm, Phillips-head (1)	Black

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:

In models with a wireless LAN card that has two antenna connectors, plug the black cable (1st) into the jack labeled **MAIN**, and the grey cable (2nd) into the jack labeled **AUX** on the card.

1040 SSD card

For access, remove these FRUs in order:

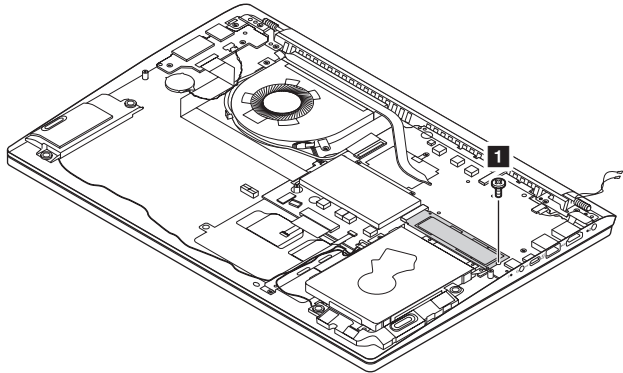
- “1010 Base cover” on page 33
- “1020 Battery pack” on page 35
- “1030 PCI Express Mini Card for wireless LAN” on page 37

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

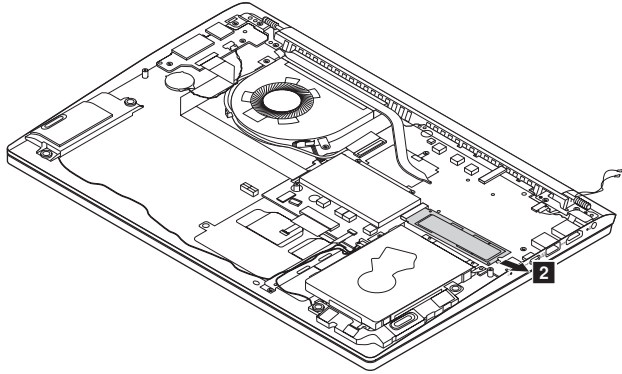
Remove the screw ■.



Step	Screw (quantity)	Color
■	M2.0 x L3.0 mm, Phillips-head (1)	Black

Figure 4. Removal steps of SSD card (continued)

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



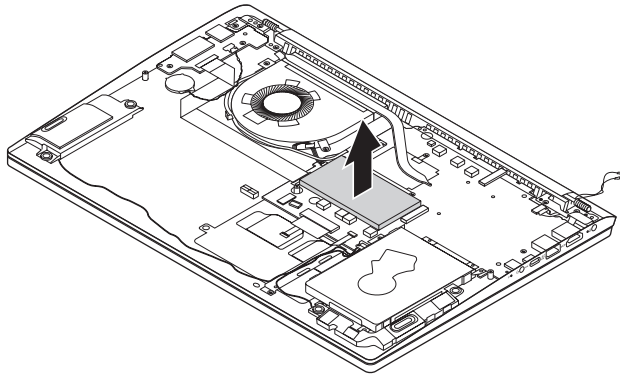
1050 DIMM

For access, remove these FRUs in order:

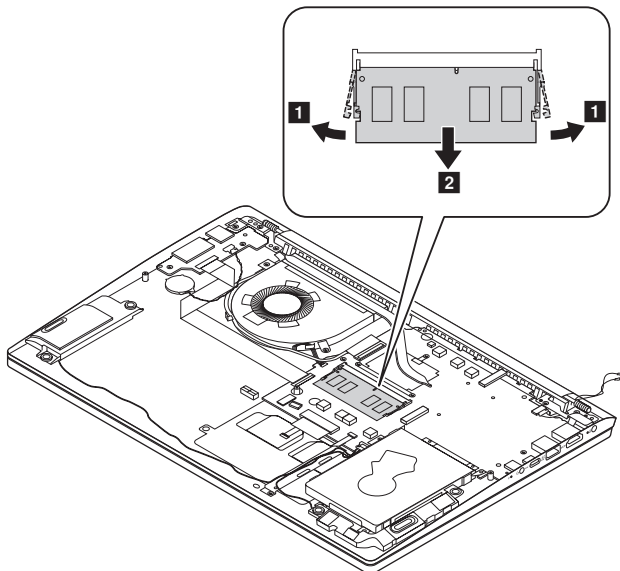
- “1010 Base cover” on page 33
- “1020 Battery pack” on page 35
- “1030 PCI Express Mini Card for wireless LAN” on page 37
- “1040 SSD card” on page 39

Figure 5. Removal steps of DIMM

Insert a flat blade tool into the memory module cover, and then remove the memory module cover manually.



Release the two latches on both edges of the socket at the same time in the directions shown by arrows **1**, and then unplug the DIMM in the direction shown by arrow **2**.



1060 Hard disk drive

For access, remove these FRUs in order:

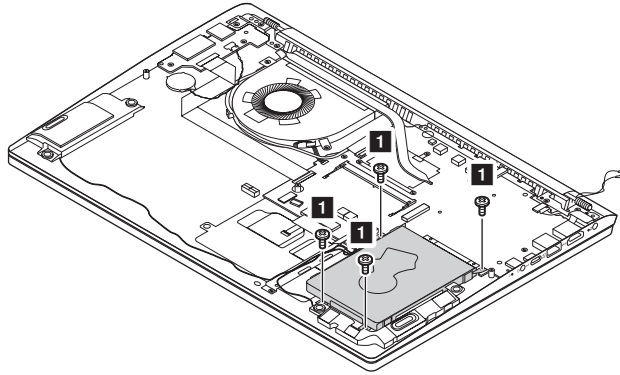
- “1010 Base cover” on page 33
- “1020 Battery pack” on page 35
- “1030 PCI Express Mini Card for wireless LAN” on page 37
- “1040 SSD card” on page 39
- “1050 DIMM” on page 41

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 6. Removal steps of hard disk drive

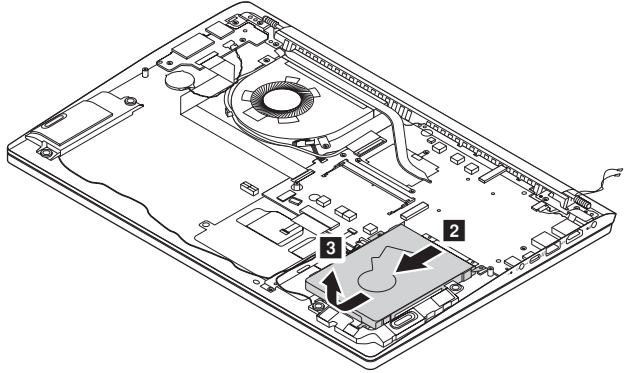
Remove the screws ■.



Step	Screw (quantity)	Color
■	M2.0 x L3.0 mm, Phillips-head (4)	Black

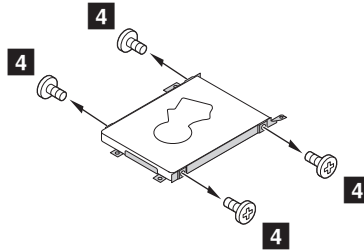
Figure 6. Removal steps of hard disk drive (continued)

Detach the HDD connector in the direction shown by arrow 2. Remove the hard disk drive from the slot in the direction shown by arrow 3.



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

Remove the screws 4 and detach the metal frame from the hard disk drive.



Step	Screw (quantity)	Color
4	M3.0 x L3.0 mm, Phillips-head (4)	Black

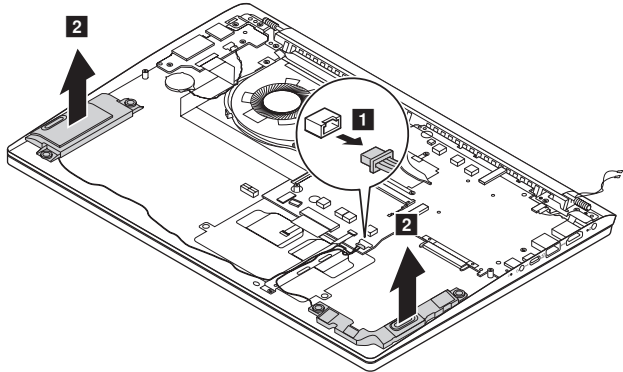
1070 Speakers

For access, remove these FRUs in order:

- “1010 Base cover” on page 33
- “1020 Battery pack” on page 35
- “1030 PCI Express Mini Card for wireless LAN” on page 37
- “1040 SSD card” on page 39
- “1050 DIMM” on page 41
- “1060 Hard disk drive” on page 42

Figure 7. Removal steps of speakers

Unplug the speaker connector **1**. Then remove the speakers **2**.



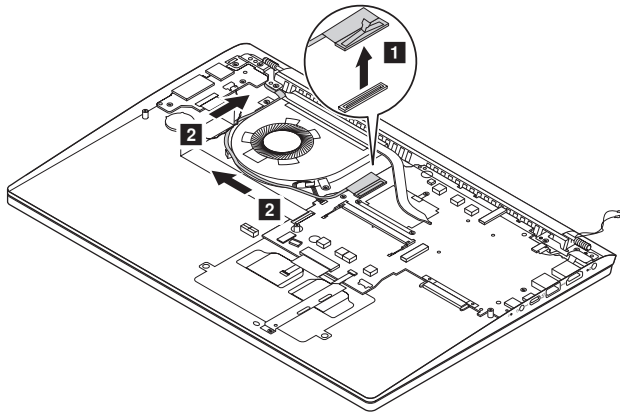
1080 Fan and heat sink

For access, remove these FRUs in order:

- “1010 Base cover” on page 33
- “1020 Battery pack” on page 35
- “1030 PCI Express Mini Card for wireless LAN” on page 37
- “1040 SSD card” on page 39
- “1050 DIMM” on page 41
- “1060 Hard disk drive” on page 42
- “1070 Speakers” on page 44

Figure 8. Removal steps of fan and heat sink

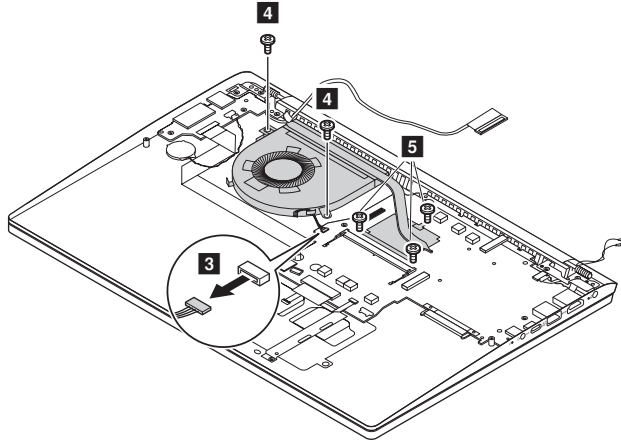
Detach the EDP connector in the direction shown by arrow **1**. Release the cables from the cable guides in the direction shown by arrows **2**.



When installing: Route the antenna cables along the cable guides. As you route the cables, make sure that they are not subjected to any tension. Tension could cause the cables to be damaged by the cable guides, or a wire to be broken.

Figure 8. Removal steps of fan and heat sink (continued)

Unplug the fan connector in the direction shown by arrow **3**. Remove the screws **4** and loosen the screws **5**.



Step	Screw (quantity)	Color
4	M2.0 x L3.0 mm, Phillips head (2)	Black
5	M2.0 x L3.0 mm, Phillips head (3)	Black

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

Remove the fan and heat sink in the direction shown by arrow **6** and **7**. Be careful not to damage the connector.

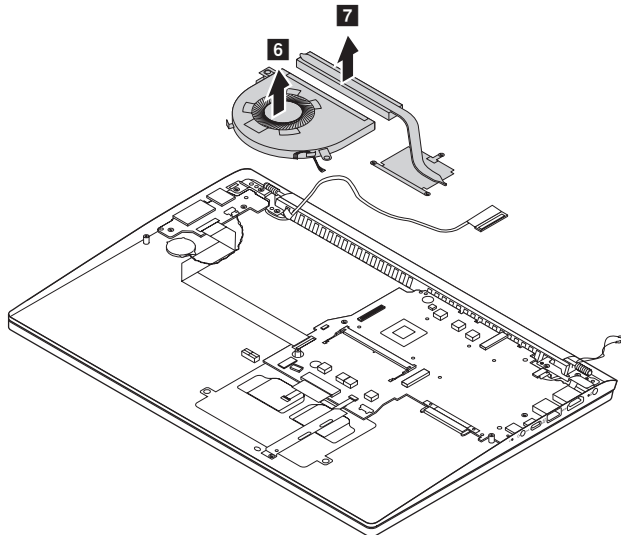
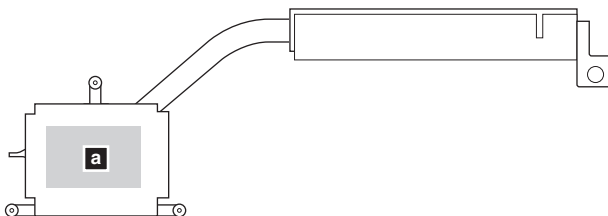


Figure 8. Removal steps of fan and heat sink (continued)



When installing: Before you attach the fan assembly to the computer, apply thermal grease, at an amount of 0.2 grams, to the **a** part 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.

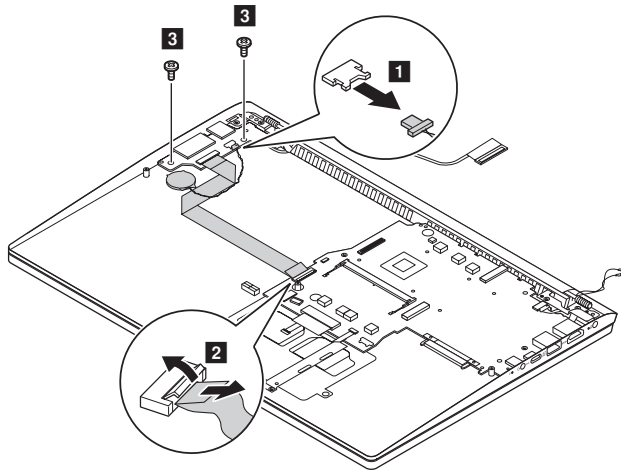
1090 IO board and backup battery

For access, remove these FRUs in order:

- “1010 Base cover” on page 33
- “1020 Battery pack” on page 35
- “1030 PCI Express Mini Card for wireless LAN” on page 37
- “1040 SSD card” on page 39
- “1050 DIMM” on page 41
- “1060 Hard disk drive” on page 42
- “1070 Speakers” on page 44
- “1080 Fan and heat sink” on page 45

Figure 9. Removal steps of IO board and backup battery

Unplug the backup battery connector in the direction shown by arrow **1**.
Detach the IO board connector in the directions shown by arrow **2**.
Remove the screw **3**.

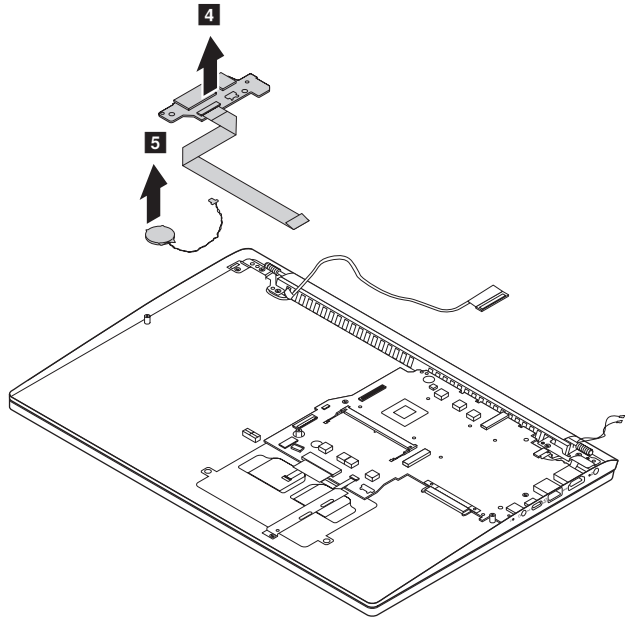


Step	Screw (quantity)	Color
3	M2.0 x L3.0 mm, Phillips-head (2)	Black

When installing: Make sure that the connectors are attached firmly.

Figure 9. Removal steps of IO board and backup battery (continued)

Remove the IO board and backup battery in the direction shown by arrow 4 and 5.



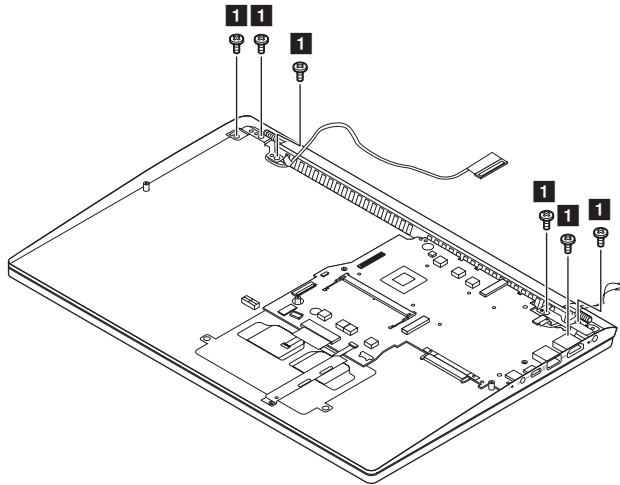
1100 Upper case

For access, remove these FRUs in order:

- “1010 Base cover” on page 33
- “1020 Battery pack” on page 35
- “1030 PCI Express Mini Card for wireless LAN” on page 37
- “1040 SSD card” on page 39
- “1050 DIMM” on page 41
- “1060 Hard disk drive” on page 42
- “1070 Speakers” on page 44
- “1080 Fan and heat sink” on page 45
- “1090 IO board and backup battery” on page 48

Figure 10. Removal steps of upper case

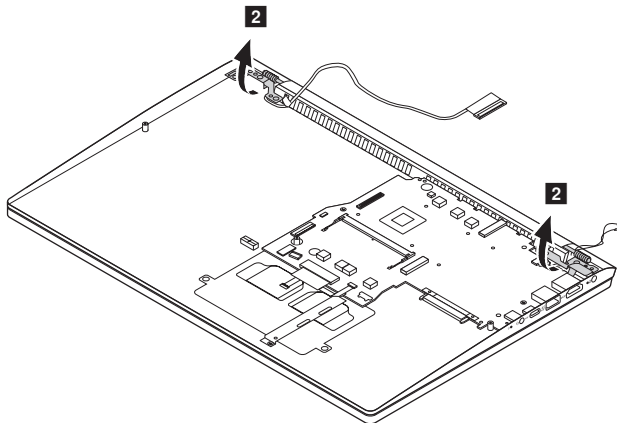
Remove the screws ■.



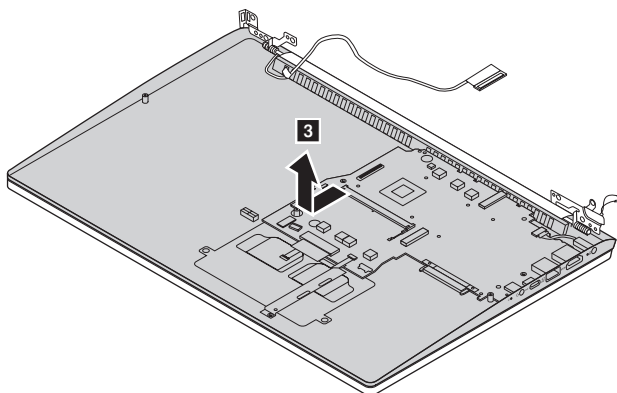
Step	Screw (quantity)	Color
■	M2.5 × L5.0 mm, Phillips-head (6)	Black

Figure 10. Removal steps of upper case (continued)

Open the hinge in the direction shown by arrows **2**.



Remove the upper case from the LCD module in the directions shown by arrow **3**.



1110 System board

Important notices for handling the system board:

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

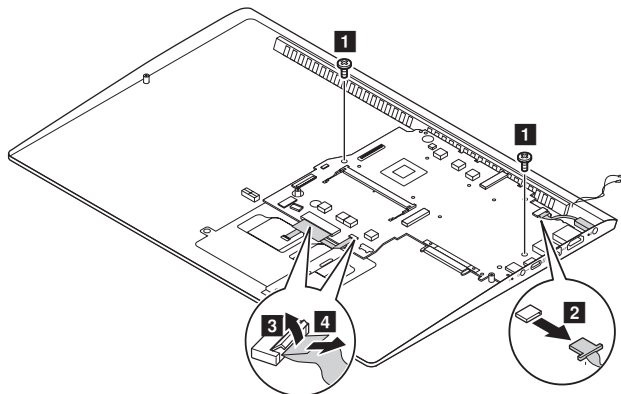
- Be careful not to drop the system board on a bench top that has a hard surface, such as metal, wood, or composite.
- Avoid rough handling of any kind.
- During the whole process, make sure not to drop or stack the system board.
- If you put a system board down, make sure to put it only on a padded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

For access, remove these FRUs in order:

- “1010 Base cover” on page 33
- “1020 Battery pack” on page 35
- “1030 PCI Express Mini Card for wireless LAN” on page 37
- “1040 SSD card” on page 39
- “1050 DIMM” on page 41
- “1060 Hard disk drive” on page 42
- “1070 Speakers” on page 44
- “1080 Fan and heat sink” on page 45
- “1090 IO board and backup battery” on page 48
- “1100 Upper case” on page 50

Figure 11. Removal steps of system board

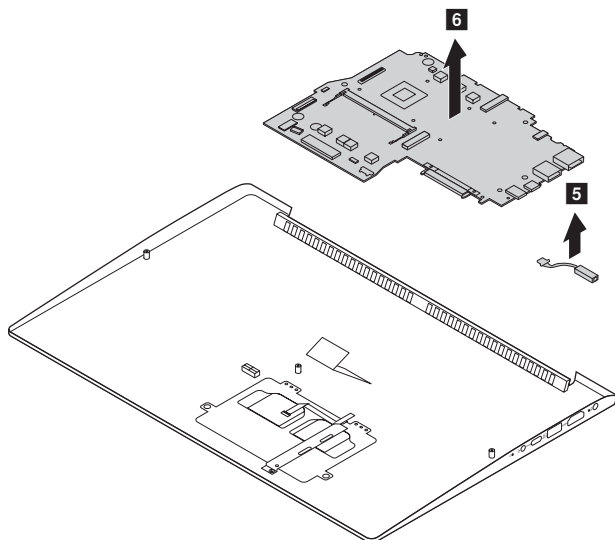
Remove the screws **■**. Then disconnect the connectors in the directions shown by arrows **2** to **4**.



Step	Screw (quantity)	Color
■	M2.0 x L3.0 mm, Phillips-head (2)	Black

Figure 11. Removal steps of system board (continued)

Remove the system board and DC-IN in the direction shown by arrows **5** and **6**.



1120 LCD unit

For access, remove these FRUs in order:

- “1010 Base cover” on page 33
- “1020 Battery pack” on page 35
- “1030 PCI Express Mini Card for wireless LAN” on page 37
- “1040 SSD card” on page 39
- “1050 DIMM” on page 41
- “1060 Hard disk drive” on page 42
- “1070 Speakers” on page 44
- “1080 Fan and heat sink” on page 45
- “1090 IO board and backup battery” on page 48
- “1100 Upper case” on page 50
- “1110 System board” on page 52

Figure 12. Removal steps of LCD unit

Remove the LCD front bezel in the direction shown by arrows **1**.

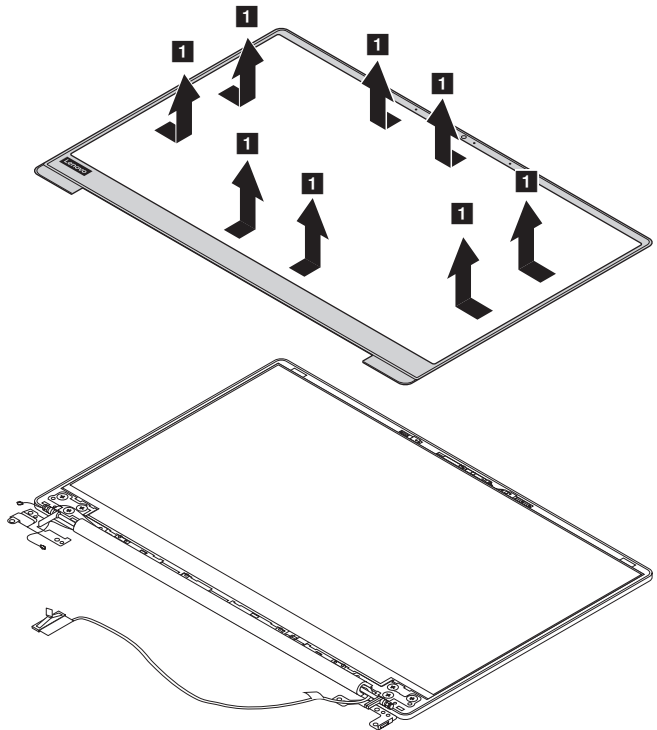
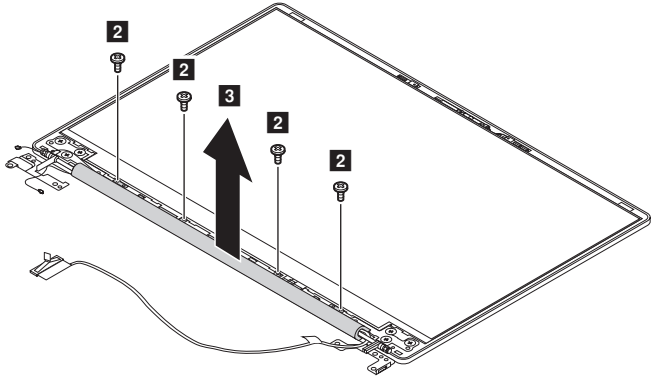


Figure 12. Removal steps of LCD unit (continued)

Remove screws **2**. Remove the hinge cover **3**.



Step	Screw (quantity)	Color
2	M1.6 x L2.5 mm, Phillips-head (4)	Black

Pull out the tapes in the direction shown by arrow **4**.

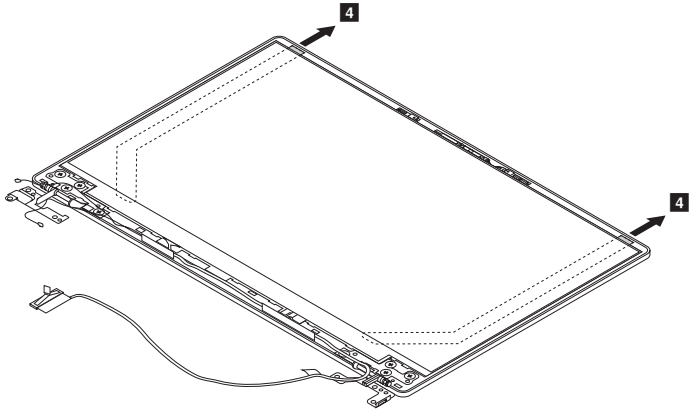
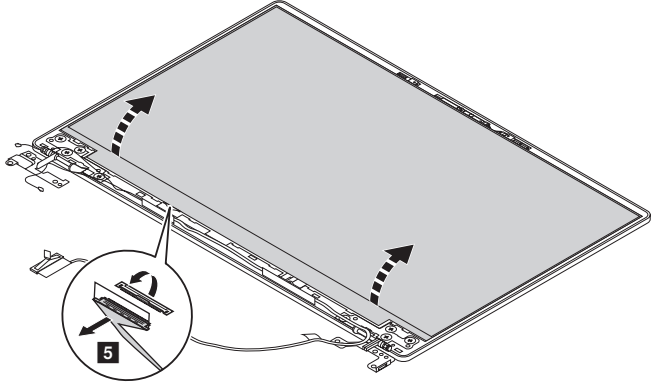
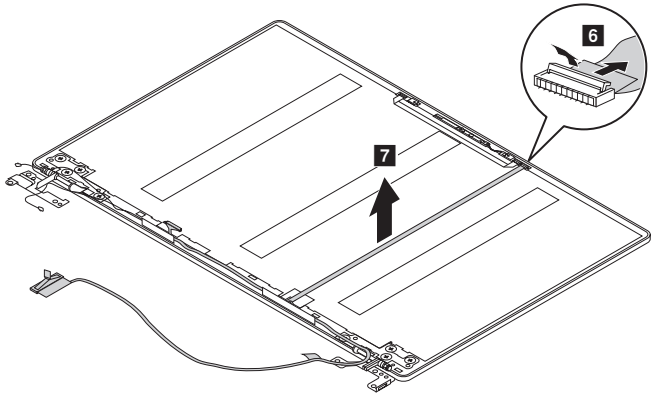


Figure 12. Removal steps of LCD unit (continued)

Lift the LCD module slightly. Disconnect the connector in the direction shown by arrow **5**. Then remove the LCD module.



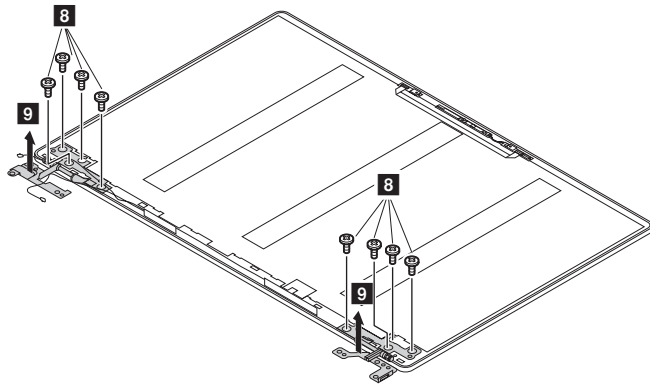
Detach the connector in the direction shown by arrow **6**. Then remove the LCD cable in the direction shown by arrows **7**.



When installing: Make sure that the connector is attached firmly and that you do not pinch the antenna cables when you attach the LCD assembly. Route the LCD cable along the cable guides.

Figure 12. Removal steps of LCD unit (continued)

Remove the screws **8**. Then remove the LCD hinges in the direction shown by arrows **9**.



Step	Screw (quantity)	Color
8	M2.5 x L2.3 mm, Phillips-head(8)	Black

1130 Integrated camera

For access, remove these FRUs in order:

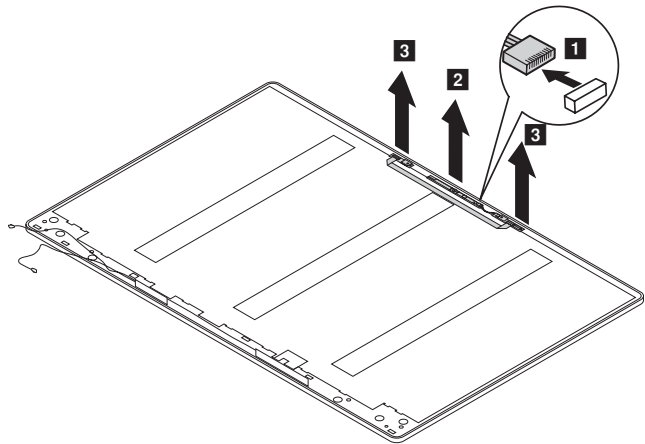
- “1010 Base cover” on page 33
- “1020 Battery pack” on page 35
- “1030 PCI Express Mini Card for wireless LAN” on page 37
- “1040 SSD card” on page 39
- “1050 DIMM” on page 41
- “1060 Hard disk drive” on page 42
- “1070 Speakers” on page 44
- “1080 Fan and heat sink” on page 45
- “1090 IO board and backup battery” on page 48
- “1100 Upper case” on page 50
- “1110 System board” on page 52
- “1120 LCD unit” on page 54

Figure 13. Removal steps of integrated camera

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

Detach the camera connector in the direction shown by arrow **1**.

Then remove the integrated camera and microphone boards in the direction shown by arrows **2** and **3**.

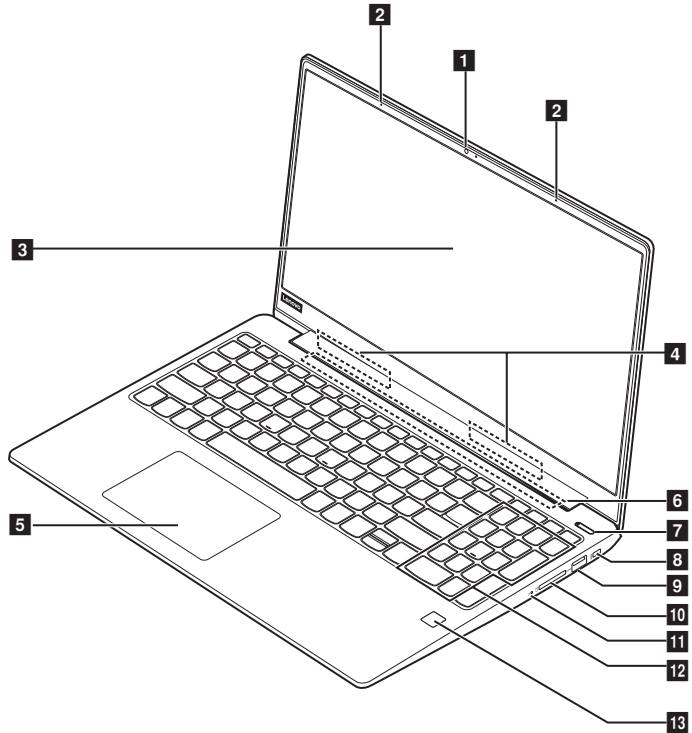


When installing: Stick the integrated camera to the top center of the LCD cover and adjust its placement to make sure the connector is attached firmly.

Locations

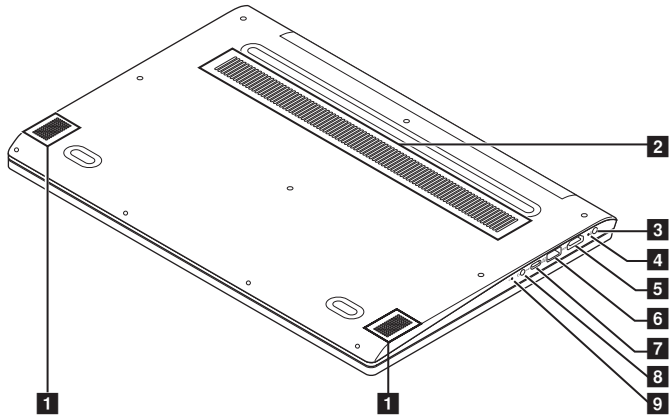
Front view and right-side view

- Integrated camera
- 2 Built-in microphone
- 3 Computer display
- 4 Wireless LAN antennas
- 5 Touch pad
- 6 Ventilation slots
- 7 Power key
- 8 Kensington Mini Security slot
- 9 USB 3.0 port
- 10 Memory card slot
- 11 Novo button
- 12 Numeric keypad
- 13 Fingerprint reader (on select models)



Bottom and Left-side view

- Speakers
- 2 Ventilation slots
- 3 AC power adapter jack
- 4 Charging indicator
- 5 HDMI port
- 6 USB 3.0 port
- 7 Type-C port
- 8 Combo audio jack
- 9 State LED



Parts list

This section presents the following service parts:

- “Overall” on page 62
- “LCD FRUs” on page 70
- “Miscellaneous parts” on page 72
- “AC adapters” on page 72
- “Screws” on page 74

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

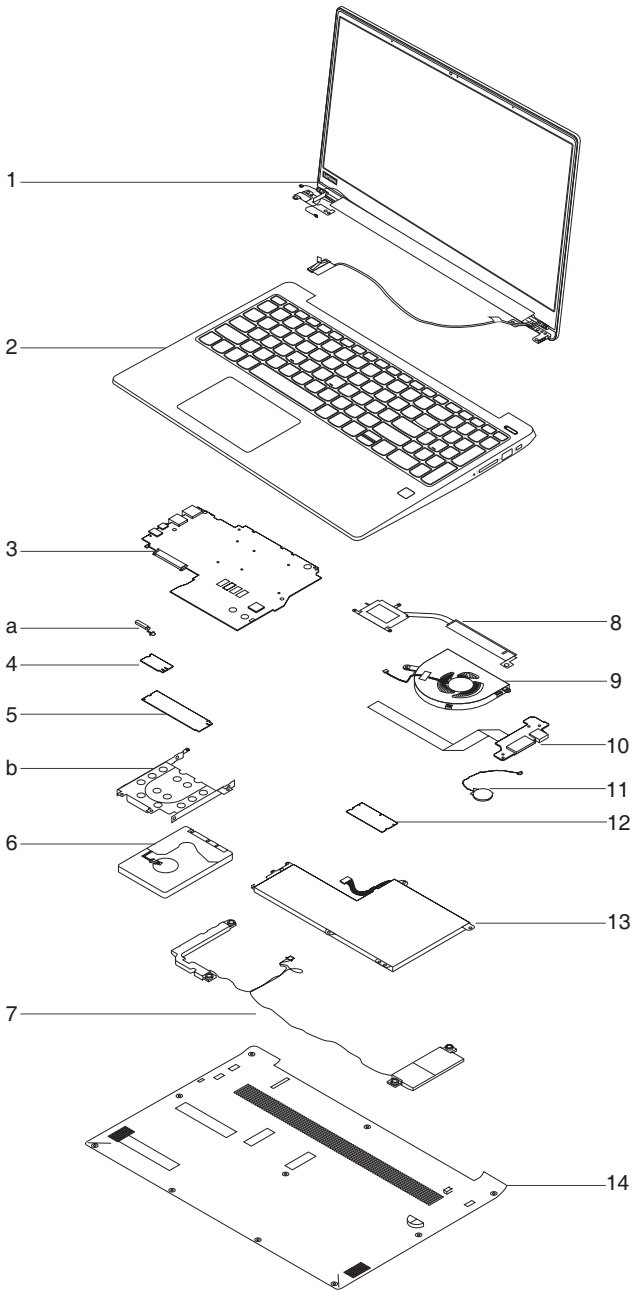


Table 4. Parts list—Overall

No.	FRU	FRU no.	CRU ID.
a-c	See "Miscellaneous parts" on page 72.		
1	LCD unit (see "LCD FRUs" on page 70).		
2	UpperCase 3N 81F5 RPK W/KB NBL NOR	5CB0R41799	N
2	Upper Case 3N 81F5 PG W/KB BL THA	5CB0R07285	
2	UpperCase 3N 81F5 MN-BU W/KB BL SW	5CB0R07357	
2	UpperCase 3N 81F5 RPK W/KB BL FRAR	5CB0R41791	
2	Upper Case 3N 81F5 BW W/KB NBL LSP	5CB0R07205	
2	Upper Case 3N 81F5 BW W/KB NBL UK	5CB0R07238	
2	UpperCase 3N81F5 MN-BU W/KB BL SLE	5CB0R07193	
2	Upper Case 3N 81F5 RPK W/KB NBL UK	5CB0R41810	
2	UpperCase 3N 81F5 PG W/KB NBL FRAR	5CB0R07258	
2	Upper Case 3N 81F5 PG W/KB NBL ITA	5CB0R07296	
2	Upper Case 3N 81F5 RPK W/KB NBL RU	5CB0R41809	
2	Upper Case 3N 81F5 PG W/KB NBL UK	5CB0R07283	
2	UpperCase 3N81F5 MN-BU W/KB BL ARA	5CB0R07263	
2	UpperCase 3N81F5 MN-BU W/KB BL HEB	5CB0R07356	
2	Upper Case 3N 81F5 PG W/KB NBL ID	5CB0R07308	
2	Upper Case 3N 81F5 PG W/KB BL HUN	5CB0R07254	
2	Upper Case 3N 81F5 RPK W/KB NBL GE	5CB0R41793	
2	UpperCase 3N 81F5 RPK W/KB NBL TUR	5CB0R41800	
2	UpperCase 3N81F5 MN-BU W/KB BL GRE	5CB0R07196	
2	Upper Case 3N 81F5 RPK W/KB BL FR	5CB0R41792	
2	Upper Case 3N 81F5 PG W/KB NBL JAP	5CB0R07387	
2	UpperCase3N81F5 MN-BU W/KB NBL UKR	5CB0R07397	
2	Upper Case 3N 81F5 PG W/KB NBL TC	5CB0R07381	
2	Upper Case 3N 81F5 PG W/KB NBL SLE	5CB0R07223	
2	Upper Case 3N 81F5 PG W/KB NBL BRA	5CB0R07204	
2	Upper Case 3N 81F5 PG W/KB BL HEB	5CB0R07385	
2	Upper Case 3N 81F5 PG W/KB NBL KOR	5CB0R07431	
2	Upper Case 3N 81F5 BW W/KB BL BUL	5CB0R07293	
2	Upper Case 3N 81F5 PG W/KB NBL ILD	5CB0R07272	
2	UpperCase3N81F5 MN-BU W/KB NBL BEL	5CB0R07367	
2	UpperCase3N81F5MN-BU W/KB NBL FRAR	5CB0R07396	
2	Upper Case 3N 81F5 BW W/KB BL KOR	5CB0R07317	
2	Upper Case 3N 81F5 BW W/KB BL TC	5CB0R07358	
2	Up Case 3N 81F5 BW W/KB BL CZH-SLK	5CB0R07307	
2	UpperCase 3N 81F5 RPK W/KB NBL LSP	5CB0R41785	
2	Upper Case 3N 81F5 RPK W/KB BL HUN	5CB0R41784	
2	Upper Case 3N 81F5 BW W/KB BL BEL	5CB0R07251	
2	UpperCase 3N 81F5 MN-BU W/KB BL RU	5CB0R07269	
2	UpperCase 3N81F5 MN-BU W/KB NBL RU	5CB0R07314	
2	Upper Case 3N 81F5 BW W/KB BL SPA	5CB0R07321	
2	Upper Case 3N 81F5 BW W/KB BL TUR	5CB0R07369	
2	Upper Case 3N 81F5 BW W/KB NBLUKR	5CB0R07246	
2	UpperCase 3N 81F5 RPK W/KB BL BEL	5CB0R42642	
2	UpperCase 3N 81F5 MN-BU W/KB BL TC	5CB0R07433	
2	UpperCase 3N81F5 MN-BU W/KB NBL TC	5CB0R07428	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	UpperCase 3N81F5 MN-BU W/KB BL UKR	5CB0R07194	N
2	UpperCase3N81F5 MN-BU W/KB NBL THA	5CB0R07348	
2	UpperCase3N81F5 MN-BU W/KB NBL SLE	5CB0R07392	
2	UpperCase3N81F5 MN-BU W/KB NBL TUR	5CB0R07298	
2	UpperCase3N81F5 MN-BU W/KB BL FRAR	5CB0R07247	
2	UpperCase3N81F5 MN-BU W/KB NBL JAP	5CB0R07315	
2	UpperCase 3N 81F5 RPK W/KB NBL SLE	5CB0R41768	
2	Upper Case 3N 81F5 BW W/KB BL USA	5CB0R07375	
2	UpperCase3N81F5 MN-BU W/KB NBL ILD	5CB0R07407	
2	Upper Case 3N 81F5 BW W/KB NBL HUN	5CB0R07424	
2	UpperCase 3N 81F5 RPK W/KB NBL KOR	5CB0R41757	
2	Upper Case 3N 81F5 BW W/KB BL US	5CB0R07400	
2	Upper Case 3N 81F5 BW W/KB BL GE	5CB0R07311	
2	Upper Case 3N 81F5 RPK W/KB NBL SW	5CB0R41776	
2	Upper Case 3N 81F5 BW W/KB BL ARA	5CB0R07334	
2	UpperCase 3N 81F5 RPK W/KB BL CFEN	5CB0R41756	
2	Upper Case 3N 81F5 BW W/KB BL CFEN	5CB0R07286	
2	Upper Case 3N 81F5 BW W/KB NBL HEB	5CB0R07328	
2	UpperCase 3N81F5 MN-BU W/KB BL BRA	5CB0R07415	
2	Upper Case 3N 81F5 RPK W/KB NBL ID	5CB0R41770	
2	Upper Case 3N 81F5 BW W/KB NBL US	5CB0R07340	
2	Upper Case 3N 81F5 BW W/KB BL GRE	5CB0R07278	
2	Upper Case 3N 81F5 BW W/KB NBL GE	5CB0R07265	
2	Upper Case 3N 81F5 BW W/KB NBL ARA	5CB0R07427	
2	Upper Case 3N 81F5 BW W/KB BL LSP	5CB0R07233	
2	Upper Case 3N 81F5 RPK W/KB BL GRE	5CB0R41769	
2	UpperCase 3N 81F5 BW W/KB NBL CFEN	5CB0R07343	
2	Upper Case 3N 81F5 BW W/KB NBL ITA	5CB0R07237	
2	Upper Case 3N 81F5 BW W/KB BL ILD	5CB0R07395	
2	Upper Case 3N 81F5 PG W/KB NBL US	5CB0R07203	
2	Upper Case 3N 81F5 BW W/KB NBL KOR	5CB0R07211	
2	UpperCase3N 81F5 RPK W/KB NBL FRAR	5CB0R41760	
2	Upper Case 3N 81F5 RPK W/KB BL SW	5CB0R41759	
2	Upper Case 3N 81F5 PG W/KB BL USA	5CB0R07410	
2	Upper Case 3N 81F5 PG W/KB NBL UKR	5CB0R07422	
2	UpperCase 3N 81F5 RPK W/KB NBL THA	5CB0R41815	
2	UpperCase 3N81F5 MN-BU W/KB NBL SW	5CB0R07391	
2	Upper Case 3N 81F5 PG W/KB NBL SPA	5CB0R07409	
2	Upper Case 3N 81F5 PG W/KB NBL TUR	5CB0R07282	
2	Upper Case 3N 81F5 PG W/KB NBL GRE	5CB0R07195	
2	Upper Case 3N 81F5 PG W/KB NBL USI	5CB0R07405	
2	Upper Case 3N 81F5 PG W/KB BL BUL	5CB0R07406	
2	Upper Case 3N 81F5 BW W/KB BL POR	5CB0R07271	
2	Up Case 3N 81F5 PG W/KB BL CZH-SLK	5CB0R07350	
2	Upper Case 3N 81F5 RPK W/KB BL RU	5CB0R41782	
2	UpperCase 3N81F5 MN-BU W/KB BL TUR	5CB0R07207	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	UpperCase 3N81F5RPK W/KB NBL CZ-SK	5CB0R41804	N
2	Upper Case 3N 81F5 BW W/KB BL THA	5CB0R07322	
2	UpperCase 3N81F5 MN-BU W/KB BL THA	5CB0R07318	
2	Upper Case 3N 81F5 PG W/KB NBL SW	5CB0R07248	
2	Upper Case 3N 81F5 RPK W/KB BL THA	5CB0R41803	
2	UpperCase 3N 81F5 RPK W/KB NBL ILD	5CB0R41781	
2	Upper Case 3N 81F5 BW W/KB NBL USI	5CB0R07355	
2	Upper Case 3N 81F5 PG W/KB BL POR	5CB0R07264	
2	Upper Case 3N 81F5 PG W/KB NBL FR	5CB0R07371	
2	Upper Case 3N 81F5 PG W/KB NBL RU	5CB0R07354	
2	Upper Case 3N 81F5 BW W/KB NBL SW	5CB0R07342	
2	Upper Case 3N 81F5 PG W/KB BL US	5CB0R07326	
2	Upper Case 3N 81F5 PG W/KB BL GE	5CB0R07359	
2	Upper Case 3N 81F5 PG W/KB BL ARA	5CB0R07330	
2	Upper Case 3N 81F5 RPK W/KB BL BRA	5CB0R41783	
2	Upper Case 3N 81F5 RPK W/KB BL LSP	5CB0R41805	
2	UpperCase 3N81F5 MN-BU W/KB BL NOR	5CB0R07404	
2	Upper Case 3N 81F5 PG W/KB BL CFEN	5CB0R07212	
2	Upper Case 3N 81F5 RPK W/KB BL NOR	5CB0R41767	
2	Upper Case 3N 81F5 BW W/KB NBL JAP	5CB0R07429	
2	Upper Case 3N 81F5 RPK W/KB BL POR	5CB0R41774	
2	Upper Case 3N 81F5 RPK W/KB BL SPA	5CB0R41766	
2	UpperCase 3N81F5 MN-BU W/KB BL HUN	5CB0R07378	
2	Upper Case 3N 81F5 BW W/KB NBL BRA	5CB0R07270	
2	Upper Case 3N 81F5 BW W/KB NBL SPA	5CB0R07201	
2	Upper Case 3N 81F5 BW W/KB BL ID	5CB0R07252	
2	Upper Case 3N 81F5 BW W/KB NBL TUR	5CB0R07304	
2	Upper Case 3N 81F5 BW W/KB BL FRAR	5CB0R07398	
2	Upper Case 3N 81F5 PG W/KB BL LSP	5CB0R07215	
2	UpperCase3N81F5 MN-BU W/KB NBL GRE	5CB0R07229	
2	Upper Case 3N 81F5 PG W/KB BL BEL	5CB0R07324	
2	UpperCase 3N81F5 MN-BU W/KB BL JAP	5CB0R07214	
2	Upper Case 3N 81F5 RPK W/KB BL TC	5CB0R41775	
2	Upper Case 3N 81F5 BW W/KB BL ITA	5CB0R07310	
2	Upper Case 3N 81F5 BW W/KB BL UK	5CB0R07360	
2	Upper Case 3N 81F5 PG W/KB BL NOR	5CB0R07267	
2	Upper Case 3N 81F5 BW W/KB NBL TC	5CB0R07256	
2	Upper Case 3N 81F5 BW W/KB BL SLE	5CB0R07300	
2	UpperCase 3N81F5 MN-BU W/KB BL POR	5CB0R07380	
2	UpperCase3N81F5 MN-BU W/KB NBL HEB	5CB0R07399	
2	Upper Case 3N 81F5 BW W/KB BL HUN	5CB0R07423	
2	Upper Case 3N 81F5 PG W/KB NBL THA	5CB0R07197	
2	Upper Case 3N 81F5 PG W/KB BL ID	5CB0R07224	
2	Upper Case 3N 81F5 PG W/KB NBL POR	5CB0R07244	
2	Upper Case 3N 81F5 PG W/KB BL FRAR	5CB0R07365	
2	Upper Case 3N 81F5 BW W/KB BL HEB	5CB0R07320	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	Upper Case 3N 81F5 RPK W/KB BL SLE	5CB0R41771	N
2	UpperCase 3N 81F5 MN-BU W/KB BL UK	5CB0R07240	
2	UpperCase 3N 81F5 RPK W/KB NBL HEB	5CB0R41780	
2	UpperCase 3N81F5 MN-BU W/KB BL USA	5CB0R07219	
2	UpperCase 3N 81F5 MN-BU W/KB BL FR	5CB0R07414	
2	Upper Case 3N 81F5 RPK W/KB NBL FR	5CB0R41779	
2	UpperCase 3N81F5 MN-BU W/KB NBL UK	5CB0R07198	
2	UpperCase3N81F5 MN-BU W/KB NBL LSP	5CB0R07366	
2	Upper Case 3N 81F5 PG W/KB BL JAP	5CB0R07257	
2	Upper Case 3N 81GB PK W/KB NBL US	5CB0R07510	
2	Upper Case 3N 81F5 RPK W/KB BL USA	5CB0R41773	
2	Upper Case 3N 81F5 PG W/KB NBL BUL	5CB0R07250	
2	Upper Case 3N 81F5 PG W/KB NBL HUN	5CB0R07325	
2	Upper Case 3N 81F5 BW W/KB BL BRA	5CB0R07228	
2	Upper Case 3N 81F5 RPK W/KB BL BUL	5CB0R41772	
2	Upper Case 3N 81F5 BW W/KB BL JAP	5CB0R07335	
2	Upper Case 3N 81F5 PG W/KB BL BRA	5CB0R07266	
2	UpperCase3N81F5 MN-BU W/KB NBL POR	5CB0R07390	
2	UpperCase 3N 81F5RPK W/KB NBL CFEN	5CB0R41765	
2	UpperCase 3N 81F5 RPK W/KB NBL JAP	5CB0R41814	
2	Upper Case 3N 81F5 BW W/KB NBL NOR	5CB0R07234	
2	UpperCase3N81F5MN-BU W/KB NBL CZ-SK	5CB0R07416	
2	Upper Case 3N 81F5 BW W/KB NBL BEL	5CB0R07306	
2	Upper Case 3N 81F5 PG W/KB BL UK	5CB0R07277	
2	Upper Case 3N 81F5 RPK W/KB BL ID	5CB0R41764	
2	UpperCase 3N 81F5PG W/KB NBL CZ-SK	5CB0R07329	
2	UpperCase3N81F5MN-BU W/KB BL CZ-SK	5CB0R07393	
2	Upper Case 3N 81F5 PG W/KB NBL HEB	5CB0R07372	
2	UpperCase3N81F5 MN-BU W/KB NBL USI	5CB0R07432	
2	UpCase 3N 81F5 RPK W/KB BL CZH-SLK	5CB0R41763	
2	Upper Case 3N 81GB PK W/KB BL US	5CB0R07514	
2	UpperCase 3N81F5 MN-BU W/KB BL USI	5CB0R07336	
2	Upper Case 3N 81F5 RPK W/KB BL KOR	5CB0R41798	
2	UpperCase 3N 81F5 RPK W/KB NBL POR	5CB0R41797	
2	Upper Case 3N 81F5 PG W/KB NBL GE	5CB0R07388	
2	UpperCase 3N 81F5 RPK W/KB NBL ITA	5CB0R41796	
2	UpperCase 3N 81F5 RPK W/KB NBL USI	5CB0R41789	
2	Upper Case 3N 81F5 PG W/KB BL SLE	5CB0R07230	
2	Upper Case 3N 81F5 PG W/KB BL ILD	5CB0R07379	
2	Upper Case 3N 81F5 BW W/KB BL USI	5CB0R07227	
2	Upper Case 3N 81F5 PG W/KB BL KOR	5CB0R07327	
2	Upper Case 3N 81F5 PG W/KB BL TC	5CB0R07363	
2	UpperCase3N81F5 MN-BU W/KB NBL BUL	5CB0R07232	
2	Upper Case 3N 81F5 PG W/KB BL ITA	5CB0R07421	
2	UpperCase 3N 81F5 RPK W/KB NBL ARA	5CB0R41807	
2	UpperCase 3N81F5 MN-BU W/KB NBL GE	5CB0R07349	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	Upper Case 3N 81F5 RPK W/KB BL TUR	5CB0R41806	N
2	Upper Case 3N 81F5 BW W/KB BL SW	5CB0R07202	
2	Upper Case 3N 81F5 RPK W/KB BL UKR	5CB0R41790	
2	Upper Case 3N 81F5 BW W/KB BL FR	5CB0R07331	
2	UpperCase 3N81F5 MN-BU W/KB NBL FR	5CB0R07373	
2	Upper Case 3N 81F5 BW W/KB BL RU	5CB0R07319	
2	Upper Case 3N 81F5 BW W/KB NBL BUL	5CB0R07274	
2	UpperCase 3N81F5 MN-BU W/KB BL LSP	5CB0R07383	
2	Upper Case 3N 81F5 RPK W/KB BL JAP	5CB0R41808	
2	UpperCase 3N 81F5BW W/KB NBL CH-SK	5CB0R07413	
2	UpperCase3N81F5 MN-BU W/KB NBL HUN	5CB0R07294	
2	Upper Case 3N 81F5 RPK W/KB BL GE	5CB0R41762	
2	UpperCase 3N 81F5 RPK W/KB NBL SPA	5CB0R41761	
2	Upper Case 3N 81F5 RPK W/KB BL ARA	5CB0R41778	
2	UpperCase 3N 81F5 RPK W/KB NBL BUL	5CB0R41758	
2	Upper Case 3N 81F5 RPK W/KB BL ILD	5CB0R41777	
2	UpperCase 3N 81F5 PG W/KB NBL CFEN	5CB0R07370	
2	Upper Case 3N 81F5 PG W/KB BL UKR	5CB0R07236	
2	Upper Case 3N 81F5 PG W/KB BL SPA	5CB0R07312	
2	Upper Case 3N 81F5 PG W/KB NBL LSP	5CB0R07288	
2	UpperCase3N81F5 MN-BU W/KB NBL NOR	5CB0R07280	
2	Upper Case 3N 81F5 PG W/KB BL GRE	5CB0R07323	
2	UpperCase3N81F5 MN-BU W/KB NBL KOR	5CB0R07313	
2	Upper Case 3N 81F5 RPK W/KB BL UK	5CB0R41813	
2	UpperCase3N81F5MN-BU W/KB NBL CFEN	5CB0R07303	
2	Upper Case 3N 81F5 PG W/KB NBL BEL	5CB0R07353	
2	Upper Case 3N 81F5 RPK W/KB NBL TC	5CB0R41802	
2	UpperCase 3N 81F5 RPK W/KB NBL GRE	5CB0R41812	
2	Upper Case 3N 81F5 BW W/KB NBL THA	5CB0R07362	
2	UpperCase 3N81F5 MN-BU W/KB BL BEL	5CB0R07217	
2	Upper Case 3N 81F5 RPK W/KB BL USI	5CB0R41801	
2	Upper Case 3N 81F5 PG W/KB NBL NOR	5CB0R07345	
2	Upper Case 3N 81F5 BW W/KB NBL POR	5CB0R07281	
2	UpperCase 3N81F5 MN-BU W/KB BL ILD	5CB0R07401	
2	Upper Case 3N 81F5 BW W/KB NBL GRE	5CB0R07253	
2	Upper Case 3N 81F5 RPK W/KB BL HEB	5CB0R41811	
2	Upper Case 3N 81F5 BW W/KB NBL FR	5CB0R07430	
2	Upper Case 3N 81F5 BW W/KB BL UKR	5CB0R07425	
2	Upper Case 3N 81F5 PG W/KB NBL ARA	5CB0R07377	
2	UpperCase 3N 81F5 RPK W/KB NBL BRA	5CB0R41795	
2	Upper Case 3N 81F5 BW W/KB NBL RU	5CB0R07418	
2	UpperCase 3N 81F5 RPK W/KB NBL HUN	5CB0R41794	
2	Upper Case 3N 81F5 PG W/KB BL SW	5CB0R07346	
2	Upper Case 3N 81F5 PG W/KB BL USI	5CB0R07426	
2	Upper Case 3N 81F5 BW W/KB BL NOR	5CB0R07332	
2	UpperCase 3N81F5 MN-BU W/KB NBL US	5CB0R07316	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
2	UpperCase 3N 81F5 RPK W/KB NBL BEL	5CB0R41788	N
2	Upper Case 3N 81F5 BW W/KB NBL ILD	5CB0R07351	
2	Upper Case 3N 81F5 BW W/KB NBL SLE	5CB0R07361	
2	Upper Case 3N 81F5 RPK W/KB BL ITA	5CB0R41787	
2	UpperCase 3N 81F5 BW W/KB NBL FRAR	5CB0R07284	
2	UpperCase 3N 81F5 RPK W/KB NBL UKR	5CB0R41786	
2	Upper Case 3N 81F5 PG W/KB BL FR	5CB0R07376	
2	UpperCase 3N81F5 MN-BU W/KB BL SPA	5CB0R07344	
2	Upper Case 3N 81F5 PG W/KB BL TUR	5CB0R07338	
2	UpperCase3N81F5 MN-BU W/KB NBL BRA	5CB0R07200	
2	Upper Case 3N 81F5 PG W/KB BL RU	5CB0R07382	
2	UpperCase 3N81F5 MN-BU W/KB BL ITA	5CB0R07341	
2	Upper Case 3N 81F5 BW W/KB NBL ID	5CB0R07241	
2	UpperCase3N81F5 MN-BU W/KB NBL ARA	5CB0R07337	
2	UpperCase 3N81F5 MN-BU W/KB BL KOR	5CB0R07225	
2	UpperCase3N81F5 MN-BU W/KB NBL SPA	5CB0R07218	
2	UpperCase 3N81F5 MN-BU W/KB NBL ID	5CB0R07242	
2	UpperCase 3N 81F5 MN-BU W/KB BL ID	5CB0R07210	
2	UpperCase 3N 81F5 MN-BU W/KB BL GE	5CB0R07290	
2	UpperCase 3N81F5 MN-BU W/KB BL BUL	5CB0R07291	
2	UpperCase3N81F5 MN-BU W/KB NBL ITA	5CB0R07206	
2	UpperCase 3N 81F5 MN-BU W/KB BL US	5CB0R07192	
2	UpperCase3N81F5 MN-BU W/KB BL CFEN	5CB0R07191	
3	MB 3N81FB R32200U NOK UMA 4G	5B20R27410	
3	MB 3N81FB R32200U WIN UMA 4G	5B20R27415	
3	MB 3N81FB R32200U NOK R540 2G4G	5B20R27414	
3	MB 3N81FB R32200U WIN R540 2G4G	5B20R27419	
3	MB 3N81FB R52500U NOK UMA 4G	5B20R27421	
3	MB 3N81FB R52500U WIN UMA 4G	5B20R27416	
3	MB 3N81FB R52500U NOK R540 2G4G	5B20R27420	
3	MB 3N81FB R52500U WIN R540 2G4G	5B20R27418	
3	MB 3N81FB R72700U NOK UMA 4G	5B20R27411	
3	MB 3N81FB R72700U WIN UMA 4G	5B20R27422	
3	MB 3N81FB R72700U NOK R540 2G4G	5B20R27412	
3	MB 3N81FB R72700U WIN R540 2G4G	5B20R27413	
4	Wireless,CMB,LTN,NFA435A	01AX709	
4	Wireless,CMB,CBT,8821CE	01AX710	
5	SS MZVLW128HEGR 128G PCIE SSD	5SD0L73445	
5	LIT CA1 128GB M.2 2280 PCIe SSD	5SD0N04881	
5	Storage SSD XG5 256G PCIe TSB	01FR517	
5	SS MZVLW256HEHP 256G PCIE SSD	5SD0L73444	
5	Storage SSD SC313 128G Hynix	01FR514	
5	Storage SSD PM871b 128G SAM	01FR502	
5	Storage SSD SC313 256G Hynix	01FR515	
5	Storage SSD PM871b 256G SAM	01FR503	
5	Storage SSD PC401 256G M.2 Hynix	01FR537	

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
6	ST Rosewood2D 7mm 2TB HDD	5H20M37521	N
6	Storage,HDD,1T,5400,7mm,SATA,WD	01FR402	
7	Speaker 3N 81F5 L+R 2Wx2	5SB0R07221	
8	Heatsink 3N 81F5 UMA	5H40R07287	
8	Heatsink 3N 81F5 DIS	5H40R07209	
9	Fan 3N 81F4	5F10R07535	
10	I/O Board 3N 81FB W/Cable	5C50R27417	
11	CMOS BATTERY 3N 81A4 HDD	5B10P23836	
12	4GB DDR4 2666 SOIMM,Hynix	01AG823	
12	4GB DDR4 2666 SODIMM,Ramaxel	01AG829	
12	4GB DDR4 2666 SoDIMM,Micron	01AG831	
12	4GB DDR4 2666 SoDIMM,Samsung	01AG836	
13	SP/C L14M2P21 7.4V30Wh2cell bty	5B10Q39203	
13	LG L14L2P21 7.4V30Wh2cell bty	5B10Q39206	
13	SP/A L15M3PB0 11.25V52.5Wh3cell	5B10Q39202	
13	LG L15L3PB0 11.4V52.5Wh3cell bty	5B10Q39201	
13	SP/A L14M2P21 7.4V30Wh2cell bty	5B10Q39204	
13	CP/C L15C3PB1 11.4V52.5Wh3cell	5B10Q39205	
14	Lower Case 3N 81F5 BW	5CB0R07261	
14	Lower Case 3N 81GB LRPK	5CB0R07513	
14	Lower Case 3N 81F5 MN-BU	5CB0R07260	
14	Lower Case 3N 81F5 PG	5CB0R07259	

LCD FRUs

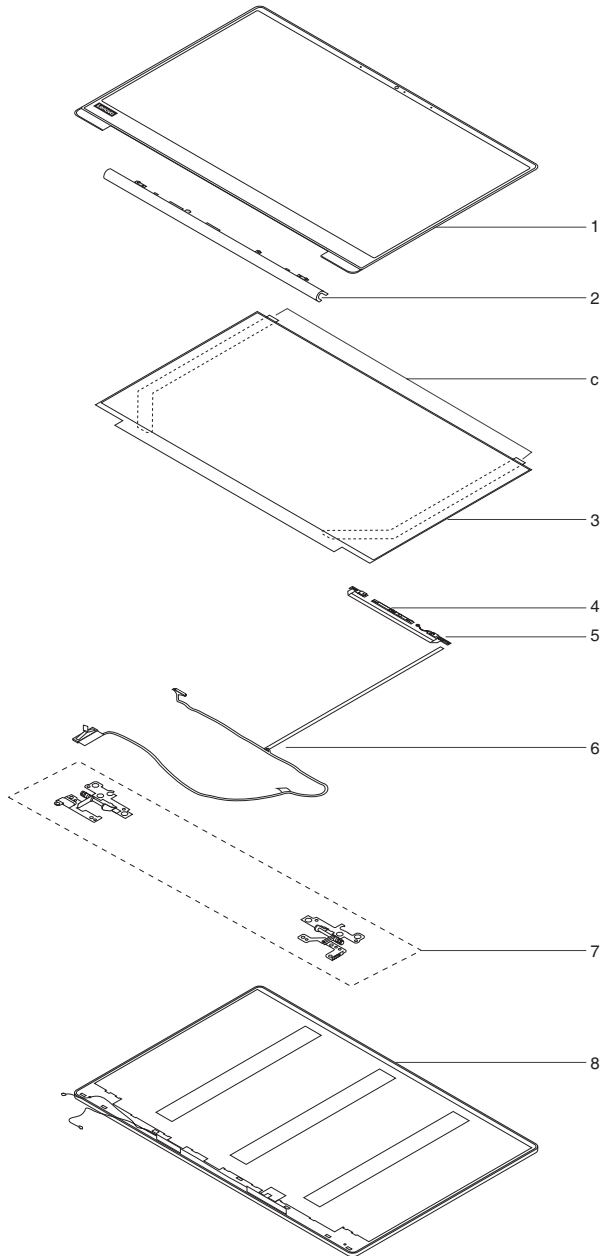


Table 5. Parts list—LCD FRUs

No.	FRU	FRU no.	CRU ID.
1	LCD Bezel 3N 81F5 BLK	5B30R07420	N
2	Hinge Cover 3N 81GB LRPK	5CB0R07511	
2	Hinge Cover 3N 81F5 PG	5CB0R07199	
2	Hinge Cover 3N 81F5 MN-BU	5CB0R07364	
2	Hinge Cover 3N 81F5 BW	5CB0R07275	
3	AU B156HAN02.1 7A FHDI AG S NB	5D10R04645	
3	IN N156BGA-EA3 C2 HDT AG S NB	5D10P54289	
3	BO NV156FHM-N48 FHDI AG S NB	5D10M42882	
3	IN N156HCA-EAB C1 FHDI AG S NB	5D10M42881	
4	Camera,720P,Front,Slim,WTB,Chy	01HW045	
4	Camera,720P,Front,Slim,WTB,Azw	01HW046	
4	Camera,720P,Front,Slim,WTB,AVC	01HW047	
4	Camera,720P,Front,Slim,WTB,Bsn	01HW044	
5	Dual Mic Board 3N 81F5 L+R W/cable	5C50R34894	
6	EDP Cable 3N 81F5	5C10R07368	
7	Hinge 3N 81F5 L+R	5H50R07243	
8	LCD Cover 3N 81F5 W/ANT MN-BU	5CB0R07434	
8	LCD Cover 3N 81F5 W/ANT BW	5CB0R07216	
8	LCD Cover 3N 81F5 W/ANT PG	5CB0R07309	
8	LCD Cover 3N 81GB LRPK	5CB0R07512	

Miscellaneous parts

Table 6. Parts list—Miscellaneous parts

FRU	FRU no.	CRU ID.
System miscellaneous parts:		
• (a)DC-IN Cable 3N 81F4	5C10R07521	N
• (b)HDD Bracket 3N 81F4	5B40R07643	
• (c)LCD Removable Tape 3N 81F5	5T10R07408	
Note: Letters in parentheses are references to the exploded view in “Overall” on page 62 and “LCD FRUs” on page 70.		

AC adapters

Table 7. Parts list—AC adapters

FRU	P/N	CRU ID.
PA-1450-55LR 20V2.25A COO	01FR122	*
ADL45WCK 20V2.25A COO	01FR130	
ADP-45DW J 20V2.25A COO	01FR110	
PA-1450-55LK 20V2.25A COO	01FR036	
ADL45WCE 20V2.25A COO	01FR131	
PA-1450-55LI 20V2.25A COO	01FR121	
ADLX65CLGR2A 20V3.25A COO	01FR148	
ADP-45DW G 20V2.25A COO	01FR114	
ADLX65CCGR2A 20V3.25A COO	01FR157	
ADLX65CCGK2A 20V3.25A COO	01FR155	
ADLX65CDGR2A 20V3.25A COO	01FR140	
ADLX65CDGK2A 20V3.25A COO	01FR138	
ADP-45DW H 20V2.25A COO	01FR113	
ADLX65CDGG2A 20V3.25A COO	01FR136	
ADLX65CCGG2A 20V3.25A COO	01FR153	
ADLX65CLGG2A 20V3.25A COO	01FR145	
ADLX65CLGK2A 20V3.25A COO	01FR037	
PA-1450-55LZ 20V2.25A COO	01FR125	
ADLX65NCC3A 20V3.25A RCOO	01FR051	
ADL45WCH 20V2.25A COO	01FR134	
ADLX65CLGE2A 20V3.25A COO	01FR150	
ADLX65CDGE2A 20V3.25A COO	01FR142	
ADLX65CCGE2A 20V3.25A COO	01FR159	
ADL45WCF 20V2.25A COO	01FR132	
ADP-45DW K 20V2.25A COO	01FR117	
ADLX65CCGU2A 20V3.25A COO	01FR154	
PA-1450-55LS 20V2.25A COO	01FR123	
ADLX65CDGU2A 20V3.25A COO	01FR137	
ADLX65CCGC2A 20V3.25A COO	01FR152	
ADLX65CLGU2A 20V3.25A COO	01FR146	
ADP-45DW E 20V2.25A COO	01FR115	
ADL45WCC 20V2.25A COO	01FR128	

Table 7. Parts list—AC adapters (continued)

FRU	P/N	CRU ID.
ADP-45DW B 20V2.25A COO	01FR111	
PA-1450-55LL 20V2.25A COO	01FR120	
ADL45WCA 20V2.25A COO	01FR126	
ADLX65CCGB2A 20V3.25A COO	01FR160	
ADLX65CCGI2A 20V3.25A COO	01FR156	
ADLX65CLGI2A 20V3.25A COO	01FR147	
ADLX65CLGB2A 20V3.25A COO	01FR151	
PA-1450-55LN 20V2.25A COO	01FR118	
ADLX65CLGC2A 20V3.25A COO	01FR144	
ADLX65CDGB2A 20V3.25A COO	01FR143	
ADLX65CDGC2A 20V3.25A COO	01FR135	
ADP-45DW A 20V2.25A COO	01FR109	
ADLX65NLC3A 20V3.25A R	5A10J40449	
ADLX65CDGI2A 20V3.25A COO	01FR139	
ADL45WCD 20V2.25A COO	01FR129	
ADLX65CCGA2A 20V3.25A COO	01FR158	
ADL45WCG 20V2.25A COO	01FR133	
ADLX65CDGA2A 20V3.25A COO	01FR141	
ADP-45DW C 20V2.25A COO	01FR116	
ADP-45DW D 20V2.25A COO	01FR112	
ADLX65CLGA2A 20V3.25A COO	01FR149	
PA-1450-55LU 20V2.25A COO	01FR124	
PA-1450-55LG 20V2.25A COO	01FR119	
ADL45WCB 20V2.25A COO	01FR127	*
Fru, LINECORD,TW,1M,3P,NON-LH	01YW107	
TW,1M,3P,NON-LH,LTK	00HM693	
lux 0041+H03VV-F 0.75/3C+0011 1m cord	145500012	
lux 0014+SPT-2 60 □ 18/3C+0016 1m cord	145500002	
lux 0018(E)+VCTF 0.75/3C+0021 1m cord	145500005	
lux 0014+H03VV-F 0.75/3C+0011	5L60J33143	
lux 0034+H03VV-F 0.75/3C+0011 1m cord	145500011	
lux 0044+H03VV-F 0.75/3C+0011 1m cord	145500010	
lux 0046+IS694 0.75/3C+0011 1m cord	145500004	
lux 0029+H03VV-F 0.75/3C+0011 1m cord	145500009	
Fru, LINECORD,TW,1M,3P,NON-LH	01YW103	
lux 0033+H03VV-F 0.75/3C+0011 1m cord	145500008	
lux 0031+H03VV-F 0.75/3C+0011 1m cord	145500000	
lux 0033+H03VV-F 0.75/3C+0011 1m cord	145500001	
Fru, LINECORD,TW,1M,3P,NON-LH	01YW105	
lux 0027+H03VV-F 0.75/3C+0011 1m cord	145500013	
lux 0038+H03VV-F 0.75/3C+0011 1m cord	145500006	
lux0036+RVV 300/300 0.75/3C+0002 1m cord	145500003	
lux 0040+H03VV-F 0.75/3C+0011 1m cord	145500015	
LINETEK LS15+H03VV-F+PE-364 1m cord	145000586	
VOLEX CH10S3+H03VV-F+VAC5S 1m cord	145000527	
VOLEX VAC5S+VCTF+M755 1m cord	145000530	

Table 7. Parts list—AC adapters (continued)

FRU	P/N	CRU ID.
Longwell LP-61L+H03VV-F+LS-18 1m cord	145000561	*
VOLEX AU10S3+H03VV-F+VAC5S 1m cord	145000532	
LINETEK LS15+H03VV-F+PE-336 1m cord	145000591	
VOLEX GB10S3+RVV 300/500+VAC5S 1m cord	145000538	
Longwell LP-41+H03VV-F+LS-18 1m cord	145000563	
LINETEK LP-34+H03VV-F + LS15 1m cord	145000585	
Longwell LP-67+BIS+LS-18 1m cord	145000560	
Longwell LSG-31+RVV300/300+LS-18 1m cord	145000568	
Longwell LP-23A+LFC-3R+LS-18 1m cord	145000557	
LINETEK LP-61L+ H03VV-F+LS15 1m cord	145000593	
LINETEK LS15+H05VV-F+LP-E04A 1m cord	145000590	
Longwell LP-46+H03VV-F+LS-18 1m cord	145000564	
VOLEX IT10S3+H03VV-F+VAC5S 1m cord	145000535	
LINETEK LP-30B + SPT-2 + LS15 1m cord	145000594	
LINETEK LS15+H03VV-F+LP-37 1m cord	145000597	
LINETEK LS15+H03VV-F+LP-41 1m cord	145000595	
LINETEK PE-361+ H05VV-F+ LS15 1m cord	145000592	
LINETEK LS15+H03VV-F+LP-23A 1m cord	145000589	
Longwell LP-37+H03VV-F+LS-18 1m cord	145000565	
VOLEX M2511+KETI IEC+VAC5S 1m cord	145000533	
LINETEK LS15 H03VV-F LP26A 1m cord	145000596	
LINETEK PC323+RVV300/300+LS15 1m cord	145000600	
Longwell LP-30B+SPT-2 18AWG+LS-181m cord	145000562	
VOLEX MP5004+H03VV-F+VAC5S 1m cord	145000605	
VOLEX VA2073+H03VV-F+VAC5S 1m cord	145000528	
Longwell LP-54+VCTF+LS-18 1m cord	145000555	
VOLEX SI16S3+H03VV-F+VAC5S 1m cord	145000526	
Longwell LP-34A+H03VV-F+LS-18 1m cord	145000553	
LINETEK LS15+H03VV-F+LP39 1m cord	145000599	
Longwell LP-39+H03VV-F+LS-18 1m cord	145000554	
Longwell LP-24+H03VV-F+LS-18 1m cord	145000567	
Longwell LP-486+KTLH03VV-F+LS-5 1m cord	145000558	
VOLEX M2511+H03VV-F+VAC5S 1m cord	145000525	
Longwell LP-22+H03VV-F+LS-18 1m cord	145000559	
VOLEX MP232+H03VV-F+VAC5S 1m cord	145000524	
LINETEK LS15+VCTF+LP-54 1m cord	145000587	
Volex US15S3+SPT-2 £?VAC5S 1m cord	145000537	

Screws

Table 8. Parts list—screws

FRU	P/N	CRU ID.
Screw Pack 3N 81F5	5S10R07279	N

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