

lenovo

***Lenovo ideapad 500-14ISK/
ideapad 500-15ISK***

***Hardware
Maintenance
Manual***



Notes:

- Before using this information and the product it supports, be sure to read the general information under “Notices” on page 112.
- This manual applies to the following models: Lenovo ideapad 500-14ISK/ideapad 500-15ISK. The illustrations used in this manual are for Lenovo ideapad 500-15ISK unless otherwise stated.

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About this manual

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

Lenovo ideapad 500-14ISK/ideapad 500-15ISK

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 500-14ISK/ideapad 500-15ISK computer:

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

General safety

Follow these rules below to ensure general safety:

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

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

Electrical safety

Observe the following rules when working on electrical equipments.

Important:

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

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

- Find the room emergency power-off (EPO) switch, disconnecting switch or electrical outlet. If an electrical accident occurs, you can then operate the switch or unplug the power cord quickly.
- Do not work alone under hazardous conditions or near the equipment that has hazardous voltages.
- Disconnect all power before:
 - Performing a mechanical inspection
 - Working near power supplies
 - Removing or installing main units
- Before you start to work on the machine, unplug the power cord. If you cannot unplug it, ask the customer to power-off the wall box that supplies power to the machine, and to lock the wall box in the off position.
- If you need to work on a machine that has exposed electrical circuits, observe the following precautions:
 - Ensure that another person, familiar with the power-off controls, is near you.
Attention: Another person must be there to switch off the power, if necessary.
 - Use only one hand when working with powered-on electrical equipment; keep the other hand in your pocket or behind your back.
Attention: An electrical shock can occur only when there is a complete circuit. By observing the above rule, you may prevent a current from passing through your body.
 - When using testers, set the controls correctly and use the approved probe leads and accessories for that tester.
 - Stand on suitable rubber mats (obtained locally, if necessary) to insulate you from grounds such as metal floor strips and machine frames.

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

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

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- 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 Systematterie nur Batterien des Typs verwenden, der in der Ersatzteilliste aufgeführt ist. Der Einsatz falscher Batterien kann zu Entzündung oder Explosion führen.

סוללות המתנה מסוימות מכילות כמות קטנה של ניקל וקדמיום. אין לפרק 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を使用してください。誤ったバッテリーを使用すると、バッテリーが発火したり、爆発したりすることがあります。

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

Safety notice 3**⚠ DANGER**

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

La batterie contient du nickel. Ne la démontez pas, ne l'exposez ni au feu ni à l'eau. Ne la mettez pas en court-circuit. Pour la mettre au rebut, conformez-vous à la réglementation en vigueur. Lorsque vous remplacez la batterie, 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.

מאז הסוללה מכיל כמות קטנה של ניקל וקדמיום. אין לפרק את מאז הסוללה, להשליך אותו לאש או למים או לקצר אותו. יש לסלק את מאז הסוללה הסוללה כנדרש על ידי התקנות החוקיים המקומיים. יש להשתמש רק בסוללה המוביעה ברשימת החלקים המתאימה בזמן החלפת מאז 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 הליטיום עלולה לגרום לשריפה, להתפוצצות או לפגיעת עקשות. אין לטעון אותה מחדש, לנתק את המחבר המפוסב שלה, למרק אותה או לחמם אותה לטמפרטורה העולה על 100 מעלות צלזיוס. אין לשרוף את הסוללה ואין לחשוף את תוכן התא למים. יש לנתק את הסוללה כנדרש במקנות ובחוקים המקומיים. יש להשתמש רק בסוללה המומייעה ברשימת החלקים המתאימים. שימוש בסוללה אחרת עלול לגרום לסכנת שריפה או התפוצצות.

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

リチウム・バッテリーは、火災、爆発、または重症のやけどを引き起こすことがあります。バックアップ・バッテリーの充電、その極性コネクターの取り外し、バッテリー本体の分解、100°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 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 sintoma 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・バックを外し、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!

Apriendo 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 22
- “Checking the battery pack” on page 22

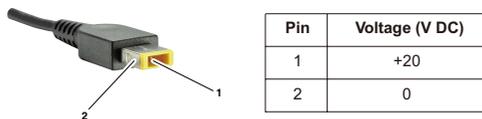
Checking the AC adapter

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

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

To check the AC adapter, follow the steps below:

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



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 500-14ISK/ideapad 500-15ISK” on page 26.

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 OneKey Recovery

Restore of factory default

The Lenovo ideapad 500-14ISK/ideapad 500-15ISK computers come with pre-installed OneKey Recovery System. 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, just enter Lenovo OneKey Recovery System and run **System Recovery**. For details of OneKey Recovery System, see *the User Guide for Lenovo OneKey Recovery System*.

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.

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 Administrator password was set then User password can 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 shut down.

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 **F9**.

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

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 panel.
- Press the power button.
- Open the Charms and then select **Settings**  → **Power**  → **Sleep**.

Attention: Wait until the power indicator light starts blinking (indicating that the computer is in sleep mode) before you move your computer. Moving your computer while the hard disk is spinning can damage the hard disk, causing loss of data.

To wake the computer, do one of the following:

- Press any key on the keyboard. (Notebook mode only)
- 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:

- Open the charms bar, then select **Settings**  → **Power**  → **Shut down**.
- Right-click the **Start** button in the lower-left corner and select **Shut down or sign out** → **Shut down**.
- Select  → **Shut down** in the upper-right corner of the Start screen.

Note: The operation depends on the BIOS setup. Please refer to the actual product.

Lenovo ideapad 500-14ISK/ideapad 500-15ISK

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

- “Specifications” on page 26
- “Status indicators” on page 28
- “Fn key combinations/Hotkeys” on page 30
- “FRU replacement notices” on page 31
- “Removing and replacing an FRU” on page 32
- “Locations” on page 80
- “Parts list” on page 83

Specifications

The following table lists the specifications of the Lenovo ideapad 500-14ISK/ideapad 500-15ISK:

Table 1. Specifications

Feature	Description
Processor	<ul style="list-style-type: none"> • See the system properties of your computer, you can do this as follows: Open the Control Panel, and then select System and Security → System.
Bus architecture	<p>BDW/Carrizo:</p> <ul style="list-style-type: none"> • 1600Mhz DDR3L SDRAM • PCI Express bus 2.0 • Serial ATA 6Gb/s • USB3.0 • USB2.0 • HDMI1.4 • eDP 1.3 <p>AMD carrizo:</p> <ul style="list-style-type: none"> • 1600Mhz DDR3L SDRAM • PCI Express bus 2.0 • Serial ATA 6Gb/s • USB3.0 • USB2.0 • HDMI1.4 • eDP 1.4
Graphic memory chip	<ul style="list-style-type: none"> • Integrated Graphics • Discreted Graphics (Option): AMD Meso XT/AMD Meso XT and Tropo XT2/AMD Exo Pro
Display	<ul style="list-style-type: none"> • 14.0" 16:9, 1,920 × 1,080 pixels FHD • 15.6" 16:9, 1,920 × 1,080 pixels FHD
Standard memory	<ul style="list-style-type: none"> • DDR3L-1333 MHz / 1600 MHz SODIMM × 2 (max 16 GB)
CMOS RAM	<ul style="list-style-type: none"> • 8Mbyte

Table 1. Specifications (continued)

Feature	Description
Storage devices	<ul style="list-style-type: none"> • 2.5-inch, SATA II/SATA III • 500 GB / 1 TB / 2 TB 5,400 rpm • HYBRID 500 GB / 1 TB 5,400 rpm SSHD(8 GB) • 128 GB / 256 GB(SSD) SATA III
I/O port	<ul style="list-style-type: none"> • Combo audio jack × 1 • RJ-45 × 1 • HDMI × 1 • VGA × 1 • USB 2.0 × 1, USB 3.0 × 2 • 4 in 1 slot × 1 (SD/SDHC/SDXC/MMC)
Audio	<ul style="list-style-type: none"> • 1/8" Combo audio jack • 2.5 W speakers × 2 • Array Digital MIC
Ethernet (on the system board)	<ul style="list-style-type: none"> • 1,000 Mbps
Bluetooth wireless	<ul style="list-style-type: none"> • Combined in combo card
Keyboard	<ul style="list-style-type: none"> • 6 row Lenovo Frame Keyboard
Integrated camera	<ul style="list-style-type: none"> • HD Camera • 3D Camera (ideapad 500-15ISK) (on select models)
Battery	<ul style="list-style-type: none"> • 4 cells, 32 Wh / 41 Wh
AC adapter	<ul style="list-style-type: none"> • 20 V, 45 W / 65 W / 90 W
Pre-installed operating system	<ul style="list-style-type: none"> • Windows 8.1/10(or similar update in 13 months) • Free-DOS

Status indicators

The system status indicators below show the computer status:

ideapad 500-14ISK



ideapad 500-15ISK



Table 2. Status indicators

Indicator	Indicator status	Charge status	Meaning
■ Power 	On (solid white)	---	The computer is powered on.
	Blinking	---	The computer is in sleep mode.
	Off	---	The computer is powered off.
 Battery 	On (solid white)	Charging	The battery has more than 80% charge.
		Discharging	The battery has more than 20% charge.
	On (solid amber)	Discharging	The battery has between 5% and 20% charge.
	Blinking slowly (white)	Charging	The battery has between 20% and 80% charge. When the battery reaches 80% charge, the light will stop blinking. However, charging will continue until the battery is fully charged.
			The battery has less than 20% charge. When the battery charge reaches 20%, the blinking color will change to white.
			The battery has less than 5% charge.

Fn key combinations/Hotkeys

The following table shows the function of each combination of Fn with a function key.

Table 3. Fn key combinations

ideapad 500-14ISK

Fn + Home:	Activates the pause function.
Fn + End:	Activates the break function.
Fn + PgUp :	Enables/disables the scroll lock.
Fn + PgDn :	Activates the insert function.
Fn + Space (on select models):	Adjusts the keyboard backlight.

ideapad 500-15ISK

Fn + Home:	Activates the pause function.
Fn + End:	Activates the break function.
Fn + PgUp :	Enables/disables the scroll lock.
Fn + PgDn :	Activates the system request.
Fn + Space (on select models):	Adjusts the keyboard backlight.

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

Table 4. Hotkeys

 : Mutes/unmutes the sound.	 : Enables/disables Airplane mode.
 : Decreases the volume level.	 : Displays all currently active apps.
 : Increases the volume level.	 : Turns on/off the backlight of the LCD screen.
 : Closes the currently active window.	 : Toggles the display between the computer and an external device.
 : Refreshes the desktop or the currently active window.	 : Decreases the display brightness.
 : Enables/disables the touchpad.	 : Increases the 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.

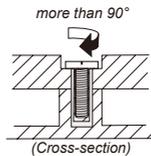
Do the following when you service this machine:

- 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:

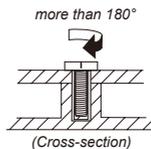
- **Plastic to plastic**

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 80.
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.

Notes:

- The following procedures about removing and replacing FRUs are the same for the Lenovo ideapad 500-14ISK/ideapad 500-15ISK.
- The illustrations used in this section are of the Lenovo ideapad 500-15ISK, unless otherwise stated.

1010 Keyboard

Figure 1. Removal steps of keyboard

Remove the screws ■.

ideapad 500-14ISK



ideapad 500-15ISK



Step	Screw (quantity)	Color	Torque
■	M2 × 6 mm, Phillips head, nylok-coated (3) LOW TO KB	Black/ Silver	1.85+/-0.15 kgf/cm

// Lenovo ideapad 500-14ISK/ideapad 500-15ISK Hardware Maintenance Manual

Figure 1. Removal steps of keyboard (continued)

Push the keyboard with the tip of an unfolded paper clip (or similar object without a sharp tip) through the screw hole on the back cover. Loosen the keyboard with fingers in the direction shown by arrows **2**.

ideapad 500-14ISK



ideapad 500-15ISK



Figure 1. Removal steps of keyboard (continued)

Lift the keyboard slightly **3**, and then detach the connectors in the direction shown by arrows **4**, **5** and **6**. Remove the keyboard.

Note: Select models do not have the keyboard backlight cable (the dashed area).

ideapad 500-14ISK



Figure 1. Removal steps of keyboard (continued)

ideapad 500-15ISK



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

1020 Optical drive

For access, remove this FRU:

- “1010 Keyboard” on page 33

Figure 2. Removal steps of optical drive

ideapad 500-14ISK

Remove the screw **1**. Then pull the optical drive out in the direction shown by arrow **2**.



Step	Screw (quantity)	Color	Torque
1	M2 × 6 mm, Phillips head, nylok-coated (1) LOW TO UPPER	Silver	1.85+/-0.15 kgf/cm

Remove the screws **3**, then carefully remove the optical drive bracket and bezel in the directions shown by arrows **4** and **5**.



Step	Screw (quantity)	Color	Torque
3	M2 × 3 mm, Phillips head, nylok-coated (2) ODD BRK TO ODD MODULE	Black	1.85+/-0.15 kgf/cm

Figure 2. Removal steps of Optical drive (continued)

ideapad 500-15ISK

Remove the screw **■**. Then pull the optical drive out in the direction shown by arrow **➔**.



Step	Screw (quantity)	Color	Torque
■	M2 × 6 mm, Phillips head, nylok-coated (1) ODD TO LOWER	Black	1.85+/-0.15 kgf/cm

Figure 2. Removal steps of optical drive (continued)

Remove the screws **3**, then carefully remove the optical drive bracket and bezel in the directions shown by arrows **4** and **5**.



Step	Screw (quantity)	Color	Torque
3	M2 × 3 mm, Phillips head, nylok-coated (2) ODD BRK TO ODD MODULE	Black	1.85+/-0.15 kgf/cm

1030 Base cover

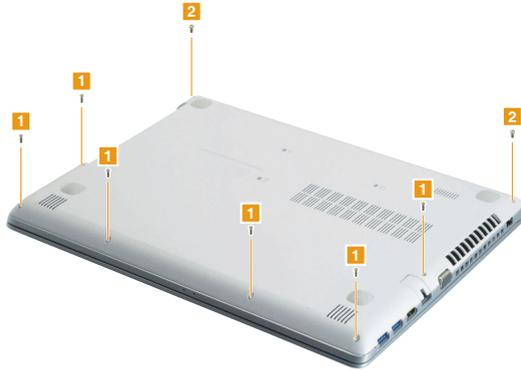
For access, remove this FRU:

- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37

Figure 3. Removal steps of base cover

ideapad 500-14ISK

Remove the screws **1** and **2**.



Step	Screw (quantity)	Color	Torque
1	M2 × 6 mm, Phillips head, nylok-coated (6) LOW TO UPPER	Black/ Silver	1.85+/-0.15 kgf/cm
2	M2.5 × 6 mm, Phillips head, nylok-coated (2) LOW TO UPPER	Black/ Silver	3.0+/-0.3 kgf/cm

Figure 3. Removal steps of base cover (continued)

Remove the base cover in the directions shown by arrows **3** and **4**.

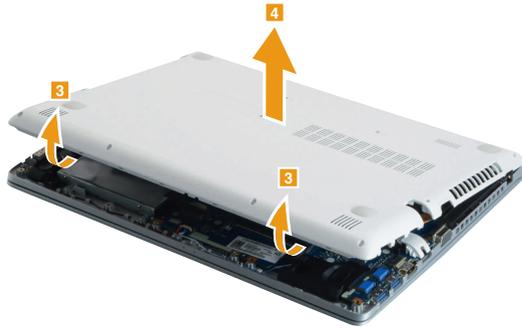


Figure 3. Removal steps of base cover (continued)

ideapad 500-15ISK

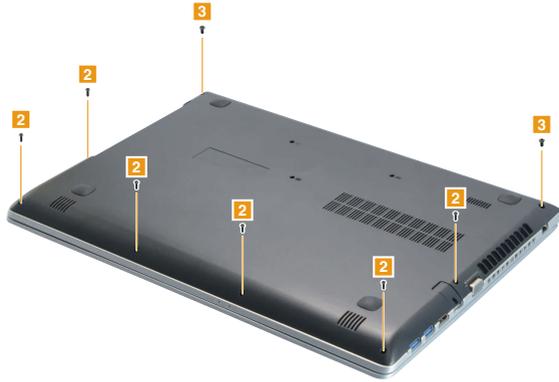
Remove the screws ■.



Step	Screw (quantity)	Color	Torque
■	M2 × 6 mm, Phillips head, nylok-coated (2) UPPER TO LOWER	Black	1.85+/-0.15 kgf/cm

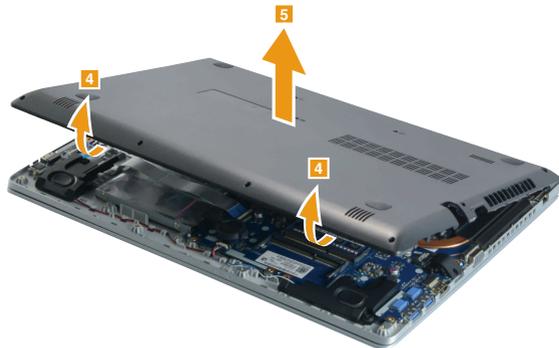
Figure 3. Removal steps of base cover (continued)

Remove the screws **2** and **3** from the bottom.



Step	Screw (quantity)	Color	Torque
2	M2 × 6 mm, Phillips head, nylok-coated (6) LOW TO UPPER	Black/ Silver	1.85+/-0.15 kgf/cm
3	M2.5 × 6 mm, Phillips head, nylok-coated (2) LOW TO UPPER	Black/ Silver	3.0+/-0.3 kgf/cm

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



Note: Applying labels to the base cover

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

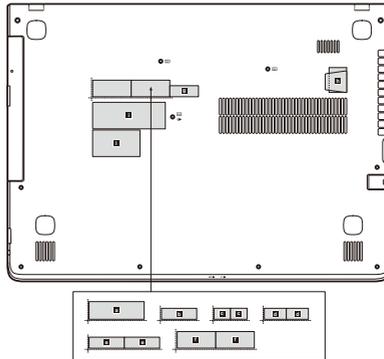
The following labels need to be peeled off from the old base cover, and need to be put on the new base cover.

- | | | | |
|----------|--------------------------------|----------|------------------------|
| a | KCC label | f | Wlan/BT for Brazil |
| b | BIS label for India | g | Indonesia D side label |
| c | Wlan/BT for Malaysia/Indonesia | h | GML Label |
| d | Wlan/BT for South Africa | i | Rating label |
| e | Wlan/BT for Israel/US/CA/TW | j | Rating print label |

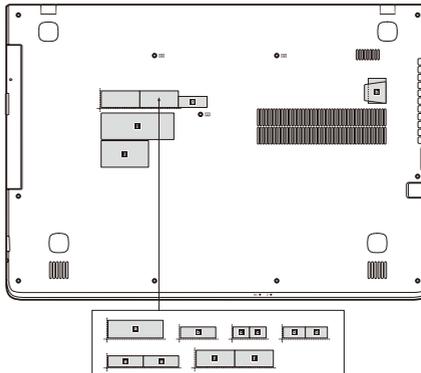
For some models, you also need to apply one or two FCC labels. Check the old base cover; if it has one or two FCC labels, find duplicates of them in the label kit and apply them to the new base cover.

For the location of each label, refer to the following figures:

ideapad 500-14ISK



ideapad 500-15ISK



1040 Battery pack

For access, remove these FRUs in order:

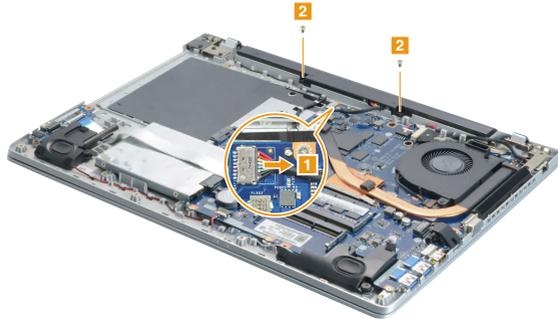
- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40

⚠ DANGER

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

Figure 4. Removal steps of battery pack

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

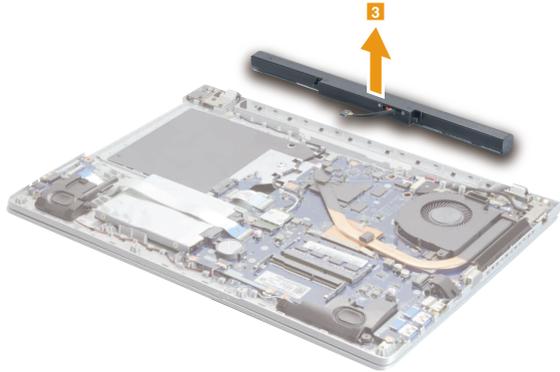


Step	Screw (quantity)	Color	Torque
2	M2.5 × 4 mm, Phillips head, nylok-coated (2) BATTERY TO UPPER	Silver	3.0+/-0.3 kgf/cm

// *Lenovo ideapad 500-14ISK/ideapad 500-15ISK Hardware Maintenance Manual*

Figure 4. Removal steps of battery pack (continued)

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



When installing: Make sure the battery pack connector is attached firmly.

1050 Hard disk drive

For access, remove these FRUs in order:

- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40
- “1040 Battery pack” on page 45

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 damages 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 is in suspend mode.

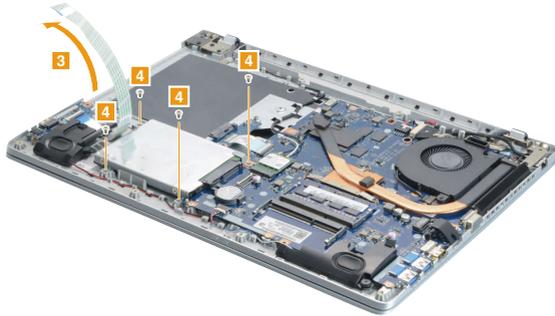
Figure 5. Removal steps of hard disk drive

Unplug the IO board cable connector in the directions shown by arrows **1** and **2**.



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

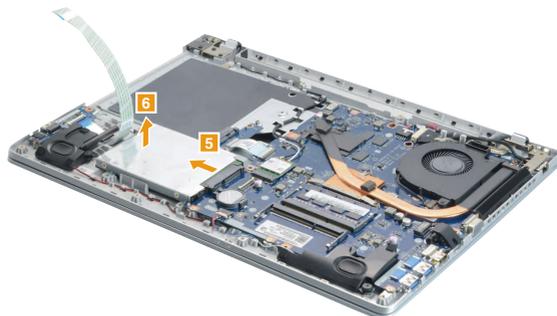
Lift the IO board cable in the direction shown by arrow **3**. Remove the screws **4**.



Step	Screw (quantity)	Color	Torque
4	M2.5 × 4 mm, Phillips head, nylok-coated (4) HDD BRK TO UPPER	Silver	3.0+/-0.3 kgf/cm

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

Detach the HDD connector in the direction shown by arrow **5**. Remove the hard disk drive from the slot in the direction shown by arrow **6**.



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

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

Remove the screws **7**, then take out the metal frame.



Step	Screw (quantity)	Color	Torque
7	M3 × 3 mm, Phillips head, nylok-coated (4) HDD BRK TO HDD	Silver	3.0+/-0.3 kgf/cm

1060 Speakers

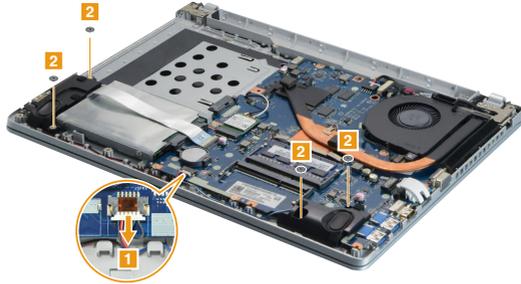
For access, remove these FRUs in order:

- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40
- “1040 Battery pack” on page 45

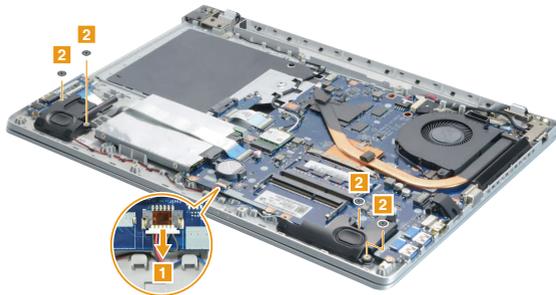
Figure 6. Removal steps of speakers

Detach the speakers connector in the direction shown by arrow **1**. Remove the screws **2**.

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ideapad 500-15ISK



Step	Screw (quantity)	Color	Torque
2	M2 × 2, Phillips head, nylok-coated (4) SPEAKER R TO UPPER & SPEAKER L TO UPPER	Black	1.85+/-0.15 kgf/cm

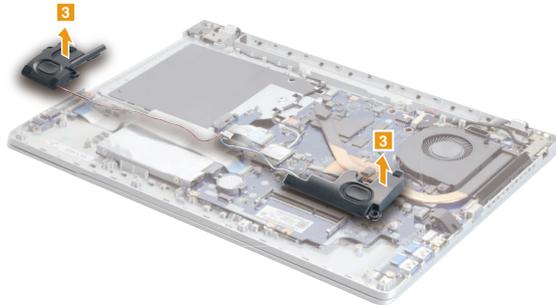
Figure 6. Removal steps of speakers (continued)

Remove the speakers 3.

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ideapad 500-15ISK



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

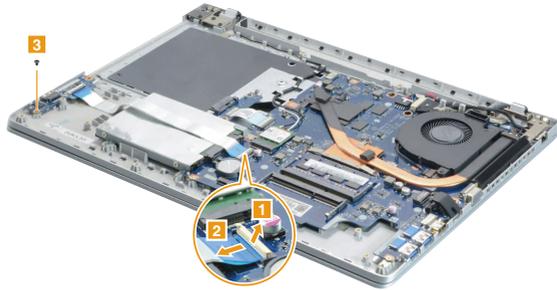
1070 IO board

For access, remove these FRUs in order:

- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40
- “1040 Battery pack” on page 45
- “1060 Speakers” on page 50

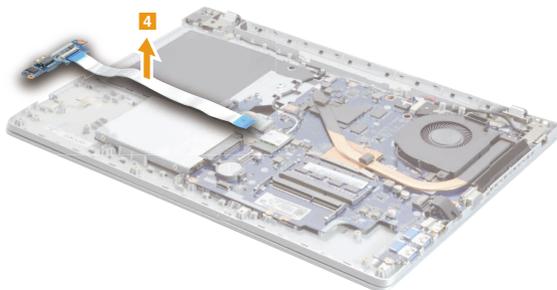
Figure 7. Removal steps of IO board

Detach the IO board connector in the directions shown by arrows **1** and **2**. Remove the screw **3**.



Step	Screw (quantity)	Color	Torque
3	M2 × 3 mm, Phillips head, nylok-coated (1) IO BOARD TO UPPER	Black	1.85+/-0.15 kgf/cm

Remove the IO board in the direction shown by arrow **4**.



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

1080 PCI Express Mini Card for wireless LAN

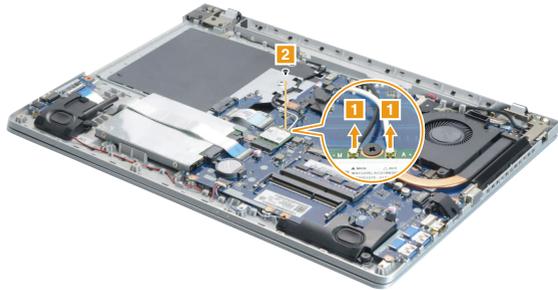
For access, remove these FRUs in order:

- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40
- “1040 Battery pack” on page 45

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 5. "Parts list—Overall" on page 86 for Lenovo part numbers for the approved modules.

Figure 8. Removal steps of PCI Express Mini Card for wireless LAN

Disconnect the two wireless LAN cables (white,black) ■, 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.

Notes: The wireless LAN card has 2 cables in step ■.
The wireless LAN card in some models might have 3 cables in step ■.

Step	Screw (quantity)	Color	Torque
2	M2 × 3 mm, Phillips head, nylok-coated (1) WLAN CARD TO MB	Black	1.85+/-0.15 kgf/cm

Figure 8. 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) (MAIN) into the jack labeled **MAIN**, and the white cable (2nd) (AUX) into the jack labeled **AUX** on the card.
- In models with a wireless LAN card that has three antenna connectors, plug the black cable (1st) (MAIN) into the jack labeled **1**, the grey cable (3rd) into the jack labeled **3**, and the white cable (2nd) (AUX) into the jack labeled **2** on the card.

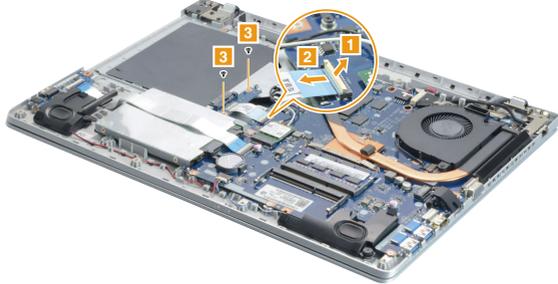
1090 ODD board (ideapad 500-15ISK)

For access, remove these FRUs in order:

- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40
- “1040 Battery pack” on page 45

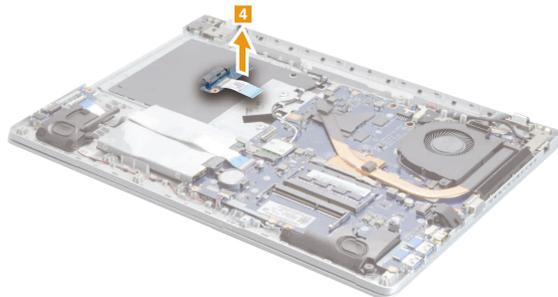
Figure 9. Removal steps of ODD board (ideapad 500-15ISK)

Detach the FPC connector in the directions shown by arrows **1** and **2**. Remove the screws **3**.



Step	Screw (quantity)	Color	Torque
3	M2 × 3, Phillips head, nylok-coated (2) ODD BOARD TO UPPPER	Black	1.85+/-0.15 kgf/cm

Remove the ODD board in the direction shown by arrow **4**.



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

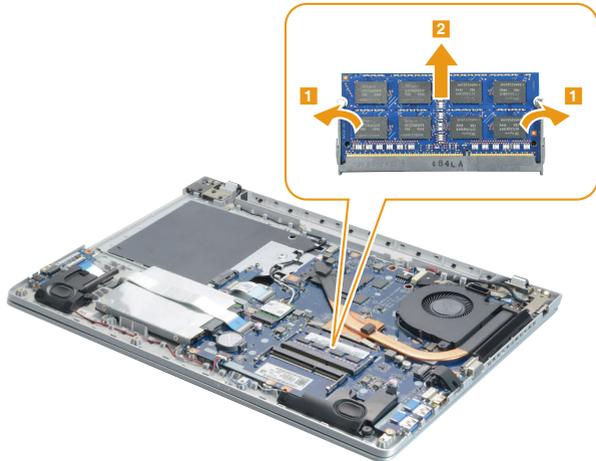
1100 DIMM

For access, remove these FRUs in order:

- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40
- “1040 Battery pack” on page 45

Figure 10. Removal steps of DIMM

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



When installing: Insert the notched end of the DIMM into the socket. Push the DIMM firmly, and pivot it until it snaps into the place. Make sure that it is firmly fixed in the slot and difficult to move.

1110 Fan assembly and Heat Sink assembly

For access, remove these FRUs in order:

- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40
- “1040 Battery pack” on page 45

Figure 11. Removal steps of fan assembly and heat sink assembly

Detach the fan connector in the direction shown by arrow **1**, and then remove the screws **2**.



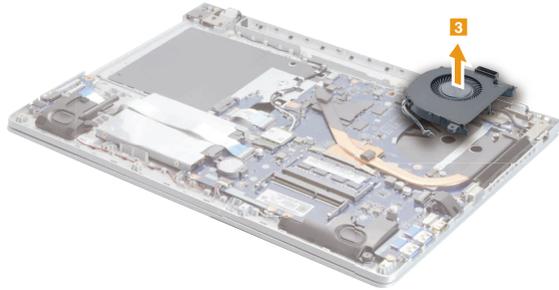
Step	Screw (quantity)	Color	Torque
2	M2 × 6, Phillips head, nylok-coated (3) FAN TO UPPER	Black	1.85+/-0.15 kgf/cm

When installing: Make sure that the fan connector is attached firmly to the system board.

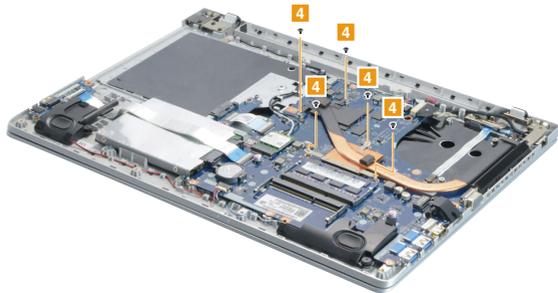
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Figure 11. Removal steps of DIMM (continued)

Remove the fan in the direction shown by arrow **3**. Be careful not to damage the connector.



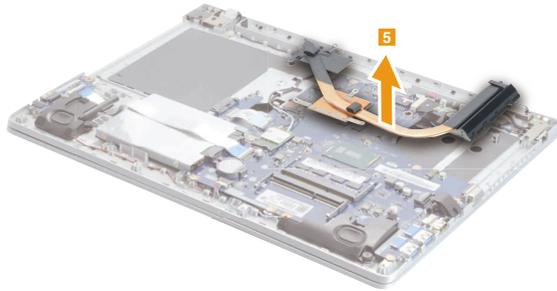
Remove the screws **4**.



Step	Screw (quantity)	Color	Torque
4	M2 × 3, Phillips head, nylok-coated (5) THERMAL MODULE TO CPU BRK & THERMAL MODULE TO MB (DIS-40W)	Black	1.85+/-0.15 kgf/cm

Figure 11. Removal steps of DIMM (continued)

Lift the heat sink in the direction shown by arrow **5**.



When installing:

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

1120 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.
- In 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 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40
- “1040 Battery pack” on page 45
- “1050 Hard disk drive” on page 47
- “1060 Speakers” on page 50
- “1070 IO board” on page 52
- “1080 PCI Express Mini Card for wireless LAN” on page 53
- “1090 ODD board (ideapad 500-15ISK)” on page 55
- “1110 Fan assembly and Heat Sink assembly” on page 57

Figure 12. Removal steps of system board

Detach the two FPC connectors in the directions shown by arrows ■.

ideapad 500-14ISK



Figure 12. Removal steps of system board (continued)

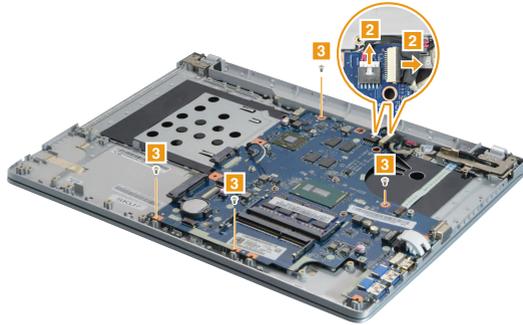
ideapad 500-15ISK



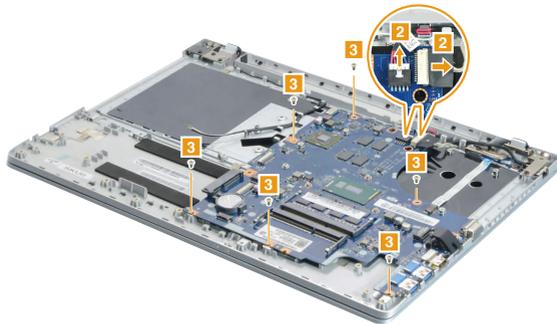
Figure 12. Removal steps of system board (continued)

Detach the two connectors in the directions shown by arrows **2**. Remove the screws **3**.

ideapad 500-14ISK



ideapad 500-15ISK

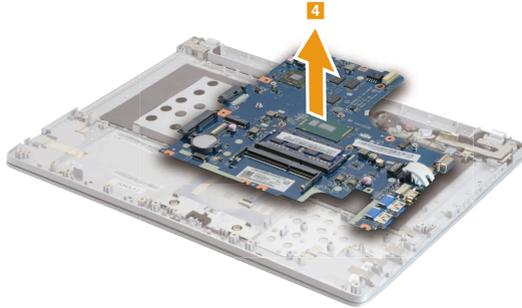


Step	Screw (quantity)	Color	Torque
3	M2.5 × 4 mm, Phillips head, nylok-coated (4) MB TO UPPER (ideapad 500-14ISK)	Silver	3.0+/-0.3 kgf/cm
3	M2.5 × 4 mm, Phillips head, nylok-coated (6) MB TO UPPER & MB TO KB BRK (ideapad 500-15ISK)	Silver	3.0+/-0.3 kgf/cm

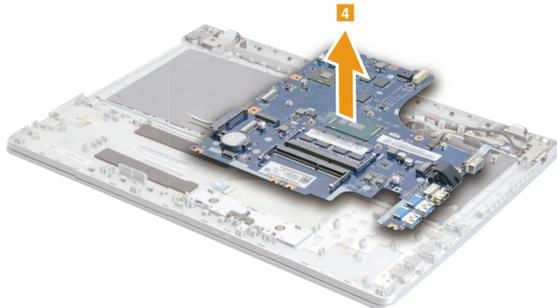
Figure 12. Removal steps of system board (continued)

Remove the system board in the direction shown by arrow 4.

ideapad 500-14ISK



ideapad 500-15ISK



Lenovo ideapad 500-14ISK/ideapad 500-15ISK Hardware Maintenance Manual

Figure 12. Removal steps of system board (continued)

Remove the screws **5**.

ideapad 500-14ISK



ideapad 500-15ISK

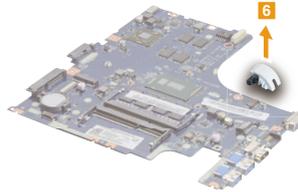


Step	Screw (quantity)	Color	Torque
5	M2 × 3, Phillips head, nylok-coated (2) RJ45 COVER TO MB	Black	1.85+/-0.15 kgf/cm

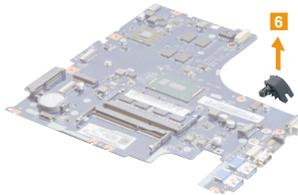
Figure 12. Removal steps of system board (continued)

Remove the RJ-45 door in the direction shown by arrow 6.

ideapad 500-14ISK



ideapad 500-15ISK



1130 Upper case

For access, remove these FRUs in order:

- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40
- “1040 Battery pack” on page 45
- “1050 Hard disk drive” on page 47
- “1060 Speakers” on page 50
- “1070 IO board” on page 52
- “1080 PCI Express Mini Card for wireless LAN” on page 53
- “1090 ODD board (ideapad 500-15ISK)” on page 55
- “1110 Fan assembly and Heat Sink assembly” on page 57

Figure 13. Removal steps of upper case

Remove the screws ■.

ideapad 500-14ISK

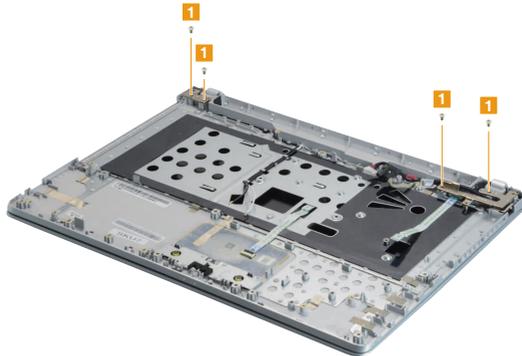
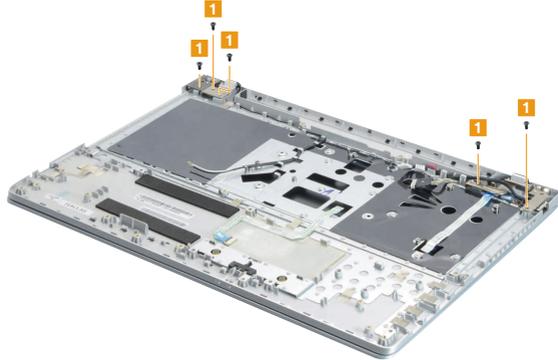


Figure 13. Removal steps of upper case (continued)

ideapad 500-15ISK



Step	Screw (quantity)	Color	Torque
■	M2.5 × 4, Phillips head, nylok-coated (4) HINGE BRK TO UPPER (ideapad 500-14ISK)	Silver	3.0+/-0.3 kgf/cm
■	M2.5 × 5, Phillips head, nylok-coated (5) HINGE BRK TO UPPER (ideapad 500-15ISK)	Black	3.0+/-0.3 kgf/cm

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

ideapad 500-14ISK

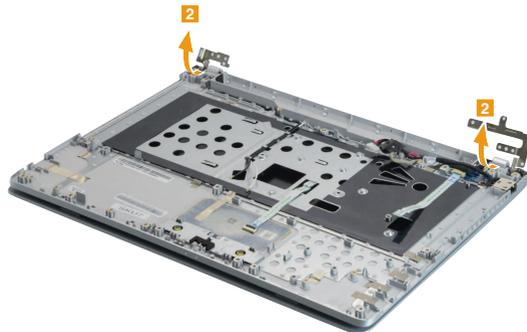
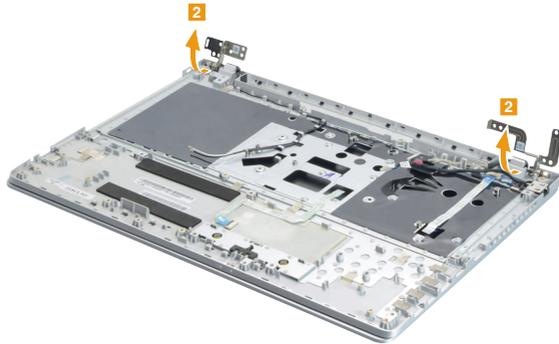


Figure 13. Removal steps of upper case (continued)

ideapad 500-15ISK



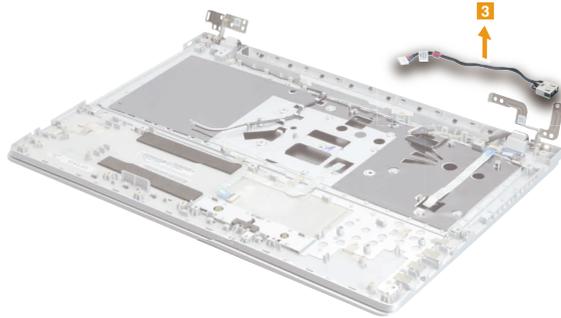
Remove the DC in cable in the direction shown by arrow **3**.

ideapad 500-14ISK



Figure 13. Removal steps of upper case (continued)

ideapad 500-15ISK



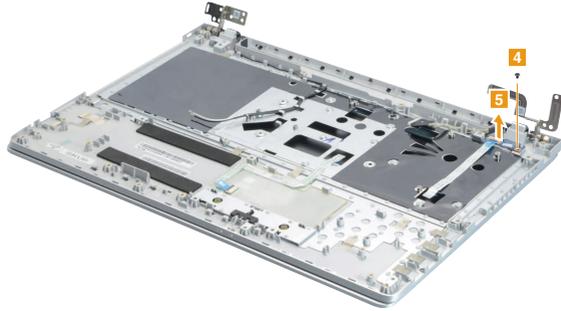
Remove the screw **4**. Then remove the power board in the direction shown by arrow **5**.

ideapad 500-14ISK



Figure 13. Removal steps of upper case (continued)

ideapad 500-15ISK



Step	Screw (quantity)	Color	Torque
4	M2 × 3, Phillips head, nylok-coated (1) POWER BOARD TO UPPER	Black	1.85+/-0.15 kgf/cm

Release the antenna cables from the cable guides in the direction shown by arrows 6.

ideapad 500-14ISK

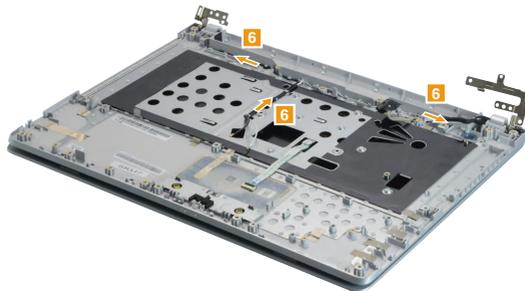
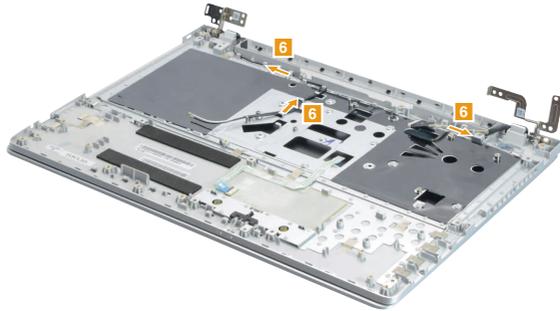


Figure 13. Removal steps of upper case (continued)

ideapad 500-15ISK



Remove the upper case from the LCD module in the directions shown by arrow **7** and **8**.

ideapad 500-14ISK

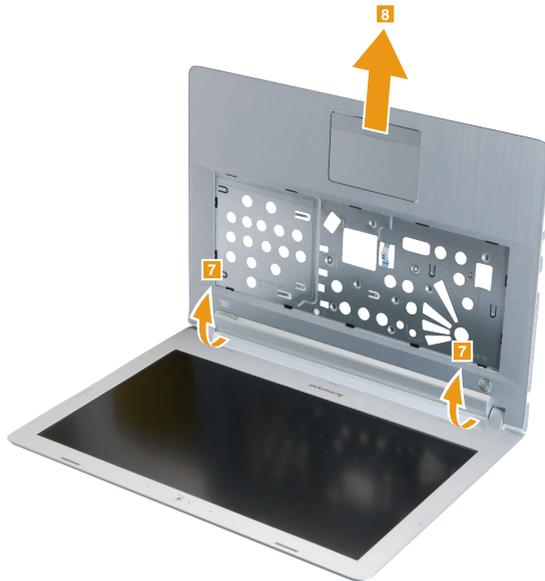


Figure 13. Removal steps of upper case (continued)

ideapad 500-15ISK



1140 LCD unit

For access, remove these FRUs in order:

- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40
- “1040 Battery pack” on page 45
- “1050 Hard disk drive” on page 47
- “1060 Speakers” on page 50
- “1070 IO board” on page 52
- “1080 PCI Express Mini Card for wireless LAN” on page 53
- “1090 ODD board (ideapad 500-15ISK)” on page 55
- “1100 DIMM” on page 56
- “1110 Fan assembly and Heat Sink assembly” on page 57
- “1120 System board” on page 60
- “1130 Upper case” on page 66

Figure 14. Removal steps of LCD unit (continued)

Step 1: unlock LCD bezel as shown by picture 1.

Step 2&3: unlock bezel off from the right & left corners as shown by pictures 2 & 3.

Step 4: unlock bezel from both sides as shown by picture 4.

Step 5: remove bezel from the rear side as shown by picture 5.

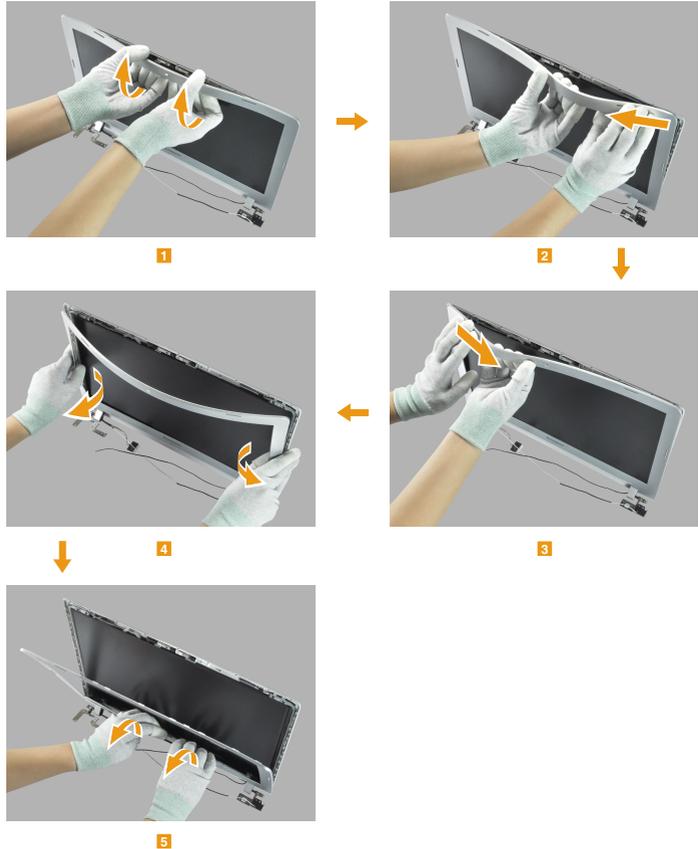
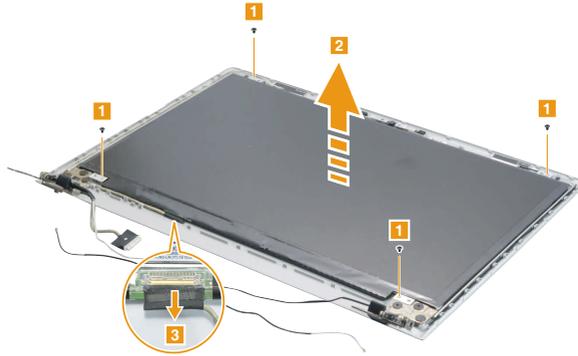


Figure 14. Removal steps of LCD unit (continued)

Remove the screws **■**. Lift the LCD module slightly **2**. Disconnect the connector in the direction shown by arrow **3**. Then remove the LCD module.



Step	Screw (quantity)	Color	Torque
■	M2 × 3, Phillips head, nylok-coated (4) HINGE BRK TO LCD PANEL	Black	1.85+/-0.15 kgf/cm

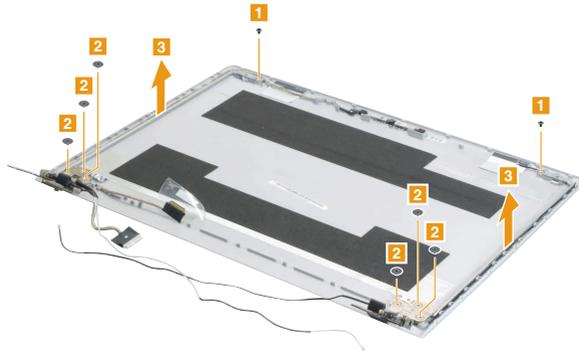
1150 LCD hinges

For access, remove these FRUs in order:

- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40
- “1040 Battery pack” on page 45
- “1050 Hard disk drive” on page 47
- “1060 Speakers” on page 50
- “1070 IO board” on page 52
- “1080 PCI Express Mini Card for wireless LAN” on page 53
- “1090 ODD board (ideapad 500-15ISK)” on page 55
- “1100 DIMM” on page 56
- “1110 Fan assembly and Heat Sink assembly” on page 57
- “1120 System board” on page 60
- “1130 Upper case” on page 66
- “1140 LCD unit” on page 73

Figure 15. Removal steps of LCD hinges

Remove the screws **1** and **2**. Then release the two hinges in the direction shown by arrows **3**.



Step	Screw (quantity)	Color	Torque
1	M2 × 3, Phillips head, nylok-coated (2) HINGE BRK TO LCD COVER	Black	1.85+/-0.15 kgf/cm
2	M2.5 × 2.5, Phillips head, nylok-coated (6) HINGE BRK TO LCD COVER	Black	3.0+/-0.3 kgf/cm

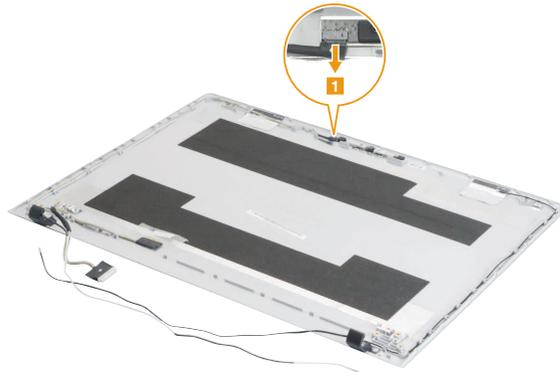
1160 Integrated camera, LCD cable and antenna assembly

For access, remove these FRUs in order:

- “1010 Keyboard” on page 33
- “1020 Optical drive” on page 37
- “1030 Base cover” on page 40
- “1040 Battery pack” on page 45
- “1050 Hard disk drive” on page 47
- “1060 Speakers” on page 50
- “1070 IO board” on page 52
- “1080 PCI Express Mini Card for wireless LAN” on page 53
- “1090 ODD board (ideapad 500-15ISK)” on page 55
- “1100 DIMM” on page 56
- “1110 Fan assembly and Heat Sink assembly” on page 57
- “1120 System board” on page 60
- “1130 Upper case” on page 66
- “1140 LCD unit” on page 73
- “1150 LCD hinges” on page 76

Figure 16. Removal steps of integrated camera, LCD cable and antenna assembly

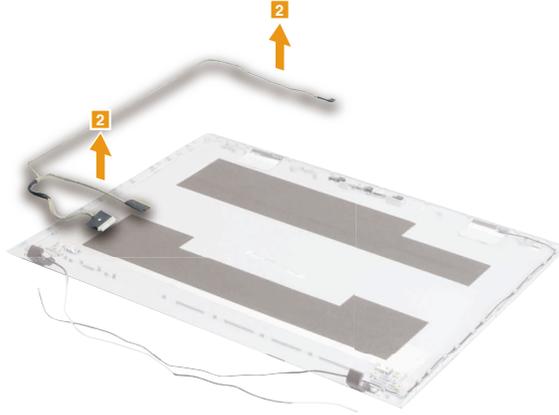
Note: The integrated camera is stuck on the top center of the LCD cover. Detach the integrated camera connector in the direction shown by arrow ■.



Note: For Lenovo ideapad 500-15ISK, select models have a 3D camera. 3D camera cable, EPD cable and microphone board are different from the common models. Please refer to the actual product.

Figure 16. Removal steps of integrated camera, LCD cable and antenna assembly (continued)

Remove the LCD cable in the direction shown by arrows **2**.



Remove the antenna assembly in the direction shown by arrows **3**.



Figure 16. Removal steps of integrated camera, LCD cable and antenna assembly (continued)

Remove the camera in the direction shown by arrow 4.



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

Locations

Front view and right-side view

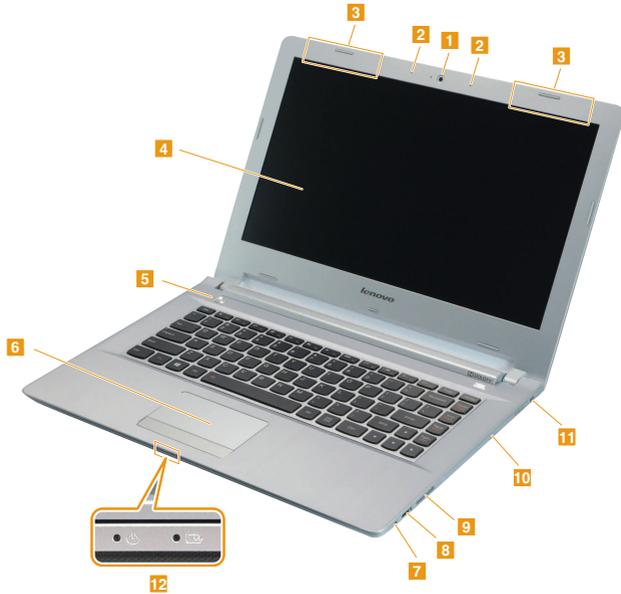
- Integrated camera

Note: For Lenovo ideapad 500-15ISK, select models have a 3D camera.

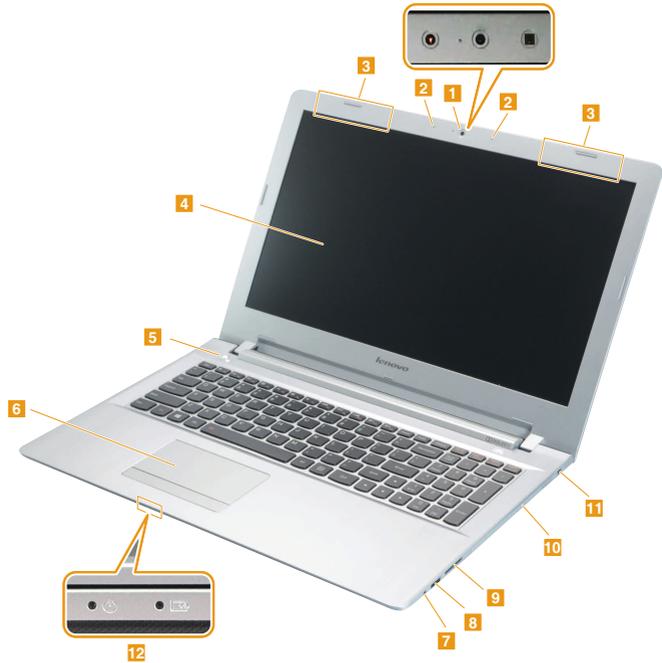
- 2 Built-in microphone
- 3 Wireless LAN antennas
- 4 Computer display
- 5 Power button
- 6 Touchpad
- 7 Combo audio jack
- 8 USB port
- 9 Memory card slot
- 10 Optical drive (on select models)
- 11 Kensington lock slot
- 12 System status indicators

Note: For the description of each indicator, see “Status indicators” on page 28.

ideapad 500-14ISK



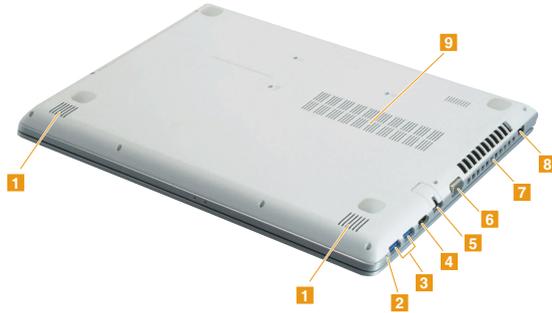
ideapad 500-15ISK



Bottom and Left-side view

- Speakers
- 2 Novo button
- 3 USB port
- 4 HDMI port
- 5 RJ-45 port
- 6 VGA port
- 7 Ventilation slots
- 8 AC power adapter jack
- 9 Louvers

ideapad 500-14ISK



ideapad 500-15ISK



Parts list

This section presents the following service parts:

- “Overall” on page 84
- “LCD FRUs” on page 97
- “Keyboard” on page 100
- “Miscellaneous parts” on page 107
- “AC adapters” on page 108
- “Screws” on page 108
- “Power cords” on page 109

Note:

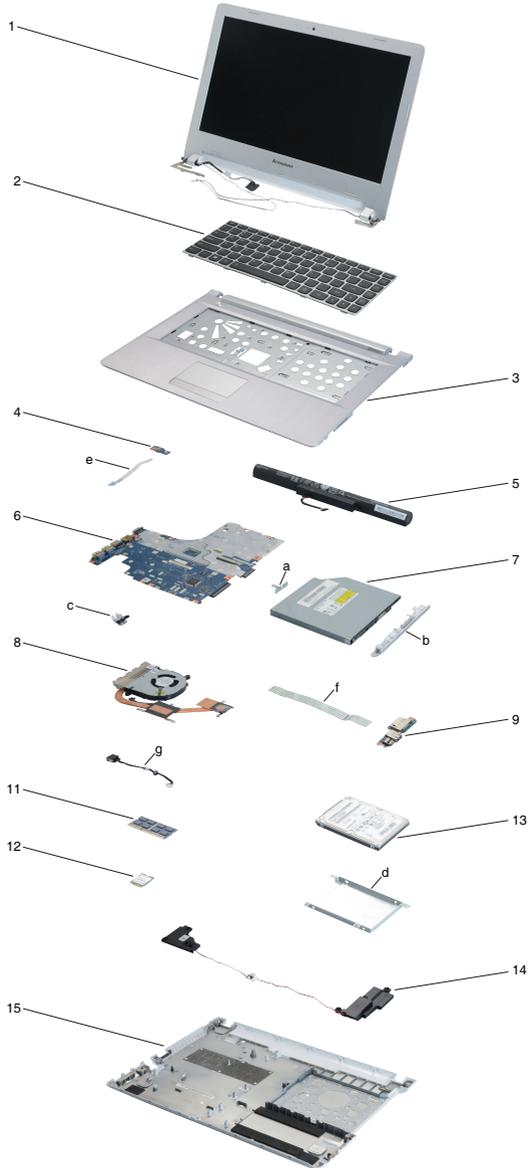
Each FRU is available for all types or models, unless specific types or models are specified.

Attention:

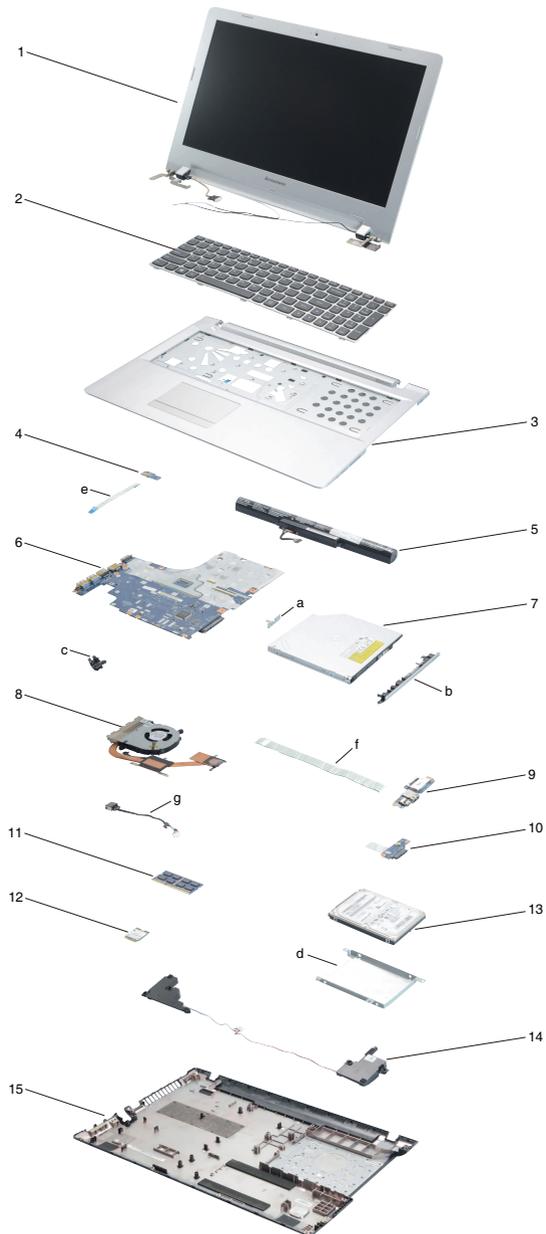
Do not attempt to replace an FRU on your own. If an FRU is damaged, contact a Lenovo authorized servicer or a marketing representative for replacement or repair. Only qualified technicians can inspect or repair this product.

Overall

ideapad 500-14ISK



ideapad 500-15ISK



Lenovo ideapad 500-14ISK/ideapad 500-15ISK Hardware Maintenance Manual

Table 5. Parts list—Overall

No.	FRU	FRU no.	CRU ID.	ideapad 500-14ISK	ideapad 500-15ISK	
a-h	See "Miscellaneous parts" on page 107.					
1	LCD unit (see "LCD FRUs" on page 97.)					
2	Keyboard (see "Keyboard" on page 100.)					
3	Upper Case C Z41-70NBKL Black NJBL	5CB0J23813	N	•		
3	Upper Case C Z41-70 NBKL Black JBL	5CB0J23570		•		
3	Upper Case C Z41-70 BKL Black JBL	5CB0J23601		•		
3	Upper Case C Z41-70NBKL White NJBL	5CB0J23669		•		
3	Upper Case C Z41-70 NBKL White JBL	5CB0J23699		•		
3	Upper Case C Z41-70 BKL White JBL	5CB0J23734		•		
3	Upper Case C Z51-70NBKL Black NJBL	5CB0J23628			•	
3	Upper Case C Z51-70 NBKL Black JBL	5CB0J23656			•	
3	Upper Case C Z51-70 BKL Black JBL	5CB0J23687			•	
3	Upper Case C Z51-70NBKL White NJBL	5CB0J23722			•	
3	Upper Case C Z51-70 NBKL White JBL	5CB0J23760			•	
3	Upper Case C Z51-70 BKL White JBL	5CB0J23799			•	
4	Power Board C Z41-70	5C50J23647			•	•
5	Z41 SY/P L14S4E01 14.4V41Wh4cell	5B10H13091			•	•
5	Z41 SP/S L14M4E01 15V41Wh4cell	5B10H13094			•	•
5	Z41 LG L14L4E01 14.88V41Wh4cell	5B10H30033			•	•
5	Z41 SY/P L14S4E01 14.4V41Wh4cell GB	5B10K10172			•	•
5	Z41 SP/S L14M4E01 15V41Wh4cell GB	5B10K10217			•	•
5	Z41 LG L14L4E01 14.88V41Wh4cell GB	5B10K10170			•	•
5	Z41 SY/P L14S4E01 14.4V41Wh4cell GB	5B10K10172			•	•
5	Z41 SP/S L14M4E01 15V41Wh4cell GB	5B10K10217			•	•
5	Z41 LG L14L4E01 14.88V41Wh4cell GB	5B10K10170			•	•
5	Z41 SY L14S4A01 14.4V32Wh4cell	5B10H13097			•	•
5	Z41 SP/S L14M4A01 14.4V32Wh4cell	5B10H13099			•	•
5	Z41 LG L14L4A01 14.4V32Wh4cell	5B10H30034			•	•
5	Z41 SY L14S4A01 14.4V32Wh4cell GB	5B10K10216			•	•
5	Z41 SP/S L14M4A01 14.4V32Wh4cell GB	5B10K10169			•	•
5	Z41 LG L14L4A01 14.4V32Wh4cell GB	5B10K10213			•	•
5	Z41 SY L14S4A01 14.4V32Wh4cell GB	5B10K10216			•	•
5	Z41 SP/S L14M4A01 14.4V32Wh4cell GB	5B10K10169			•	•
5	Z41 LG L14L4A01 14.4V32Wh4cell GB	5B10K10213			•	•
6	MB C 80NS I3-6100 NOK 2G BL	5B20K34569			•	
6	MB C 80NS I3-6100 WIN 2G BL	5B20K34552		•		
6	MB C 80NS I3-6100 NOK 4G BL	5B20K34580		•		
6	MB C 80NS I3-6100 WIN 4G BL	5B20K34571		•		
6	MB C 80NS I3-6100 NOK 2G NBL	5B20K34561		•		
6	MB C 80NS I3-6100 WIN 2G NBL	5B20K34550		•		
6	MB C 80NS I3-6100 NOK 4G NBL	5B20K34578		•		
6	MB C 80NS I3-6100 WIN 4G NBL	5B20K34568		•		
6	MB C 80NS I5-6200 NOK 2G BL	5B20K34557		•		
6	MB C 80NS I5-6200 WIN 2G BL	5B20K34547		•		
6	MB C 80NS I5-6200 NOK 4G BL	5B20K34576		•		
6	MB C 80NS I5-6200 WIN 4G BL	5B20K34566		•		
6	MB C 80NS I5-6200 NOK 2G NBL	5B20K34555		•		

Table 5. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.	ideapad 500-14ISK	ideapad 500-15ISK
6	MB C 80NS I5-6200 WIN 2G NBL	5B20K34564	N	•	
6	MB C 80NS I5-6200 NOK 4G NBL	5B20K34554		•	
6	MB C 80NS I5-6200 WIN 4G NBL	5B20K34582		•	
6	MB C 80NS I7-6500 NOK 2G BL	5B20K34573		•	
6	MB C 80NS I7-6500 WIN 2G BL	5B20K34570		•	
6	MB C 80NS I7-6500 NOK 4G BL	5B20K34558		•	
6	MB C 80NS I7-6500 WIN 4G BL	5B20K34548		•	
6	MB C 80NS I7-6500 NOK 2G NBL	5B20K34559		•	
6	MB C 80NS I7-6500 WIN 2G NBL	5B20K34549		•	
6	MB C 80NS I7-6500 NOK 4G NBL	5B20K34577		•	
6	MB C 80NS I7-6500 WIN 4G NBL	5B20K34567		•	
6	MB C 80NS I3-6100 NOK UMA BL	5B20K34560		•	
6	MB C 80NS I3-6100 WIN UMA BL	5B20K34581		•	
6	MB C 80NS I3-6100 NOK UMA NBL	5B20K34574		•	
6	MB C 80NS I3-6100 WIN UMA NBL	5B20K34572		•	
6	MB C 80NS I5-6200 NOK UMA BL	5B20K34562		•	
6	MB C 80NS I5-6200 WIN UMA BL	5B20K34551		•	
6	MB C 80NS I5-6200 NOK UMA NBL	5B20K34579		•	
6	MB C 80NS I5-6200 WIN UMA NBL	5B20K34575		•	
6	MB C 80NS I7-6500 NOK UMA BL	5B20K34563		•	
6	MB C 80NS I7-6500 WIN UMA BL	5B20K34553		•	
6	MB C 80NS I7-6500 NOK UMA NBL	5B20K34565		•	
6	MB C 80NS I7-6500 WIN UMA NBL	5B20K34556		•	
6	MB C 80NT I3-6100 NOK 2G BL 3D	5B20K34603			•
6	MB C 80NT I3-6100 WIN 2G BL 3D	5B20K34639			•
6	MB C 80NT I3-6100 NOK 4G BL 3D	5B20K34631			•
6	MB C 80NT I3-6100 WIN 4G BL 3D	5B20K34620			•
6	MB C 80NT I3-6100 NOK 2G NBL 3D	5B20K34613			•
6	MB C 80NT I3-6100 WIN 2G NBL 3D	5B20K34608			•
6	MB C 80NT I3-6100 NOK 4G NBL 3D	5B20K34602			•
6	MB C 80NT I3-6100 WIN 4G NBL 3D	5B20K34599			•
6	MB C 80NT I3-6100 NOK 2G BL N3D	5B20K34594			•
6	MB C 80NT I3-6100 WIN 2G BL N3D	5B20K34598			•
6	MB C 80NT I3-6100 NOK 4G BL N3D	5B20K34593			•
6	MB C 80NT I3-6100 WIN 4G BL N3D	5B20K34589			•
6	MB C 80NT I3-6100 NOK2G NBL N3D	5B20K34585			•
6	MB C 80NT I3-6100 WIN2G NBL N3D	5B20K34597			•
6	MB C 80NT I3-6100 NOK4G NBL N3D	5B20K34592			•
6	MB C 80NT I3-6100 WIN4G NBL N3D	5B20K34588			•
6	MB C 80NT I5-6200 NOK 2G BL 3D	5B20K34583			•
6	MB C 80NT I5-6200 WIN 2G BL 3D	5B20K34651			•
6	MB C 80NT I5-6200 NOK 4G BL 3D	5B20K34647			•
6	MB C 80NT I5-6200 WIN 4G BL 3D	5B20K34641			•
6	MB C 80NT I5-6200 NOK 2G NBL 3D	5B20K34630			•
6	MB C 80NT I5-6200 WIN 2G NBL 3D	5B20K34629			•
6	MB C 80NT I5-6200 NOK 4G NBL 3D	5B20K34619			•
6	MB C 80NT I5-6200 WIN 4G NBL 3D	5B20K34612			•

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Table 5. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.	ideapad 500-14ISK	ideapad 500-15ISK
6	MB C 80NT I5-6200 NOK 2G BL N3D	5B20K34605	N		•
6	MB C 80NT I5-6200 WIN 2G BL N3D	5B20K34645			•
6	MB C 80NT I5-6200 NOK 4G BL N3D	5B20K34637			•
6	MB C 80NT I5-6200 WIN 4G BL N3D	5B20K34625			•
6	MB C 80NT I5-6200 NOK2G NBL N3D	5B20K34618			•
6	MB C 80NT I5-6200 WIN2G NBL N3D	5B20K34614			•
6	MB C 80NT I5-6200 NOK4G NBL N3D	5B20K34606			•
6	MB C 80NT I5-6200 WIN4G NBL N3D	5B20K34601			•
6	MB C 80NT I7-6500 NOK 2G BL 3D	5B20K34596			•
6	MB C 80NT I7-6500 WIN 2G BL 3D	5B20K34591			•
6	MB C 80NT I7-6500 NOK 4G BL 3D	5B20K34586			•
6	MB C 80NT I7-6500 WIN 4G BL 3D	5B20K34654			•
6	MB C 80NT I7-6500 NOK 2G NBL 3D	5B20K34627			•
6	MB C 80NT I7-6500 WIN 2G NBL 3D	5B20K34646			•
6	MB C 80NT I7-6500 NOK 4G NBL 3D	5B20K34638			•
6	MB C 80NT I7-6500 WIN 4G NBL 3D	5B20K34626			•
6	MB C 80NT I7-6500 NOK 2G BL N3D	5B20K34648			•
6	MB C 80NT I7-6500 WIN 2G BL N3D	5B20K34642			•
6	MB C 80NT I7-6500 NOK 4G BL N3D	5B20K34632			•
6	MB C 80NT I7-6500 WIN 4G BL N3D	5B20K34621			•
6	MB C 80NT I7-6500 NOK2G NBL N3D	5B20K34633			•
6	MB C 80NT I7-6500 WIN2G NBL N3D	5B20K34622			•
6	MB C 80NT I7-6500 NOK4G NBL N3D	5B20K34615			•
6	MB C 80NT I7-6500 WIN4G NBL N3D	5B20K34609			•
6	MB C 80NT I3-6100 NOK UMA BL 3D	5B20K34607			•
6	MB C 80NT I3-6100 WIN UMA BL 3D	5B20K34649			•
6	MB C 80NT I3-6100 NOK UMA NBL3D	5B20K34643			•
6	MB C 80NT I3-6100 WIN UMA NBL3D	5B20K34635			•
6	MB C 80NT I3-6100NOK UMA BL N3D	5B20K34624			•
6	MB C 80NT I3-6100WIN UMA BL N3D	5B20K34617			•
6	MB C 80NT I3-6100NOKUMA NBL N3D	5B20K34611			•
6	MB C 80NT I3-6100WINUMA NBL N3D	5B20K34640			•
6	MB C 80NT I5-6200 NOK UMA BL 3D	5B20K34634			•
6	MB C 80NT I5-6200 WIN UMA BL 3D	5B20K34623			•
6	MB C 80NT I5-6200 NOK UMA NBL3D	5B20K34616			•
6	MB C 80NT I5-6200 WIN UMA NBL3D	5B20K34610			•
6	MB C 80NT I5-6200NOK UMA BL N3D	5B20K34604			•
6	MB C 80NT I5-6200WIN UMA BL N3D	5B20K34600			•
6	MB C 80NT I5-6200NOKUMA NBL N3D	5B20K34595			•
6	MB C 80NT I5-6200WINUMA NBL N3D	5B20K34590			•
6	MB C 80NT I7-6500 NOK UMA BL 3D	5B20K34587			•
6	MB C 80NT I7-6500 WIN UMA BL 3D	5B20K34584			•
6	MB C 80NT I7-6500NOK UMA NBL 3D	5B20K34652			•
6	MB C 80NT I7-6500WIN UMA NBL 3D	5B20K34653			•
6	MB C 80NT I7-6500NOK UMA BL N3D	5B20K34650			•
6	MB C 80NT I7-6500WIN UMA BL N3D	5B20K34644			•
6	MB C 80NT I7-6500NOKUMA NBL N3D	5B20K34636		•	
6	MB C 80NT I7-6500WINUMA NBL N3D	5B20K34628		•	

Table 5. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.	ideapad 500-14ISK	ideapad 500-15ISK
7	HLDS GUE0N 9.0mm internal DVD Rambo ODD	5DX0J46488		•	
7	PLDS DA-8A6SH 9.0mm Slim Tray Rambo ODD	5DX0F86404		•	
7	PSN UJ8HC 9.0mm Slim Tray Rambo ODD	5DX0G86787		•	
7	Z41 White Dummy ODD	SMC0H34065		•	
7	Z41 Red Dummy ODD	SMC0J23501		•	
7	Z41 Black Dummy ODD	SMC0J23502		•	
7	Dummy ODD C Z41-70 Black	5M20J31782	*	•	
7	Dummy ODD C Z41-70 White	5M20J31780		•	
7	HLDS GUE0N 9.0mm internal DVD Rambo ODD	5DX0J46488	**		•
7	PLDS DA-8A6SH 9.0mm Slim Tray Rambo ODD	5DX0F86404			•
7	PSN UJ8HC 9.0mm Slim Tray Rambo ODD	5DX0G86787			•
7	Z41 White Dummy ODD	SMC0H34065			•
7	Z41 Black Dummy ODD	SMC0J23502			•
7	Dummy ODD C Z51-70 Black	5M20J31783			•
7	Dummy ODD C Z51-70 White	5M20J31781			•
8	Thermal Module C Z41-70 UMA	5H40J23704		•	•
8	Thermal Module C Z41-70 DIS 25W	5H40J23741		•	•
9	IO Board C Z41-70	5C50J23629		•	•
10	ODD Board C Z51-70 BKL	5C50J23540			•
10	ODD Board C Z51-70 NBKL	5C50J23560			•
11	M471B5674QH0-YK0 2GB DDR3L 1600	11202451		•	•
11	HMT425S6CFR6A-PB 2GB DDR3L 1600	5M30G99881		•	•
11	RMT3190MN76F8F-1600 2GB DDR3L 1600	5M30J33428		•	•
11	MT4KTF25664HZ-1G6E1 2GB DDR3L 1600	11201967		•	•
11	M471B5173EB0-YK0 4GB DDR3L 1600	5M30G18425		•	•
11	HMT451S6BFR8A-PB/RD 4GB DDR3L 1600	11202706		•	•
11	RMT3170MN68F9F-1600 4GB DDR3L 1600	5M30G75129		•	•
11	MT8KTF51264HZ-1G6E1 4GB DDR3L 1600	11202125		•	•
11	M471B1G73EB0-YK0 8GB DDR3L 1600	5M30G18424		•	•
11	HMT41GS6BFR8A-PB/RD 8GB DDR3L 1600	11202707		•	•
11	RMT3160ME68FAF-1600 8GB DDR3L 1600	11202450		•	•
11	MT16KTF1G64HZ-1G6E1 8GB DDR3L 1600	11201304		•	•
12	Intel 3165 1x1AC+BT PCIE M.2 WLAN	SW10H24486	N	•	•
12	Cbt BCM43162 1x1AC+BT4.0 PCIE M.2 WLAN V2	SW10A11586		•	•
12	Cbt RTL8821AE 1x1AC+BT4.0 PCIE M.2 WLAN	SW10A11648		•	•
12	Ltn NFA435 1x1AC+BT4.0 PCIE M.2 WLAN	SW10A11641		•	•
13	ST500LT012 6G 7mm 5.4K 500G HDD	16200383		•	•
13	HTS545050A7E660 6G 7mm 5.4K 500G HDD	5H20H14223		•	•
13	MQ01ABF050 6G 7mm 5.4K 500G HDD	16200433		•	•
13	WD WD5000LPCX-24VHAT0	5H20J35762		•	•
13	ST1000LM024 6G 9.5mm 5.4K 1T HDD	16200385		•	•
13	HTS541010A9E660 6G 9.5mm 5.4K 1T HDD	16200400		•	•
13	TSB MQ01ABD100 6G 9.5mm 5.4K 1T HDD	16200429		•	•
13	WD10JPCX-24UE4T0 6G 9.5mm 5.4K 1T HDD	16200393		•	•
13	ST500LM000 7mm 500G+8G	5H20H24608		•	•
13	ST1000LM014 9.5mm 1T+8G	5H20H24607		•	•
13	Samsung MZYL128HCHP 2.5" 5mm 128GB SSD	5SD0H45117		•	•
13	Liteon CV1-DB256 256GB 2.5" SSD	5SD0J21064		•	•

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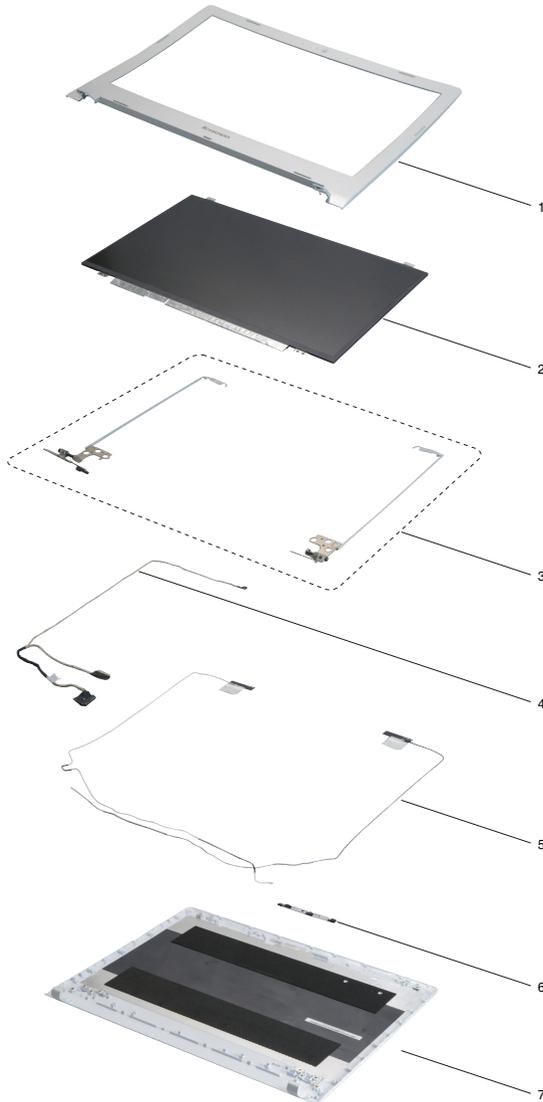
No.	FRU	FRU no.	CRU ID.	ideapad 500-14ISK	ideapad 500-15ISK
13	ST2000LM003 9.5mm 5400rpm	5H20K10149	N		•
13	Samsung MZYLN256HCHP 2.5"	5SD0H00097			•
14	Z41 JBL Blade N Speaker	5SB0H15127		•	
14	Speaker C Z41-70	5SB0J23681		•	
14	Z51/Z71 JBL Blade N Speaker	5SB0H15128			•
14	Speaker C Z51-70	5SB0J23726			•
15	Lower Case C Z41-70 Black	5CB0J23683		•	
15	Lower Case C Z41-70 White	5CB0J23776		•	
15	Lower Case C Z51-70 Black	5CB0J23702			•
15	Lower Case C Z51-70 White	5CB0J23737			•
—	AC adapter (see "AC adapters" on page 108).				

LCD FRUs

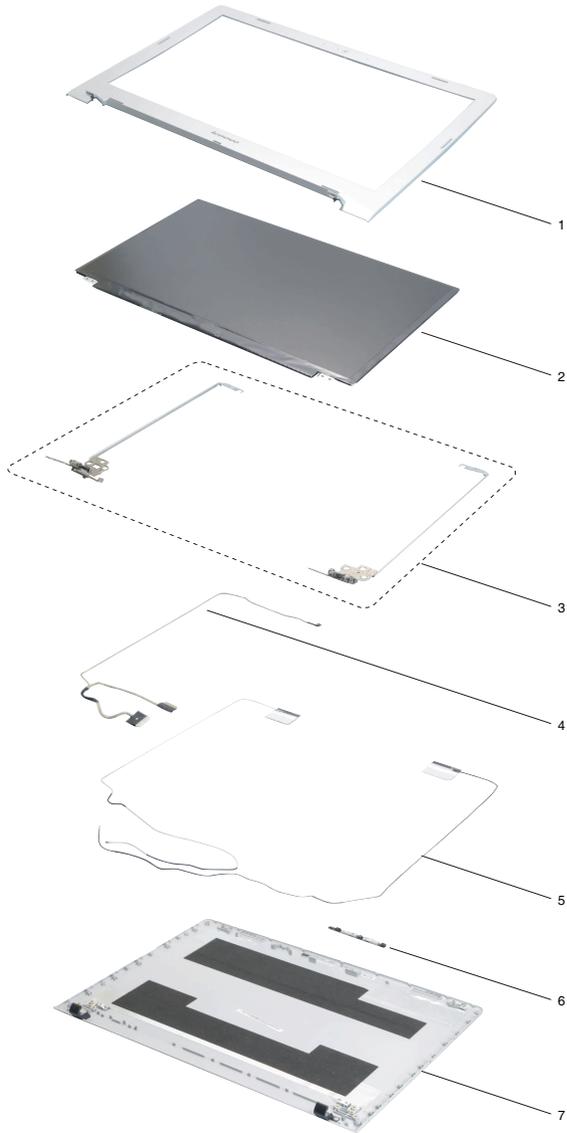
In Lenovo ideapad 500-14ISK/ideapad 500-15ISK, there are following types of LCDs.

- “14.0-in. HD LED”

ideapad 500-14ISK



- “15.6-in. HD LED”
ideapad 500-15ISK



* For Lenovo Z51-70, select models have a 3D camera. 3D camera cable, EPD cable and microphone board are different from the common models. Please refer to the actual product.

Table 6. Parts list—LCD FRUs

No.	FRU	FRU no.	CRU ID.	ideapad 500-14ISK	ideapad 500-15ISK
1	LCD Bezel C Z41-70	5B30J23663		•	
1	LCD Bezel C Z51-70	5B30J23838			•
1	LCD Bezel C Z51-70 3D	5B30J23547			•
2	Panel AUO B140HTN01.B FHD AG S NB	5D10H20139		•	
2	Panel IN N140HGE-EAA C3 FHDT AG S NB	5D10J33368		•	
2	Panel BO HB140FH1-401 V4.1 FHDT AG S	5D10H56752		•	
2	Panel LGD LP140WF6-SPB1 FHD AG S NB	5D10H34771		•	
2	Panel SDC LTN140HL05-401 FHD AG S NB	5D10H29268		•	
2	Panel AUO B156HTN03.8 FHD AG S NB	5D10H15380			•
2	Panel IN N156HGE-EAB C2 FHDT AG S NB	5D10J45879			•
2	Panel BOE HB156FH1-401 FHD AG S LED1 NB LCD	18201585			•
2	Panel AUO B156HTN03.9 0A FHD G S NB	5D10H15251			•
2	Panel IN N156HGE-EBB C2 FHDT G S NB	5D10J45878			•
2	Panel BOE HB156FH1-301 FHD G S LED1 NB LCD	18201673			•
2	Panel LGD LP156WF6-SPK1 FHD AG S NB	5D10H34772		•	
2	Panel SDC LTN156HL09-401 FHD AG S NB	5D10H29267			•
2	Panel BOE NV156FHM-N42 FHD AG S NB	5D10H32287			•
3	Hinge C Z41-70 L+R	5H50J23677		•	
3	Hinge C Z51-70	5H50J23638			•
3	Hinge C Z51-70 3D	5H50J23686			•
4	EDP Cable C Z41-70 DIS	5C10J23698		•	
4	EDP Cable C Z41-70 UMA	5C10J23721	N	•	
4	EDP Cable C Z51-70 DIS	5C10J23727			•
4	EDP Cable C Z51-70 UMA	5C10J23751			•
4	EDP Cable C Z51-70 DIS 3D	5C10J23775			•
4	EDP Cable C Z51-70 UMA 3D	5C10J23795			•
5	Antenna C Z41-70 MAIN+AUX	5A30J23770		•	•
5	Antenna C Z51-70 MAIN+AUX	5A30J23829			•
6	Camera BIS BNC416YTK HD NB camera	5C20G89272		•	•
6	Camera BIS BNC416YS7 HD NB camera	5C20G89268		•	•
6	Camera AVC HAA-6D0F03 HD NB camera	5C20G89276		•	•
6	Camera CCY CNFEH39 HD NB camera	5C20G89264		•	•
6	Camera Intel F200 3D camera	5C20H15126			•
6	Camera C Z41-70	5C20J23680		•	•
7	LCD Cover C Z41-70 White	5CB0J23746		•	
7	LCD Cover C Z41-70 Black	5CB0J23780		•	
7	LCD Cover C Z51-70 White	5CB0J23817			•
7	LCD Cover C Z51-70 Black	5CB0J23535			•
7	LCD Cover C Z51-70 White 3D	5CB0J23565			•
7	LCD Cover C Z51-70 Black 3D	5CB0J23597			•
*	Camera Cable C Z51-70 3D DIS	5C10J23567			•
*	Camera Cable C Z51-70 3D UMA	5C10J23592			•
*	MIC Board C Z51-70 L+R	5C50J23706			•

* For Z51-70 only.

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Keyboard

Table 7. Parts list—Keyboard

Language		P/N	CRU ID.	
ideapad 500-14ISK	Chicony Normal	English	5N20H03103	**
		U.K. English	5N20H03076	
		Italian	5N20H03018	
		Spanish	5N20H02957	
		Turkish	5N20H03078	
		Thai	5N20H03019	
		Portuguese	5N20H02958	
		Latin	5N20H02966	
		Canadian English&French	5N20H03089	
		Korean	5N20H03029	
		Traditional Chinese	5N20H02972	
		Russian	5N20H03092	
		French	5N20H03030	
		German	5N20H02993	
		Arabic	5N20H03114	
		Brazilian	5N20H03053	
		Japanese	5N20H02997	
		Dutch	5N20H03116	
		Greek	5N20H03055	
		Hebrew	5N20H03000	
		Hungarian	5N20H03120	
		Four Nordic countries	5N20H03058	
		Belgian	5N20H03002	
		Icelandic	5N20H03122	
		Slovenian	5N20H03063	
		Swiss	5N20H03037	
		International English	5N20H02977	
	Czechoslovakian	5N20H03100		
	Bulgarian	5N20H03041		
	Indian	5N20H02982		
	French-Arabic	5N20H31158		
	Liteon Normal	English	5N20H03008	
		U.K. English	5N20H03125	
Italian		5N20H03065		
Spanish		5N20H03009		
Turkish		5N20H03129		
Thai		5N20H03070		
Portuguese		5N20H03013		
Latin		5N20H03132		
Canadian English&French		5N20H03073		
Korean		5N20H03016		
Traditional Chinese		5N20H03135		
Russian		5N20H03077		

Table 7. Parts list—Keyboard (continued)

Language		P/N	CRU ID.	
ideapad 500-14ISK	Liteon Normal	French	5N20H03020	**
		German	5N20H02959	
		Arabic	5N20H03081	
		Brazilian	5N20H03023	
		Japanese	5N20H02961	
		Dutch	5N20H02968	
		Greek	5N20H03090	
		Hebrew	5N20H03031	
		Hungarian	5N20H02973	
		Four Nordic countries	5N20H03095	
		Belgian	5N20H03036	
		Icelandic	5N20H03022	
		Slovenian	5N20H02960	
		Swiss	5N20H03085	
		International English	5N20H03028	
		Czechoslovakian	5N20H02969	
		Bulgarian	5N20H03091	
	Indian	5N20H03039		
	French-Arabic	5N20H31187		
	English	5N20H02965		
	U.K. English	5N20H03084		
	Italian	5N20H03024		
	Spanish	5N20H02962		
	Turkish	5N20H03086		
	Thai	5N20H03027		
	Portuguese	5N20H02964		
	Latin	5N20H03111		
	Canadian English&French	5N20H03052		
	Korean	5N20H02996		
	Traditional Chinese	5N20H03115		
	Russian	5N20H03057		
	French	5N20H02999		
	German	5N20H03119		
	Arabic	5N20H03056		
	Brazilian	5N20H02998		
	Dutch	5N20H03121		
Greek	5N20H03062			
Hebrew	5N20H03003			
Hungarian	5N20H02985			
Four Nordic countries	5N20H03106			
Belgian	5N20H03047			
Icelandic	5N20H02986			
Slovenian	5N20H02967			
Swiss	5N20H03087			
International English	5N20H03064			
	Sunrex Normal			

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Table 7. Parts list—Keyboard (continued)

Language		P/N	CRU ID.		
ideapad 500-14ISK	Sunrex Normal	Czechoslovakian	5N20H03007	**	
		Bulgarian	5N20H03126		
		Indian	5N20H03066		
		French-Arabic	5N20H31167		
	Chicony Backlight	English	5N20H02980		
		English (for USA)	5N20H03101		
		U.K. English	5N20H03043		
		Italian	5N20H02990		
		Spanish	5N20H03112		
		Turkish	5N20H03054		
		Thai	5N20H03001		
		Portuguese	5N20H03123		
		Latin	5N20H02975		
		Canadian English&French	5N20H03097		
		Korean	5N20H03083		
		Traditional Chinese	5N20H03026		
		Russian	5N20H02971		
		French	5N20H03094		
		German	5N20H03035		
		Arabic	5N20H02978		
		Brazilian	5N20H03099		
		Japanese	5N20H03042		
		Dutch	5N20H02988		
		Greek	5N20H03108		
		Hebrew	5N20H03049		
		Hungarian	5N20H02992		
		Four Nordic countries	5N20H03118		
		Belgian	5N20H03061		
		Icelandic	5N20H03006		
		Slovenian	5N20H03128		
		Swiss	5N20H03068		
		International English	5N20H03011		
		Czechoslovakian	5N20H03131		
		Bulgarian	5N20H03072		
		Indian	5N20H03015		
		French-Arabic	5N20H31161		
		Sunrex Backlight	English		5N20H03134
			English (for USA)		5N20H03075
	U.K. English		5N20H03082		
	Italian		5N20H03025		
	Spanish		5N20H02970		
	Turkish		5N20H03093		
Thai	5N20H03034				
Portuguese	5N20H02979				
Latin	5N20H03102				

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Table 7. Parts list—Keyboard (continued)

Language		P/N	CRU ID.
ideapad 500-14ISK	Sunrex Backlight	Canadian English&French	5N20H03045
		Korean	5N20H02989
		Traditional Chinese	5N20H03110
		Russian	5N20H03051
		French	5N20H02995
		German	5N20H03117
		Arabic	5N20H03060
		Brazilian	5N20H03004
		Dutch	5N20H03124
		Greek	5N20H03067
		Hebrew	5N20H03010
		Hungarian	5N20H03130
		Four Nordic countries	5N20H03071
		Belgian	5N20H03014
		Icelandic	5N20H02955
		Slovenian	5N20H03080
		Swiss	5N20H03033
		International English	5N20H02976
		Czechoslovakian	5N20H03098
		Bulgarian	5N20H03040
Indian	5N20H02983		
French-Arabic	5N20H31182		
ideapad 500-15ISK	Chicony Normal	English	5N20H03515
		U.K. English	5N20H03500
		Italian	5N20H03450
		Spanish	5N20H03563
		Turkish	5N20H03521
		Thai	5N20H03475
		Portuguese	5N20H03512
		Latin	5N20H03466
		Canadian English&French	5N20H03425
		Korean	5N20H03536
		Traditional Chinese	5N20H03490
		Russian	5N20H03445
		French	5N20H03556
		German	5N20H03532
		Arabic	5N20H03484
		Brazilian	5N20H03439
		Japanese	5N20H03548
		Dutch	5N20H03504
		Greek	5N20H03457
		Hebrew	5N20H03416
Hungarian	5N20H03525		
Four Nordic countries	5N20H03478		
Belgian	5N20H03434		

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Table 7. Parts list—Keyboard (continued)

Language		P/N	CRU ID.	
ideapad 500-15ISK	Chicony Normal	Icelandic	5N20H03546	**
		Slovenian	5N20H03502	
		Swiss	5N20H03489	
		International English	5N20H03444	
		Czechoslovakian	5N20H03555	
		Bulgarian	5N20H03509	
		Indian	5N20H03469	
		French-Arabic	5N20H31171	
	Sunrex Normal	English	5N20H03427	
		U.K. English	5N20H03538	
		Italian	5N20H03491	
		Spanish	5N20H03446	
		Turkish	5N20H03557	
		Thai	5N20H03510	
		Portuguese	5N20H03465	
		Latin	5N20H03441	
		Canadian English&French	5N20H03552	
		Korean	5N20H03507	
		Traditional Chinese	5N20H03460	
		Russian	5N20H03419	
		French	5N20H03529	
		German	5N20H03482	
		Arabic	5N20H03436	
		Brazilian	5N20H03551	
		Japanese	5N20H03506	
		Dutch	5N20H03458	
		Greek	5N20H03415	
		Hebrew	5N20H03562	
		Hungarian	5N20H03519	
		Four Nordic countries	5N20H03470	
		Belgian	5N20H03433	
		Icelandic	5N20H03544	
		Slovenian	5N20H03497	
		Swiss	5N20H03479	
		International English	5N20H03437	
		Czechoslovakian	5N20H03547	
		Bulgarian	5N20H03503	
		Indian	5N20H03454	
		French-Arabic	5N20H31162	
		Darfon Normal	English	
	U.K. English		5N20H03420	
	Italian		5N20H03527	
	Spanish		5N20H03480	
	Turkish		5N20H03435	
	Thai		5N20H03545	

Table 7. Parts list—Keyboard (continued)

Language		P/N	CRU ID.	
ideapad 500-15ISK	Darfon Normal	Portuguese	5N20H03501	**
		Latin	5N20H03451	
		Canadian English&French	5N20H03412	
		Korean	5N20H03523	
		Traditional Chinese	5N20H03477	
		Russian	5N20H03513	
		French	5N20H03464	
		German	5N20H03424	
		Arabic	5N20H03534	
		Brazilian	5N20H03488	
		Japanese	5N20H03443	
		Dutch	5N20H03553	
		Greek	5N20H03508	
		Hebrew	5N20H03462	
		Hungarian	5N20H03422	
		Four Nordic countries	5N20H03531	
		Belgian	5N20H03522	
		Icelandic	5N20H03476	
		Slovenian	5N20H03428	
		Swiss	5N20H03539	
	International English	5N20H03494		
	Czechoslovakian	5N20H03449		
	Bulgarian	5N20H03559		
	Indian	5N20H03514		
	Sunrex Backlight	English	5N20H03468	
		English (for USA)	5N20H03429	
		U.K. English	5N20H03540	
		Italian	5N20H03495	
		Spanish	5N20H03456	
		Turkish	5N20H03418	
		Thai	5N20H03530	
		Portuguese	5N20H03561	
		Latin	5N20H03518	
		Canadian English&French	5N20H03474	
Korean		5N20H03432		
Traditional Chinese		5N20H03543		
Russian		5N20H03499		
French		5N20H03453		
German	5N20H03414			
Arabic	5N20H03526			
Brazilian	5N20H03481			
Japanese	5N20H03438			
Dutch	5N20H03549			
Greek	5N20H03505			
Hebrew	5N20H03461			

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Table 7. Parts list—Keyboard (continued)

Language		P/N	CRU ID.
ideapad 500-15ISK	Sunrex Backlight	Hungarian	5N20H03423
		Four Nordic countries	5N20H03535
		Belgian	5N20H03487
		Icelandic	5N20H03455
		Slovenian	5N20H03417
		Swiss	5N20H03528
		International English	5N20H03492
		Czechoslovakian	5N20H03447
		Bulgarian	5N20H03560
		Indian	5N20H03517
		French-Arabic	5N20H31170
		Darfon Backlight	English
	English (for USA)		5N20H03486
	U.K. English		5N20H03442
	Italian		5N20H03554
	Spanish		5N20H03520
	Turkish		5N20H03473
	Thai		5N20H03431
	Portuguese		5N20H03542
	Latin		5N20H03498
	Canadian English&French		5N20H03452
	Korean		5N20H03413
	Traditional Chinese		5N20H03524
	Russian		5N20H03483
	French		5N20H03440
	German		5N20H03550
	Arabic		5N20H03511
	Brazilian		5N20H03467
	Japanese		5N20H03426
	Dutch		5N20H03537
	Greek		5N20H03493
	Hebrew		5N20H03448
	Hungarian		5N20H03558
	Four Nordic countries		5N20H03516
	Belgian		5N20H03471
	Icelandic		5N20H03430
	Slovenian		5N20H03541
	Swiss		5N20H03496
	International English		5N20H03459
	Czechoslovakian		5N20H03421
	Bulgarian		5N20H03533
	Indian	5N20H03485	
French-Arabic	5N20H31192		

**

Miscellaneous parts

Table 8. Parts list—Miscellaneous parts

FRU	FRU no.	CRU ID.	ideapad 500-14ISK	ideapad 500-15ISK	
System miscellaneous parts:					
• (a) ODD Bracket C Z41-70	5B40J23805	N	•		
• (a) ODD Bracket C Z51-70	5B40J23769			•	
• (b) ODD Bezel C Z41-70 Black	5B30J23828		•		
• (b) ODD Bezel C Z41-70 White	5B30J23551		•		
• (b) ODD Bezel C Z51-70 Black	5B30J23792			•	
• (b) ODD Bezel C Z51-70 White	5B30J23823			•	
• (c) RJ45 Door C Z41-70 Black	5D30J23596		•		
• (c) RJ45 Door C Z41-70 White	5D30J23626		•		
• (c) RJ45 Door C Z51-70 Black	5D30J23583			•	
• (c) RJ45 Door C Z51-70 White	5D30J23611			•	
• (d) HDD Bracket C Z41-70	5B40J23575		•	•	
Cable miscellaneous parts:					
• (e) Power Board Cable C Z41-70	5C10J23578		•		
• (e) Power Board Cable C Z51-70	5C10J23816			•	
• (f) IO Board Cable C Z41-70	5C10J23559		•		
• (f) IO Board Cable C Z51-70	5C10J23793			•	
• (g) DC-IN Cable C Z41-70 DIS	5C10J23812		•		
• (g) DC-IN Cable C Z41-70 UMA	5C10J23539		•		
• (g) DC-IN Cable C Z51-70 DIS	5C10J23750			•	
• (g) DC-IN Cable C Z51-70 UMA	5C10J23774		•		
Note: Italicized letters in parentheses are references to the exploded view in "Overall" on page 84.					

AC adapters

Table 9. Parts list—3-pin AC adapters

FRU	FRU no.	CRU ID.	ideapad 500-14ISK	ideapad 500-15ISK
Delta ADLX45NDC3A 20V2.25A adap DOE	5A10H03911	*	•	•
Liteon ADLX45DLC3A 20V2.25A adap DOE	5A10H03910		•	•
Chicony ADLX45NCC3A 20V2.25A adap DOE	5A10H03912		•	•
Acbel ADLX45NAC3A 20V2.25A adap	5A10K02213		•	•
Liteon ADLX45DLC3A 20V2.25A adap DOE	5A10H03910		•	•
Chicony ADLX45NCC3A 20V2.25A adap DOE	5A10H03912		•	•
Delta ADLX45NDC3A 20V2.25A adap DOE	5A10H03911		•	•
Liteon ADLX45DLC3A 20V2.25A adap DOE	5A10H03910		•	•
Chicony ADLX45NCC3A 20V2.25A adap DOE	5A10H03912		•	•
Chicony ADLX65NCC3A 20V3.25A adap(CMN)	36200611		•	•
Liteon ADLX65NLC3A 20V3.25A adap(CMN)	36200607		•	•
Delta ADLX65NDC3A 20V3.25A adapter	36200249		•	•
Delta ADLX65NDC3A 20V3.25A BIS	5A10J46692		•	•
Liteon ADLX65NLC3A 20V3.25A AD BIS	5A10J75114		•	•
Chicony ADLX65NCC3A 20V3.25A AD BIS	5A10J75111		•	•
Delta ADLX65NDC3A 20V3.25A BIS	5A10J46692		•	•
Liteon ADLX65NLC3A 20V3.25A AD BIS	5A10J75114		•	•
Chicony ADLX65NCC3A 20V3.25A AD BIS	5A10J75111		•	•

Screws

Table 10. Parts list—screws

FRU	FRU no.	CRU ID.	ideapad 500-14ISK	ideapad 500-15ISK
Screw Pack C Z41-70	5S10J23636	N	•	
Screw Pack C Z51-70	5S10J23771			•

Power cords

A Lenovo power cord for a specific country or region is usually available only in that country or region:

Table 11. Parts list—3-pin power cords

Region	P/N	CRU ID.	ideapad 500-14ISK	ideapad 500-15ISK
CCC 3PIN • LINETEK PC323+RVV300/300+LS15 1m	145000600		•	•
Argentina 3PIN • LINETEK LS15+H03VV-F+LP39 1m	145000599		•	•
Danmark 3PIN • LINETEK LS15+H03VV-F+LP-38 1m	145000598		•	•
Switzerland 3PIN • LINETEK LS15+H03VV-F+LP-37 1m	145000597		•	•
Brazil 3PIN • LINETEK LS15 H03VV-F LP26A 1m	145000596		•	•
Israel 3PIN • LINETEK LS15+H03VV-F+LP-41 1m	145000595		•	•
UL 3PIN • LINETEK LP-30B + SPT-2 + LS15 1m	145000594		•	•
UK 3PIN • LINETEK LP-61L+ H03VV-F+ LS15 1m	145000593		•	•
Indian 3PIN • LINETEK PE-361+ H05VV-F+ LS15 1m	145000592		•	•
Italy 3PIN • LINETEK LS15+H03VV-F+PE-336 1m	145000591		•	•
Korea 3PIN • LINETEK LS15+H05VV-F+LP-E04A 1m	145000590	*	•	•
Australia 3PIN • LINETEK LS15+H03VV-F+LP-23A 1m	145000589		•	•
Taiwan3PIN • LINETEK LS15+VCTF+LP-53 1m	145000588		•	•
Japan 3PIN • LINETEK LS15+VCTF+LP-54 1m	145000587		•	•
Africa 3PIN • LINETEK LS15+H03VV-F+PE-364 1m	145000586		•	•
CE 3PIN • LINETEK LP-34+H03VV-F + LS15 1m	145000585		•	•
CCC 3PIN • Longwell LSG-31+RVV300/300+LS-18 1m	145000568		•	•
Argentina 3PIN • Longwell LP-24+H03VV-F+LS-18 1m	145000567		•	•
Danmark 3PIN • Longwell LP-40+H03VV-F+LS-18 1m	145000566		•	•
Switzerland 3PIN • Longwell LP-37+H03VV-F+LS-18 1m	145000565		•	•
Brazil 3PIN • Longwell LP-46+H03VV-F+LS-18 1m	145000564		•	•

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Table 11. Parts list—3-pin power cords (continued)

Region	P/N	CRU ID.	ideapad 500-14ISK	ideapad 500-15ISK
Israel 3PIN • Longwell LP-41+H03VV-F+LS-18 1m	145000563	*	•	•
UL 3PIN • Longwell LP-30B+SPT-2 18AWG+LS-18 1m	145000562		•	•
UK 3PIN • Longwell LP-61L+H03VV-F+LS-18 1m	145000561		•	•
Indian 3PIN • Longwell LP-67+BIS+LS-18 1m	145000560		•	•
Italy 3PIN • Longwell LP-22+H03VV-F+LS-18 1m	145000559		•	•
Korea 3PIN • Longwell LP-486+KTLH03VV-F+LS-5 1m	145000558		•	•
Australia 3PIN • Longwell LP-23A+LFC-3R+LS-18 1m	145000557		•	•
Taiwan3PIN • Longwell LP-71+VCTF+LS-33 1m	145000556		•	•
Japan 3PIN • Longwell LP-54+VCTF+LS-18 1m	145000555		•	•
Africa 3PIN • Longwell LP-39+H03VV-F+LS-18 1m	145000554		•	•
CE 3PIN • Longwell LP-34A+H03VV-F+LS-18 1m	145000553		•	•
CCC 3PIN • VOLEX GB10S3+RVV 300/500+VAC5S 1m	145000538		•	•
UL 3PIN • Volex US15S3+SPT-2 +VAC5S 1m	145000537		•	•
UK 3PIN • VOLEX MP5004+H03VV-F+VAC5S 1m	145000605		•	•
Switzerland 3PIN • VOLEX MP232+H03VV-F+VAC5S 1m	145000524		•	•
Italy 3PIN • VOLEX IT10S3+H03VV-F+VAC5S 1m	145000535		•	•
Denmark 3PIN • VOLEX MP233D+H03VV-F+VAC5S 1m	145000534		•	•
Korea 3PIN • VOLEX M2511+KETI IEC+VAC5S 1m	145000533		•	•
Australia 3PIN • VOLEX AU10S3+H03VV-F+VAC5S 1m	145000532		•	•
Taiwan3PIN • VOLEX TW15CS3+VCTF+VAC5S 1m	145000531		•	•
Japan 3PIN • VOLEX VAC5S+VCTF+M755 1m	145000530		•	•

Table 11. Parts list—3-pin power cords (continued)

Region	P/N	CRU ID.	ideapad 500-14ISK	ideapad 500-15ISK
Argentina 3PIN • VOLEX VA2073+H03VV-F+VAC5S 1m	145000528	*	•	•
Brazil 3PIN • VOLEX CH10S3+H03VV-F+VAC5S 1m	145000527		•	•
Israel 3PIN • VOLEX SI16S3+H03VV-F+VAC5S 1m	145000526		•	•
CE 3PIN • VOLEX M2511+H03VV-F+VAC5S 1m	145000525		•	•
UK • lux 0031+H03VV-F 0.75/3C+0011 1m	145500000		•	•
Europe • lux 0033+H03VV-F 0.75/3C+0011 1m	145500001		•	•
US • lux 0014+SPT-2 60°C 18/3C+0016 1m	145500002		•	•
China • lux 0036+RVV 300/300 0.75/3C+0002 1m	145500003		•	•
Indian • lux 0046+IS694 0.75/3C+0011 1m	145500004		•	•
Japan • lux 0018(E)+VCTF 0.75/3C+0021 1m	145500005		•	•
Australia • lux 0038+H03VV-F 0.75/3C+0011 1m	145500006		•	•
Taiwan • lux 0019+VCTF 0.75/3C+0021 1m	145500007		•	•
Korea • lux 0033+H03VV-F 0.75/3C+0011 1m	145500008		•	•
Italy • lux 0029+H03VV-F 0.75/3C+0011 1m	145500009		•	•
South Africa • lux 0044+H03VV-F 0.75/3C+0011 1m	145500010		•	•
Brazil • lux 0034+H03VV-F 0.75/3C+0011 1m	145500011		•	•
Israel • lux 0041+H03VV-F 0.75/3C+0011 1m	145500012		•	•
Switzerland • lux 0027+H03VV-F 0.75/3C+0011 1m	145500013		•	•
Denmark • lux 0048+H03VV-F 0.75/3C+0011 1m	145500014		•	•
Argentina • lux 0040+H03VV-F 0.75/3C+0011 1m	145500015		•	•

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