

lenovo

***Lenovo B5400/M5400/
M5400 Touch***

***Hardware
Maintenance
Manual***

A faint, light gray background graphic of a hand holding a pen, positioned diagonally across the page. The hand is on the left, and the pen is pointing towards the top right. The lines are thick and stylized.

Notes:

- Before using this information and the product it supports, be sure to read the general information under “Notices” on page 92.
- This manual applies to the following models: Lenovo B5400/M5400/M5400 Touch. The illustrations used in this manual are for Lenovo M5400 unless otherwise stated.

First Edition (Jul. 2013)

© Copyright Lenovo 2013. All rights reserved.

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

© 2013 Lenovo

Contents

About this manual	iv	1050 Hard disk drive and solid state disk	39
Safety information	1	1060 PCI Express Mini Card for wireless LAN	42
General safety	2	1070 DIMM	44
Electrical safety	3	1080 Keyboard	45
Safety inspection guide	5	1090 Keyboard bezel	47
Handling devices that are sensitive to electrostatic discharge	6	1100 USB board and function board	51
Grounding requirements	6	1110 System board	53
Safety notices: multilingual translations	7	1120 Fan assembly and heat sink assembly	56
Laser compliance statement	14	1130 CPU	58
Important service information	16	1140 LCD unit	59
Strategy for replacing FRUs	16	1150 LCD front bezel (B5400/M5400)	61
Strategy for replacing a hard disk drive	17	1160 LCD panel, LCD cable, antenna assembly, and hinges (B5400/M5400)	63
Important notice for replacing a system board	17	1170 LCD module, LCD cable, and hinges (M5400 Touch)	66
Important information about replacing RoHS compliant FRUs	18	1180 Integrated camera	68
General checkout	19	Locations	69
What to do first	20	Front view and right-side view	69
Power system checkout	21	Bottom and Left-side view	71
Checking the AC adapter	21	Parts list	72
Checking operational charging	21	Overall	73
Checking the battery pack	22	LCD FRUs	77
Related service information	23	Keyboard	81
Restoring the factory contents by using OneKey Recovery	23	Miscellaneous parts	85
Restore of factory default	23	Screws	85
Passwords	25	AC adapters	86
Power-on password	25	Power cords	87
Hard-disk password	25	Notices	92
Supervisor password	25	Trademarks	93
Power management	26		
Screen blank state	26		
Putting the computer to sleep or shutting it down	26		
Putting your computer to sleep	26		
Shutting down the computer	27		
Lenovo B5400/M5400/M5400 Touch	28		
Specifications	28		
Status indicators	30		
Fn key combinations	31		
FRU replacement notices	32		
Screw notices	32		
Removing and replacing an FRU	33		
1010 Battery pack	34		
1020 Base cover	35		
1030 Backup battery	37		
1040 Optical drive	38		

About this manual

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

Lenovo B5400/M5400/M5400 Touch

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 B5400/M5400/M5400 Touch computer:

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

General safety

Follow these rules below to ensure general safety:

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

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

Electrical safety

Observe the following rules when working on electrical equipments.

Important:

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

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

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

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

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

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

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

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

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

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

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

Safety notice 2

DANGER

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

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

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

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

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

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

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

Safety notice 3**⚠ DANGER**

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

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

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

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

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

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

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

Safety notice 4

DANGER

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

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

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

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

La batteria di supporto e una batteria al litio e può 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 incinere ni exponga el contenido de sus celdas al agua. Deséchela tal como dispone la normativa local.

Safety notice 5

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

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

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

אם מסך הנביש הנוזלי (LCD) נשבר והנוזל מתוך המסך בא במגע עם עיניים או ידיים, 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 מוארזת 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 מטריז הסוללה, ואז לנתק כבלי חיבור אחרים אם יש כאלה.

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

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

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

Laser compliance statement

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

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

CAUTION

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

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

凡未在这里指明的任何控制用法、调整、行为，都会导致严重后果。

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

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

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

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

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

Použitie 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，请勿盯视激光光束，请勿直接查看视觉仪器，并且避免直接接触在激光光束之中。

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

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

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

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

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

Keď je laserová jednotka otvorená. Vyhňte sa priamemu pohľadu a neľadte priamo s optickými nástrojmi do lúča a vyhňte sa priamemu vystaveniu lúčov.

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

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

Important service information

This chapter presents the following important service information:

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

Important:

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

<http://support.lenovo.com>.

Strategy for replacing FRUs

Before replacing parts:

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

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

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

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

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

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

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

Strategy for replacing a hard disk drive

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

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

Important notice for replacing a system board

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

Attention: When handling a system board:

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

Important information about replacing RoHS compliant FRUs

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

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

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

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

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

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

General checkout

This chapter presents the following information:

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

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

Important notes:

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

What to do first

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

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

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

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

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

The following are not covered under warranty:

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

The following symptoms might indicate damage caused by nonwarranted activities:

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

Power system checkout

To verify a symptom, follow the steps below:

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

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

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

Checking the AC adapter

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

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

To check the AC adapter, follow the steps below:

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



Pin	Voltage (V DC)
1	+20
2	0

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

3. If the voltage is not correct, replace the AC adapter.
4. If the voltage is acceptable, do the following:
 - Replace the system board.
 - If the problem persists, go to “Lenovo B5400/M5400/M5400 Touch” on page 28.

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 25
- “Power management” on page 26

Restoring the factory contents by using OneKey Recovery

Restore of factory default

This topic provides information about the recovery programs that are available for you to recover the computer settings.

- Windows 7: The following recovery programs are available on computers with a Windows 7 operating system:

- OneKey® Recovery Pro

The OneKey Recovery Pro program enables you to back up all your hard disk drive contents, including the operating system, data files, software programs, and personal settings. You can designate where the OneKey Recovery Pro program stores the backup. After you have backed up the contents on the hard disk drive, you can restore the complete contents of the hard disk drive, restore only the desired files, or restore only the Windows operating system and applications.

- Product Recovery

The Product Recovery program enables you to restore the computer settings to the factory default settings through recovery media.

Attention: When you use the Product Recovery program to restore the computer settings, all the data you have stored on the hard disk drive will be deleted and the computer settings will be restored to the factory default settings. During the restoring process, you will be given the option to save one or more files currently on the hard disk drive to other media before the data is deleted.

- Windows 8: The preinstalled Windows recovery program enables you to do the following:

- Refresh the computer without losing personal files
- Restore the computer to the factory default settings

Attention: When you use the Windows recovery program to restore the computer settings, all the data you have stored on the hard disk drive will be deleted and the computer will be restored to the factory default settings. To avoid data loss, back up your data in advance.

- Configure the advanced startup options

The advanced startup options enable you to do the following:

- Change the startup settings of the Windows operating system
- Restore the Windows operating system from a system image
- Change the startup settings of the Windows operating system

For more information about the recovery solutions, refer to the help information system of the programs.

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 supervisor 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.

Supervisor password

A supervisor password protects the system information stored in the BIOS. The user must enter the supervisor password to get access to the BIOS and change the system configuration.


Attention: If you forget the password, there is no service procedure to reset the password. The system board must be replaced for a scheduled fee.


Power management

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

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

Screen blank state

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



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

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:

- **For the Windows 7 operating system:**
 - Click **Start**. Then select **Sleep** from the **Shut down** menu options.
 - Press **Fn+F1**.
- **For the Windows 8 operating system:**
 - Move your cursor to the lower-right corner of the screen to open the charms bar, then select **Settings**  → **Power**  → **Sleep**.
 - Press **Fn+F1**.

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

Shutting down the computer

If you are not going to use your computer for a long time, shut it down.

To shut down your computer:

- **For the Windows 7 operating system:** Click **Start** → **Shut down**.
- **For the Windows 8 operating system:**

Move your cursor to the lower-right corner of the screen to open the charms bar, then select **Settings**  → **Power**  → **Shut down**.

Lenovo B5400/M5400/M5400 Touch

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

- “Specifications” on page 28
- “Status indicators” on page 30
- “Fn key combinations” on page 31
- “FRU replacement notices” on page 32
- “Removing and replacing an FRU” on page 33
- “Locations” on page 69
- “Parts list” on page 72

Specifications

The following table lists the specifications of the Lenovo B5400/M5400/M5400 Touch

Table 1. Specifications

Feature	Description
Processor	To view the processor information of your computer, do either of the following: <ul style="list-style-type: none"> • For the Windows 7 operating system: Click Start, right-click Computer. Then click Properties. • For the Windows 8 operating system: From the desktop, move the cursor to the top-right or bottom-right corner of the screen to display the charms. Then click Settings PC info.
Display	<ul style="list-style-type: none"> • 15.6", 1366 × 768 pixels
Standard memory	<ul style="list-style-type: none"> • DDR3L-1600MHz SODIMM x 2 (max 16 GB)
Hard disk drive	<ul style="list-style-type: none"> • 2.5-inch, 7 mm/9.5 mm SATA • 320 GB / 500 GB / 750 GB / 1TB 5400 rpm
Optical drive	<ul style="list-style-type: none"> • 2.5" External 9.5 mm (on select models)
I/O port	<ul style="list-style-type: none"> • Combo audio jack × 1 • RJ45 × 1 • HDMI port × 1 • USB 2.0 port × 1, USB 3.0 port × 2 • 4 in 1 slot × 1
Audio	<ul style="list-style-type: none"> • 1/8" Combo audio jack • Integrated Speakers Stereo • Internal analog Microphone × 1 (B5400)
Ethernet (on the system board)	<ul style="list-style-type: none"> • 100/1000M
PCI Express Mini Card slot	<ul style="list-style-type: none"> • 2 slots
Bluetooth wireless	<ul style="list-style-type: none"> • Combined in combo card

Table 1. Specifications (continued)

Feature	Description
Keyboard	<ul style="list-style-type: none">• 6 Row, Lenovo Keyboard
Touch pad	<ul style="list-style-type: none">• Multi-touch type
Integrated camera	<ul style="list-style-type: none">• 0.3 MP or HD 720P (B5400)• Integrated 720P (M5400/M5400 Touch)
Battery	<ul style="list-style-type: none">• 6 cell, 2.2 Ah
AC adapter	<ul style="list-style-type: none">• 20 V, 65 W or 90 W
Pre-installed operating system	<ul style="list-style-type: none">• Win7 or Win8/Win8.1

Status indicators

The system status indicators below show the computer status:



Table 2. Status indicators

Indicator	Meaning
<p>■</p> <p>Power and battery status indicator</p> <p>⏻</p>	<ul style="list-style-type: none"> • Green: The battery has a charge between 20% and 100% and the computer is powered on. • Blinking green: The battery has a charge between 20% and 100% and the computer is in sleep or hibernate mode. • Amber: The battery has a charge of 20% or less and the computer is powered on. • Blinking amber: The battery has a charge of 20% or less and the AC power adapter is connected to the computer. • Off: The battery is detached or the computer is powered off.
<p>■</p> <p>Hard disk drive indicator</p> <p>💾</p>	<p>On: the hard disk drive is reading or writing data.</p>

Fn key combinations

The following table describes the functions of Fn key combinations.

Table 3. Function key combinations

Fn+Esc:	<ul style="list-style-type: none"> On the Windows 7 operating system: Press Fn+Esc to open the camera and audio settings window. The camera preview is turned on. Change the camera and audio settings as desired. On the Windows 8 operating system: Press Fn+Esc to enable or disable the camera.
Fn+F1:	Enters sleep mode.
Fn+F2:	Turns on/off the backlight of the LCD screen.
Fn+F3:	Opens the display device switch interface. Select this notebook or an external display.
Fn+F5:	Enables/Disables wireless devices.
Fn+F6:	Enables/Disables the touchpad and touchpad buttons.
Fn+F9:	Starts/Pauses playback of Windows Media Player.
Fn+F10:	Stops playback of Windows Media Player.
Fn+F11:	Skips to the previous track.
Fn+F12:	Skips to the next track.
Fn+PrtSc:	Activates the system request.
Fn+Insert:	Enables/Disables the scroll lock.
Fn+Home:	Activates the pause function.
Fn+End:	Activates the break function.
Fn+ ↑ / ↓:	Increases/Decreases display brightness.
Fn+ → / ←:	Increases/Decreases sound volume.

FRU replacement notices

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

Screw notices

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

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

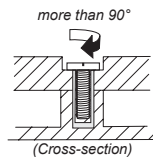
Do the following when you service this machine:

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

Tighten screws as follows:

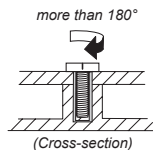
- **Plastic to plastic**

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



- **Logic card to plastic**

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



- **Torque driver**

If you have a torque screwdriver, refer to the "Torque" column for each step.

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

Removing and replacing an FRU

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

1. Do not attempt to service any computer unless you have been trained and certified. An untrained person runs the risk of damaging parts.
2. Before replacing any FRU, review "FRU replacement notices" on page 32.
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 69.
8. When replacing an FRU, use the correct screw as shown in the procedures.

DANGER

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

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

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

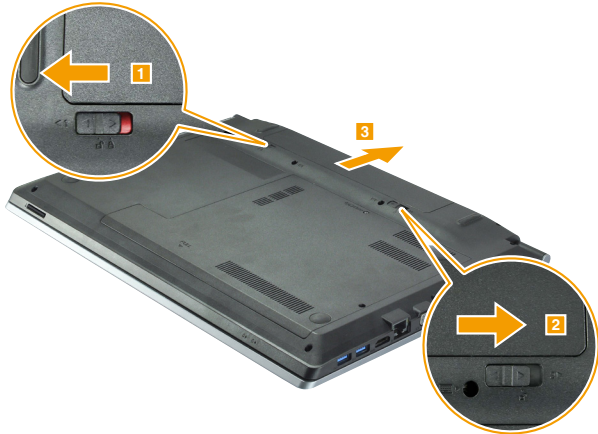
1010 Battery pack

⚠ DANGER

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

Figure 1. Removal steps of battery pack

Unlock the manual battery latch **1**. Holding the spring-loaded battery latch in the unlocked position **2**, remove the battery pack in the direction shown by the arrow **3**.



When installing: Install the battery pack along the slide rails of the slot. Then make sure that the battery release lever is in the locked position.

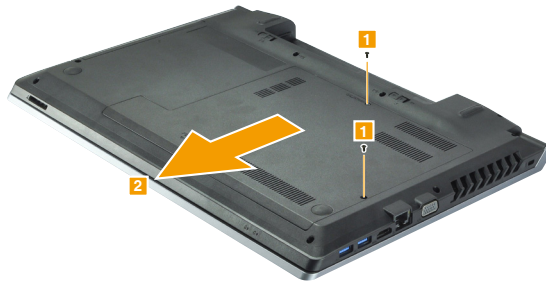
1020 Base cover

For access, remove this FRU:

- “1010 Battery pack” on page 34

Figure 2. Removal steps of base cover

Remove the screws **1**. Then remove the base cover **2**.



Step	Screw (quantity)	Color	Torque
1	M2 × 4 mm, flat-head, nylok-coated (2) Door to BASE	Black	1.85±0.15 kgf*cm

Note: Applying labels to the base cover

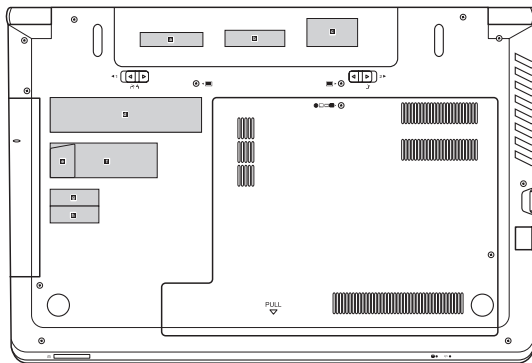
The new base cover FRU is shipped with a kit containing labels of several kinds. When you replace the base cover, you need to apply the following labels:

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

- a** Barcode label
- b** KCC label
- c** Indonesia D side label
- d** Rating label
- e** GML label
- f** COA label
- g** BT label
- h** WL 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 figure:



1030 Backup battery

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35

Figure 3. Removal steps of backup battery

Detach the backup battery connector in the direction shown by arrow **1**. Then remove the backup battery **2**.



1040 Optical drive

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35

Figure 4. Removal steps of optical drive

Remove the screw **■**. Pull the optical drive out in the direction shown by arrow **2**.



Step	Screw (quantity)	Color	Torque
■	M2 × 4 mm, flat-head, nylok-coated (1) ODD BKT to BASE	Black	1.85+/-0.15 kgf*cm

1050 Hard disk drive and solid state disk

For access, remove these FRUs in order:

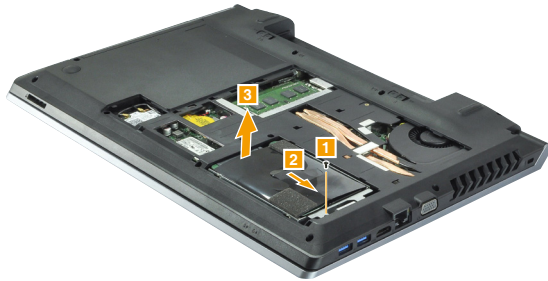
- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35

Attention:

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

Figure 5. Removal steps of hard disk drive and solid state disk

Remove the screw **■**. Detach the HDD connector and then remove the hard disk drive from the slot in the direction shown by arrows **2** and **3**.

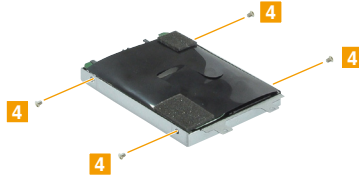


Step	Screw (quantity)	Color	Torque
■	M2 × 4 mm, flat-head, nylok-coated (1) HDD BKT to BASE	Black	1.85±/0.15 kgf•cm

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

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

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



Step	Screw (quantity)	Color	Torque
4	M3 × 4 mm, flat-head, nylok-coated (4) HDD BRKT to HDD	Sliver	3.0+/-0.3 kgf*cm

Remove the screw **5**.



Step	Screw (quantity)	Color	Torque
5	M2 × 3 mm, flat-head, nylok-coated (1) SSD to MB	Black	1.85+/-0.15 kgf*cm

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

Remove the solid state disk from the slot in the direction shown by arrow **6**.



1060 PCI Express Mini Card for wireless LAN

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35

Figure 6. Removal steps of PCI Express Mini Card for wireless LAN

Disconnect the two wireless LAN cables (black, white) **1**, and then remove the screw **2**.



In step **1**, 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 **1**.

The wireless LAN card in some models might have 3 cables in step **1**.

Step	Screw (quantity)	Color	Torque
2	M2 × 3 mm, flat-head, nylok-coated (1) MINIPCIE to MB	Black	1.85+/-0.15 kgf*cm

Figure 6. Removal steps of PCI Express Mini Card for wireless LAN (continued)

Remove the card in the direction shown by arrow **3**.



When installing:

When installing the wireless LAN card, plug the black cable into the jack labeled **AUX** and the white cable into the jack labeled **MAIN**.

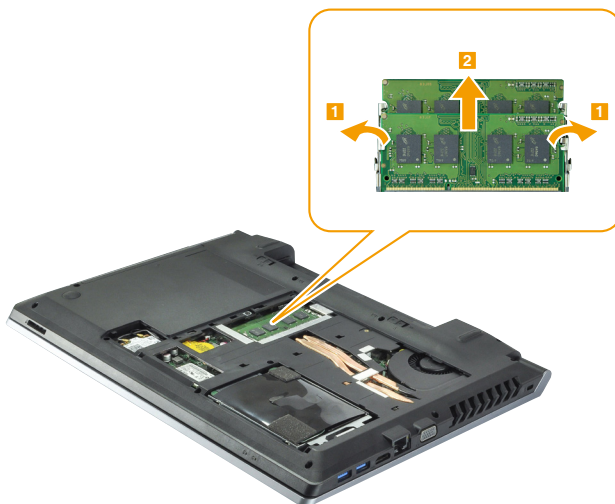
1070 DIMM

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35

Figure 7. 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 place. Make sure that it is firmly fixed in the slot and is difficult to move.

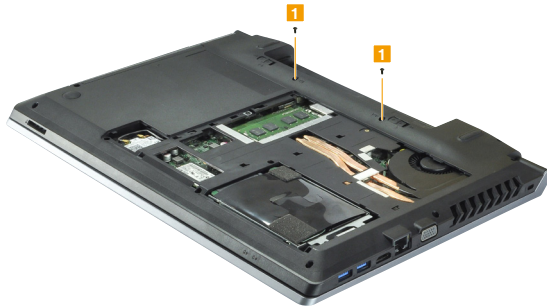
1080 Keyboard

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35

Figure 8. Removal steps of keyboard

Remove the screws .




Step	Screw (quantity)	Color	Torque
	M2 × 4 mm, flat-head, nylok-coated (2) BASE to KB	Black	1.85+/-0.15 kgf*cm

Figure 8. Removal steps of keyboard (continued)

Loosen the keyboard with fingers in the direction shown by arrow **2**. Lift the keyboard slightly **3**. Detach the connectors in the direction shown by arrows **4** and **5**. Then remove the keyboard.



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

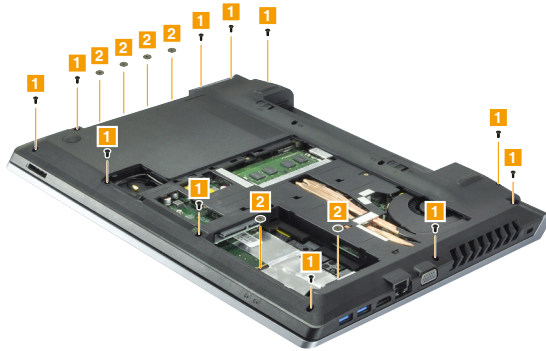
1090 Keyboard bezel

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35
- “1040 Optical drive” on page 38
- “1050 Hard disk drive and solid state disk” on page 39
- “1060 PCI Express Mini Card for wireless LAN” on page 42
- “1080 Keyboard” on page 45

Figure 9. Removal steps of keyboard bezel

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



Step	Screw (quantity)	Color	Torque
1	M2.5 × 5.0 mm, flat-head, nylok-coated (11) BASE to TOP	Black	3.0+/-0.3 kg*cm
2	M2.0-0.4 × 2 mm, flat-head, nylok-coated (6) BASE TO TOP (ODD Bridge) & BASE TO TOP (HDD Frame)	Black	1.85+/-0.15 kg*cm

Figure 9. Removal steps of keyboard bezel (continued)

Disconnect the connectors in the directions shown by arrows **3**, **4**, and **5**.
Remove the screws **6**.

B5400

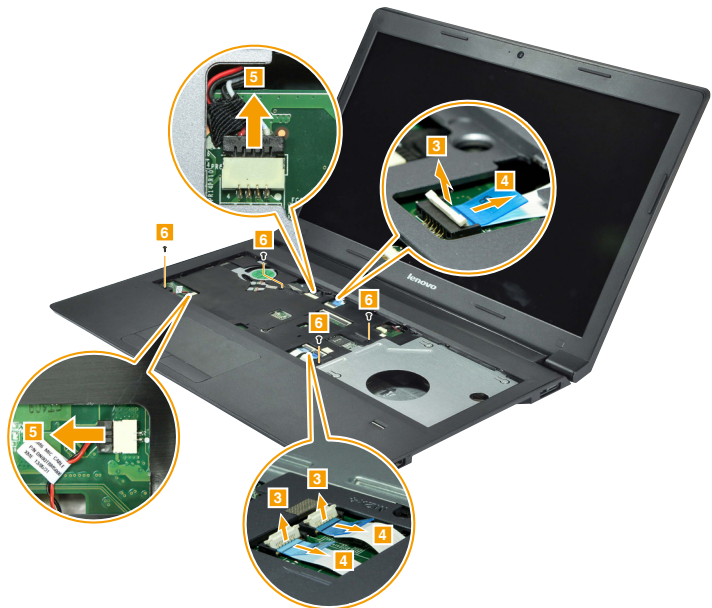


Figure 9. Removal steps of keyboard bezel (continued)

M5400/M5400 Touch



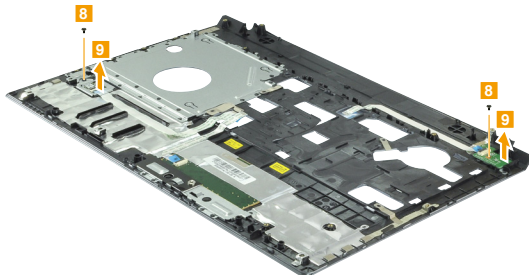
Step	Screw (quantity)	Color	Torque
6	M2 × 4 mm, flat-head, nylok-coated (4) TOP to MB to BASE & TOP to MB	Black	1.85+/-0.15 kgf*cm

Figure 9. Removal steps of keyboard bezel (continued)

Remove the keyboard bezel in the direction shown by arrow **7**.



Remove the screws **8**, then remove the finger print module and the power board in the direction shown by arrows **9**.



Step	Screw (quantity)	Color	Torque
8	M2 × 3 mm, flat-head, nylok-coated (2) FP BKT to TOP & Power Board to TOP	Black	1.85+/-0.15 kg-cm

1100 USB board and function board

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35
- “1040 Optical drive” on page 38
- “1050 Hard disk drive and solid state disk” on page 39
- “1060 PCI Express Mini Card for wireless LAN” on page 42
- “1080 Keyboard” on page 45
- “1090 Keyboard bezel” on page 47

Figure 10. Removal steps of USB board and function board

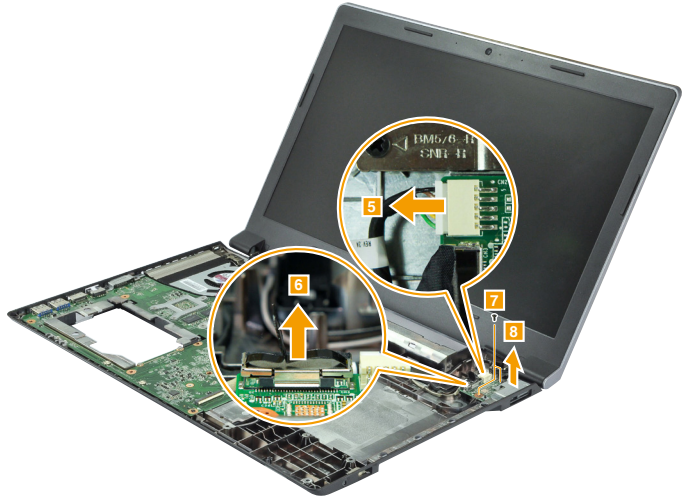
Detach the USB board connector in the direction shown by arrows **1** and **2**. Remove the screw **3**, then remove the USB board **4**.



Step	Screw (quantity)	Color	Torque
3	M2 × 4 mm, flat-head, nylok-coated (1) Audio PCB to BASE	Black	1.85+/-0.15 kg*cm

Figure 10. Removal steps of USB board and function board (continued)

Detach the connectors in the direction shown by arrows **5** and **6**. Remove the screws **7**, then remove the function board and docking bracket **8**.



Step	Screw (quantity)	Color	Torque
7	M2 × 4 mm, flat-head, nylok-coated (2) DCIN PCB to BASE & DCIN BKT to DC IN PCB to BASE	Black	1.85+/-0.15 kg*cm

1110 System board

Important notices for handling the system board:

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

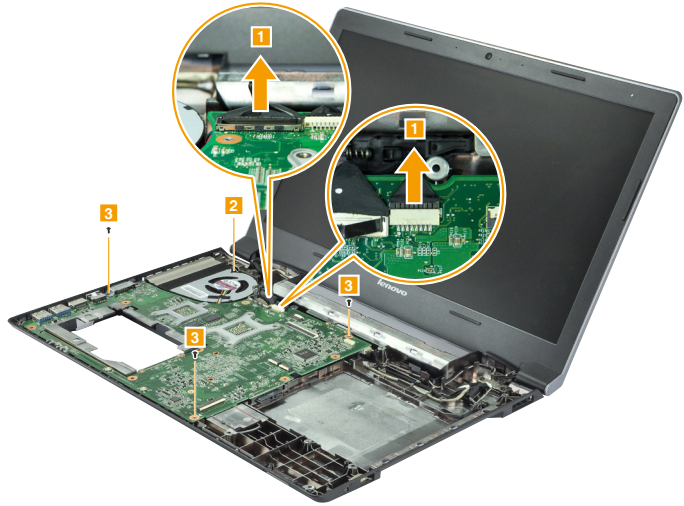
- Be careful not to drop the system board on a bench top that has a hard surface, such as metal, wood, or composite.
- Avoid rough handling of any kind.
- During the whole process, make sure not to drop or stack the system board.
- If you put a system board down, make sure to put it only on a padded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

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35
- “1040 Optical drive” on page 38
- “1050 Hard disk drive and solid state disk” on page 39
- “1060 PCI Express Mini Card for wireless LAN” on page 42
- “1080 Keyboard” on page 45
- “1090 Keyboard bezel” on page 47
- “1100 USB board and function board” on page 51

Figure 11. Removal steps of system board (continued)

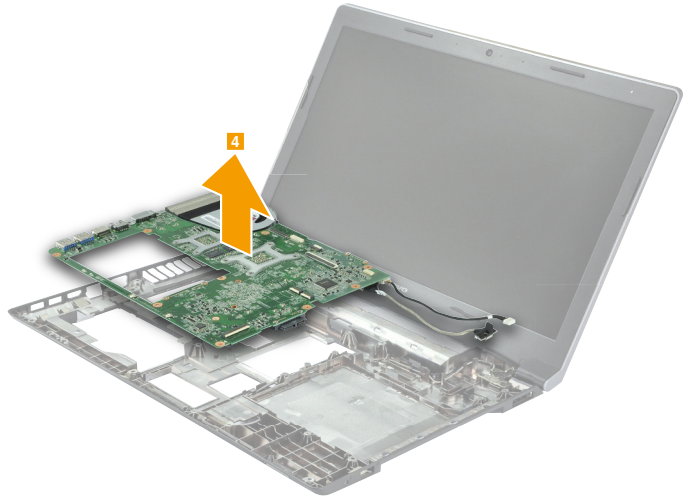
Disconnect the two connectors in the direction shown by arrows **1**. Loosen the screw **2** and remove the screws **3**.



Step	Screw (quantity)	Color	Torque
3	M2 × 4 mm, flat-head, nylok-coated (3) MB to BASE & CRT BKT to MB to BASE	Black	1.85+/-0.15 kgf*cm

Figure 11. Removal steps of system board (continued)

Remove the system board and the VGA port bracket in the direction shown by arrow 4.



1120 Fan assembly and heat sink assembly

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35
- “1040 Optical drive” on page 38
- “1050 Hard disk drive and solid state disk” on page 39
- “1060 PCI Express Mini Card for wireless LAN” on page 42
- “1080 Keyboard” on page 45
- “1090 Keyboard bezel” on page 47
- “1100 USB board and function board” on page 51
- “1110 System board” on page 53

Figure 12. Removal steps of fan assembly and heat sink assembly

Disconnect the fan connector in the direction shown by arrow **1** and then loosen the screws **2**.

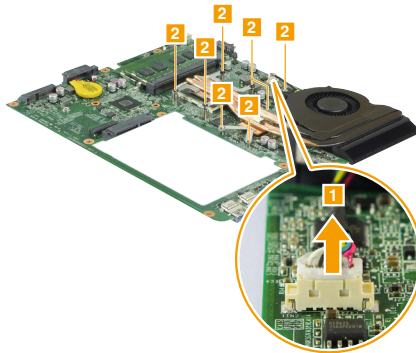
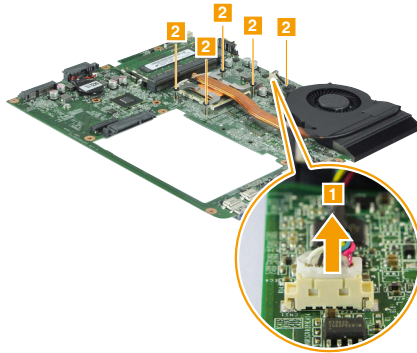
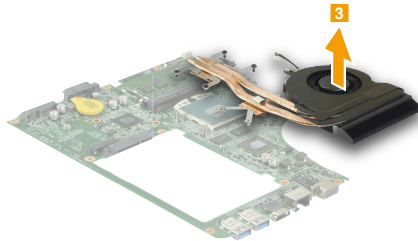


Figure 12. Removal steps of fan assembly and heat sink assembly (continued)



Lift the fan assembly and heat sink assembly in the direction shown by arrow **3**. Be careful not to damage the connector.



Attention: Do not handle the heat sink assembly roughly. Improper handling can cause distortion or deformation and imperfect contact with components.

1130 CPU

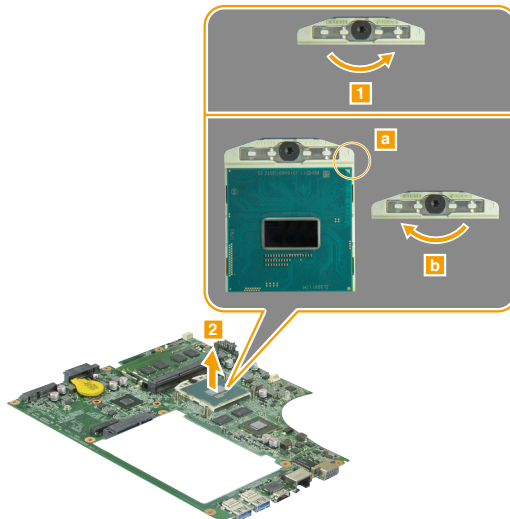
For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35
- “1040 Optical drive” on page 38
- “1050 Hard disk drive and solid state disk” on page 39
- “1060 PCI Express Mini Card for wireless LAN” on page 42
- “1080 Keyboard” on page 45
- “1090 Keyboard bezel” on page 47
- “1100 USB board and function board” on page 51
- “1110 System board” on page 53
- “1120 Fan assembly and heat sink assembly” on page 56

Attention: CPU is extremely sensitive. When you service the CPU, avoid any kind of rough handling.

Figure 13. Removal steps of CPU

Rotate the head of the screw in the direction shown by arrow **1** to release the lock, then remove the CPU in the direction shown by arrow **2**.



When installing: Place the CPU on the CPU socket in the direction shown by arrow **a**, and then rotate the head of the screw in the direction shown by arrow **b** to secure the CPU.

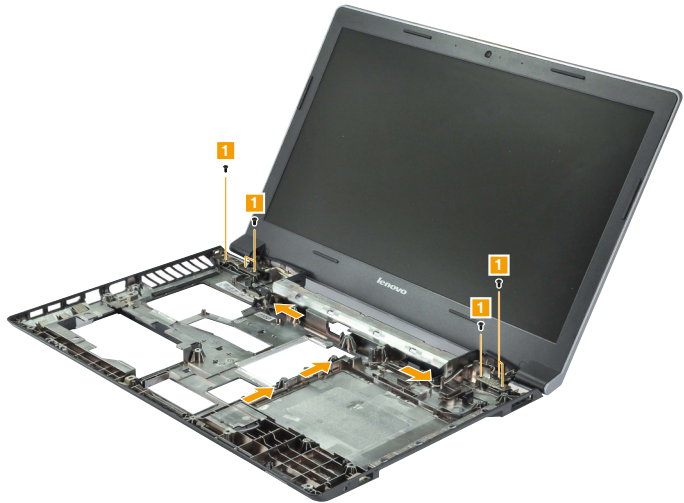
1140 LCD unit

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35
- “1030 Backup battery” on page 37
- “1040 Optical drive” on page 38
- “1050 Hard disk drive and solid state disk” on page 39
- “1060 PCI Express Mini Card for wireless LAN” on page 42
- “1080 Keyboard” on page 45
- “1090 Keyboard bezel” on page 47
- “1100 USB board and function board” on page 51
- “1110 System board” on page 53

Figure 14. Removal steps of LCD unit

Release the antenna cables from the cable guides and then remove the screws ■.



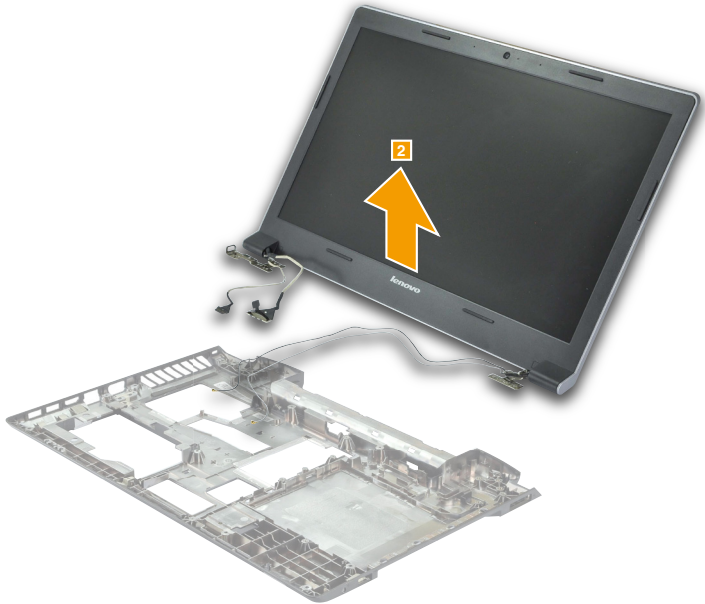
Step	Screw (quantity)	Color	Torque
■	M2.5 × 5 mm, flat-head, nylok-coated (6) Hinge to BASE	Black	4.0+/-0.3 kgf*cm

Figure 14. Removal steps of LCD unit (continued)

When installing:

- Route the antenna cables along the cable guides. As you route the cables, make sure that they are not subjected to any tension. Tension could cause the cables to be damaged by the cable guides, or a wire to be broken.
- Make sure that the LCD connector is attached firmly and that you do not pinch the antenna cables when you attach the LCD assembly. Route the LCD cable along the cable guides.

Remove the LCD unit in the direction shown by arrow **2**.



1150 LCD front bezel (B5400/M5400)

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35
- “1040 Optical drive” on page 38
- “1050 Hard disk drive and solid state disk” on page 39
- “1060 PCI Express Mini Card for wireless LAN” on page 42
- “1080 Keyboard” on page 45
- “1090 Keyboard bezel” on page 47
- “1100 USB board and function board” on page 51
- “1110 System board” on page 53
- “1140 LCD unit” on page 59

Figure 15. Removal steps of LCD front bezel (B5400/M5400)

Remove LCD bezel screw pads **1** and the screws **2**.

B5400

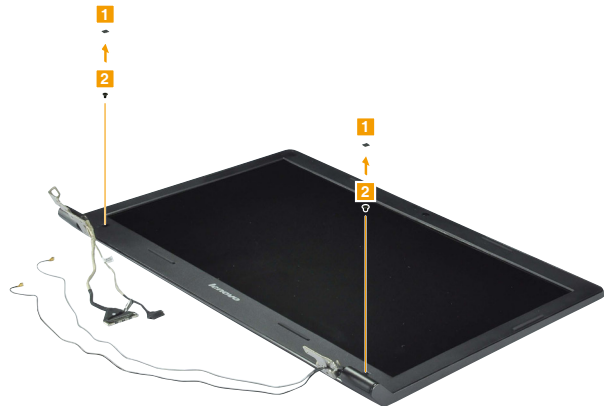
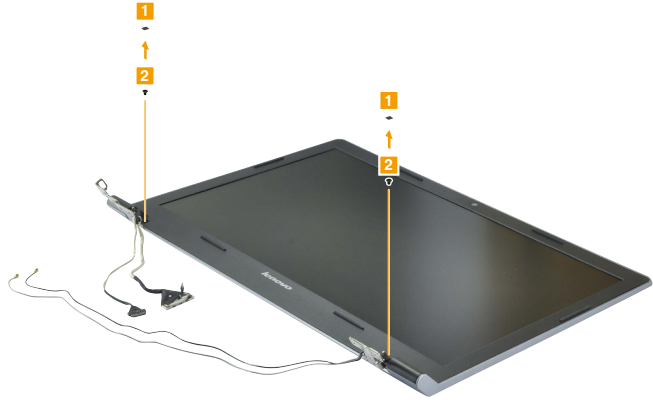


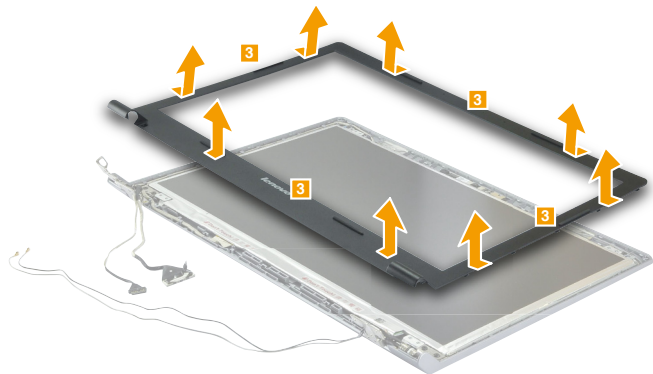
Figure 15. Removal steps of LCD front bezel (B5400/M5400) (continued)

M5400



Step	Screw (quantity)	Color	Torque
2	M2.5 × 5 mm, flat-head, nylok-coated (2) (B5400) LCD Bezel to LCD Cover (BM6)	Black	3.0+/-0.3 kgf*cm
2	M2.5 × 3 mm, flat-head, nylok-coated (2) (M5400) LCD Bezel to LCD Cover (BM5)	Black	3.0+/-0.3 kgf*cm

Remove the LCD front bezel in the direction shown by arrows **3**.



1160 LCD panel, LCD cable, antenna assembly, and hinges (B5400/M5400)

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35
- “1030 Backup battery” on page 37
- “1040 Optical drive” on page 38
- “1050 Hard disk drive and solid state disk” on page 39
- “1060 PCI Express Mini Card for wireless LAN” on page 42
- “1070 DIMM” on page 44
- “1080 Keyboard” on page 45
- “1090 Keyboard bezel” on page 47
- “1100 USB board and function board” on page 51
- “1110 System board” on page 53
- “1140 LCD unit” on page 59
- “1150 LCD front bezel (B5400/M5400)” on page 61

Figure 16. Removal steps of LCD panel, LCD cable, antenna assembly, and hinges (B5400/M5400)

Remove the screws **1**. Lift the LCD panel in the direction shown by arrow **2**.

B5400

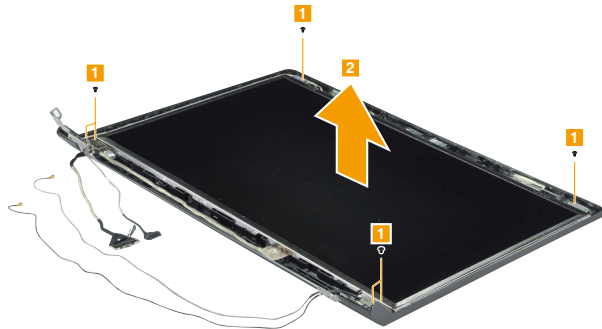
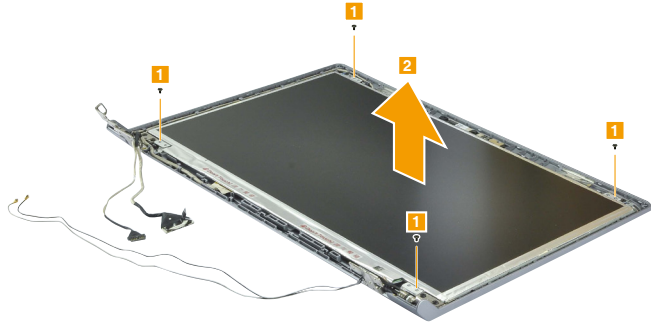


Figure 16. Removal steps of LCD panel, LCD cable, antenna assembly, and hinges (B5400/M5400) (continued)

M5400



Step	Screw (quantity)	Color	Torque
■	M2.5 × 3 mm, flat-head, nylok-coated (4) (B5400) Hinge to LCD Cover (for BM6)	Black	4.0+/-0.3 kg*cm
■	M2 × 3 mm, flat-head, nylok-coated (4) (M5400) Panel to LCD Cover (for BM5)	Black	1.85+/-0.15 kg*cm

Remove the screws **3**. Then release the hinges in the direction shown by arrows **4**.

B5400

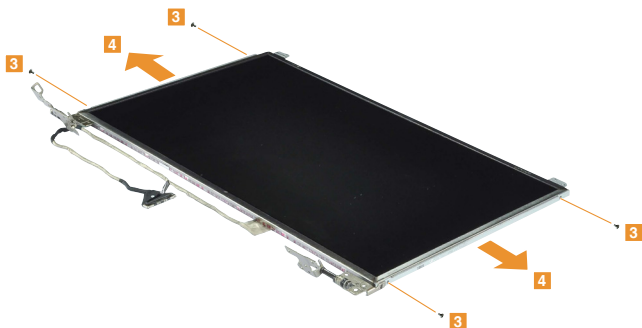
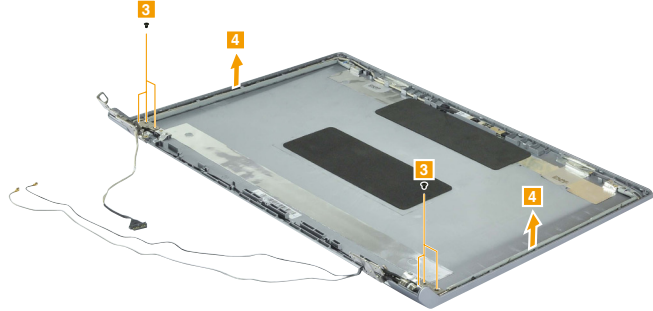


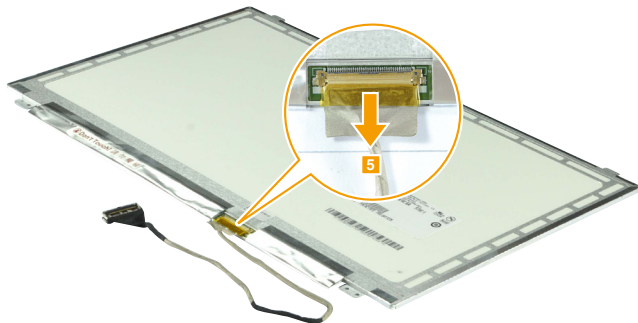
Figure 16. Removal steps of LCD panel, LCD cable, antenna assembly, and hinges (B5400/M5400) (continued)

M5400



Step	Screw (quantity)	Color	Torque
3	M2 × 3 mm, flat-head, nylok-coated (4) (B5400) Hinge to Panel (for BM6)	Black	1.85+/-0.15 kg*cm
3	M2.5 × 3 mm, flat-head, nylok-coated (6) (M5400) Hinge to LCD Cover (for BM5)	Black	4.0+/-0.3 kg*cm

Peel off the adhesive tape and detach the connector in the direction shown by arrow 5. Then remove the LCD cable.



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

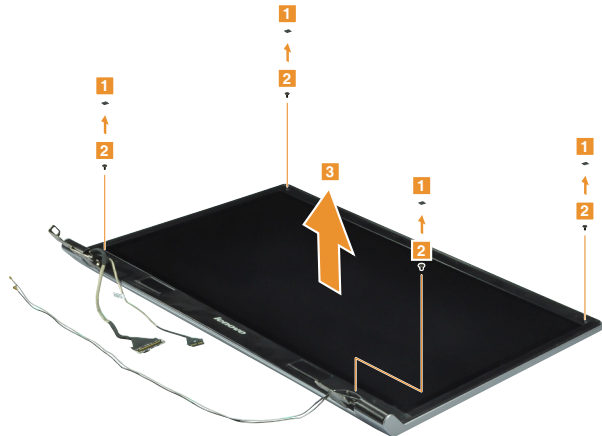
1170 LCD module, LCD cable, and hinges (M5400 Touch)

For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35
- “1030 Backup battery” on page 37
- “1040 Optical drive” on page 38
- “1050 Hard disk drive and solid state disk” on page 39
- “1060 PCI Express Mini Card for wireless LAN” on page 42
- “1070 DIMM” on page 44
- “1080 Keyboard” on page 45
- “1090 Keyboard bezel” on page 47
- “1100 USB board and function board” on page 51
- “1110 System board” on page 53
- “1140 LCD unit” on page 59

Figure 17. Removal steps of LCD module, LCD cable, and hinges (M5400 Touch)

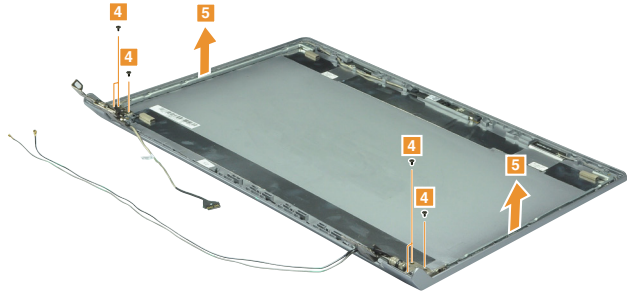
Remove LCD bezel screw pads **1** and the screws **2**. Then remove the LCD module **3**.



Step	Screw (quantity)	Color	Torque
2	M2.5 × 5 mm, flat-head, nylok-coated (4) LCD Module W/LCD Bezel	Black	3.0+/-0.3 kgf*cm

Figure 17. Removal steps of LCD module, LCD cable, and hinges (M5400 Touch)(continued)

Remove the screws **4**. Then release the hinges in the direction shown by arrows **5**.



Step	Screw (quantity)	Color	Torque
4	M2.5 × 5 mm, flat-head, nylok-coated (6) Hinge to LCD Cover (for BM5)	Black	3.0+/-0.3 kg*cm

Peel off the adhesive tape and detach the connector in the direction shown by arrow **6**. Then remove the LCD cable.



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

1180 Integrated camera

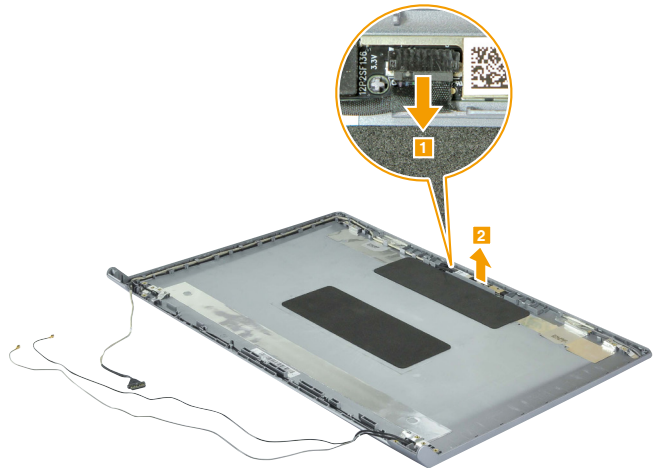
For access, remove these FRUs in order:

- “1010 Battery pack” on page 34
- “1020 Base cover” on page 35
- “1030 Backup battery” on page 37
- “1040 Optical drive” on page 38
- “1050 Hard disk drive and solid state disk” on page 39
- “1060 PCI Express Mini Card for wireless LAN” on page 42
- “1070 DIMM” on page 44
- “1080 Keyboard” on page 45
- “1090 Keyboard bezel” on page 47
- “1100 USB board and function board” on page 51
- “1110 System board” on page 53
- “1140 LCD unit” on page 59
- “1150 LCD front bezel (B5400/M5400)” on page 61
- “1160 LCD panel, LCD cable, antenna assembly, and hinges (B5400/M5400)” on page 63
- “1170 LCD module, LCD cable, and hinges (M5400 Touch)” on page 66

Figure 18. Removal steps of integrated camera

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

Unplug the integrated camera connector in the direction shown by arrow **1**.
Remove the integrated camera from the LCD cover **2**.



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

- 1 Integrated camera
- 2 Built-in microphone
- 3 Wireless LAN antennas
- 4 Computer display
- 5 Power button
- 6 Touchpad
- 7 System status indicators

Note: For the description of each indicator, see “Status indicators” on page 30.

- 8 Memory card slot
- 9 Combo audio jack
- 10 USB port
- 11 Optical drive
- 12 AC power adapter jack
- 13 Lenovo OneLink connector
- 14 Speakers

B5400

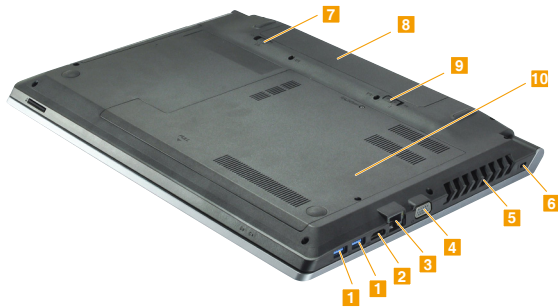


M5400



Bottom and Left-side view

- USB port
- 2 HDMI port
- 3 RJ-45 port
- 4 VGA port
- 5 Fan louvers
- 6 Kensington lock slot
- 7 Battery latch - manual
- 8 Battery pack
- 9 Battery latch - spring loaded
- 10 Bottom slot cover



Parts list

This section presents the following service parts:

- “Overall” on page 73
- “LCD FRUs” on page 77
- “Keyboard” on page 81
- “Miscellaneous parts” on page 85
- “Screws” on page 85
- “AC adapters” on page 86
- “Power cords” on page 87

Notes:

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

Overall

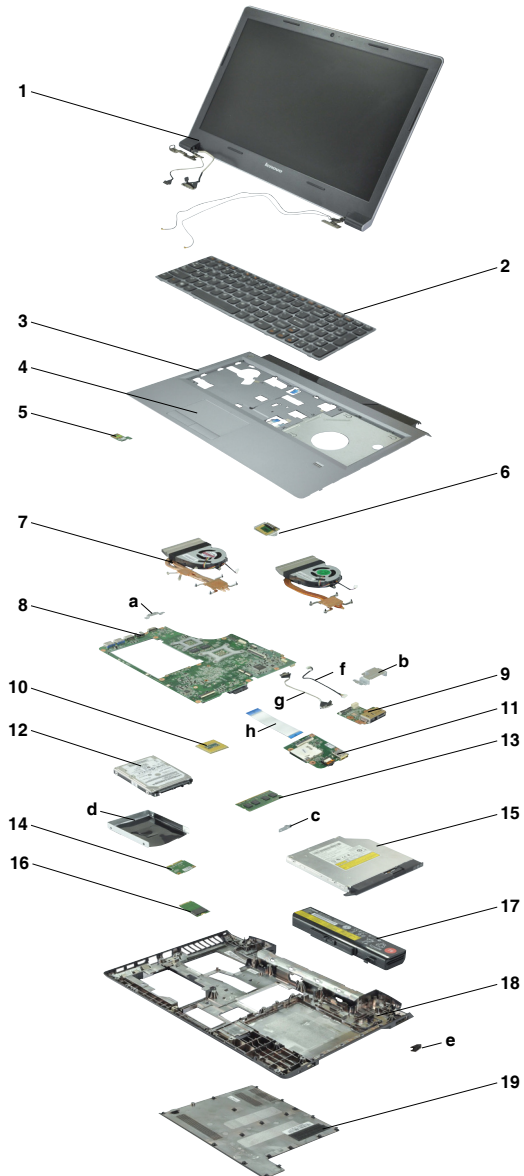


Table 4. Parts list—Overall

No.	FRU	FRU no.	CRU ID.
a-h	See "Miscellaneous parts" on page 85.		
1	LCD unit (see "LCD FRUs" on page 77.)		
2	Keyboard (see "Keyboard" on page 81.)		
3	BM5 Upper Case Silver (with FP/TP/POWER cable) (M5400/M5400 Touch)	90204214	N
3	BM6 Upper Case W/FP (with FP/TP/POWER cable) (B5400)	90204217	N
3	BM6 Upper Case WO/FP (with FP/TP/POWER cable) (B5400)	90204218	N
4	BM5 Touch Pad (M5400)	90004626	N
5	BM5 Power Board	90004625	N
6	BM5 Finger Print Module	90004623	N
7	BM5 Thermal Module 37W DIS	90204212	N
7	BM5 Thermal Module 37W UMA	90204213	N
8	BM5 MB UMA HM87 W/SBA (M5400/M5400 Touch)	90004610	N
8	BM5 MB W8P UMA HM87 W/SBA (M5400/M5400 Touch)	90004611	N
8	BM5 MB W8S UMA HM87 W/SBA (M5400/M5400 Touch)	90004612	N
8	BM5 MB DIS HM87 GV 2G W/SBA (M5400/M5400 Touch)	90004613	N
8	BM5 MB W8P DIS HM87 GV 2G W/SBA (M5400/M5400 Touch)	90004614	N
8	BM5 MB W8S DIS HM87 GV 2G W/SBA (M5400/M5400 Touch)	90004615	N
8	BM6 MB UMA HM86 WO/SBA (B5400)	90004616	N
8	BM6 MB W8P UMA HM86 WO/SBA (B5400)	90004617	N
8	BM6 MB W8S UMA HM86 WO/SBA (B5400)	90004618	N
8	BM6 MB DIS HM86 GE 1G WO/SBA (B5400)	90004619	N
8	BM6 MB W8P DIS HM86 GE 1G WO/SBA (B5400)	90004620	N
8	BM6 MB W8S DIS HM86 GE 1G WO/SBA (B5400)	90004621	N
9	BM5 Function Board (M5400/M5400 Touch)	90004624	N
9	BM6 Function Board (B5400/M5400)	90004628	N
10	Intel i3-4100M 2.5G 3M C0 2cPGA CPU	102500645	N
10	Intel i5-4200M 2.5G 3M C0 2cPGA CPU	102500644	N
10	Intel i3-4000M 2.4G 3M C0 2cPGA CPU	102500594	N
10	Intel 3550M 2.3G 2M C0 2cPGA CPU	102500646	N
11	BM5 USB Board	90004627	N
12	HDD, HGST, Jaguar B7 (IPG config) (B5400)	16200405	**
12	HDD, Toshiba, Aquarius-B Slim (B5400)	16200330	**
12	HDD, WD, MN500S (B5400)	16200378	**
12	HDD, Seagate, Yarra (1D) BP (6G) (B5400)	16200384	**
12	HDD, 500GB/5400rpmWD, MN500S	16200379	**
12	HDD, 500GB/5400rpmHGST, Jaguar B7 (IPG config)	16200404	**
12	HDD, 500GB/5400rpmToshiba, Aquarius-B Slim	16200329	**
12	HDD, 500GB/5400rpmSeagate, Yarra (1D) BP (6G)	16200383	**
12	HDD, 500GB/5400rpmSeagate, M8 BP2 (6G)	16200387	**
12	HDD, 750GB/5400rpmToshiba, Aquarius-B	16200326	**

Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
12	HDD, 750GB/5400rpmHGST, Jaguar B	16200374	**
12	HDD, 750GB/5400rpmSeagate, M8 BP2 (6G)	16200386	**
12	HDD, 750GB/5400rpmWD, ML500M	16200376	**
12	HDD, 1TB/5400rpmWD, ML500M	16200377	**
12	HDD, 1TB/5400rpmHGST, Jaguar B	16200375	**
12	HDD, 1TB/5400rpmSeagate, M8 BP 2 (6G)	16200385	**
12	HDD, 1TB/5400rpmToshiba, Aquarius-BS	16200325	**
12	HDD, SSHD (8GB) Seagate, ST1000LM014 6G 9.5mm 1T SSHD (9.5MM)	16200389	**
12	HDD, SSHD (8GB) Seagate, ST500LM000 6G 7mm 500G SSHD (7MM)	16200391	**
13	Memory, M471B5773DH0-YK0 2GB DDR3L 1600	11200502	*
13	Memory, HMT425S6AFR6A-PB 2GB DDR3L 1600	11201299	*
13	Memory, RMT3170ED58F8W-1600 DDR3L 1600	11201835	*
13	Memory, MT8KTF25664HZ-1G6M1 2GB DDR3L 1600	11200346	*
13	Memory, M471B5273DH0-YK0 4GB DDR3L 1600	11200503	*
13	Memory, M471B5173QH0-YK0 4GB DDR3L 1600	11202079	*
13	Memory, HMT451S6AFR8A-PB 4GB DDR3L 1600	11201300	*
13	Memory, RMT3170EB68F9W-1600 4GB DDR3L 1600	11201512	*
13	Memory, SM321NQ08ICF 4GB DDR3L 1600	11201834	*
13	Memory, MT8KTF51264HZ-1G6J1 4GB DDR3L 1600	11201342	*
13	Memory, M471B1G73BH0-YK0 8GB DDR3L 1600	11200504	*
13	Memory, Samsung M471B1G73QH0-YK0 8GB DDR3L 1600	11202080	*
13	Memory, HMT41GS6AFR8A-PB 8GB DDR3L 1600	11201301	*
13	Memory, SM322NW08IAF 8GB DDR3L 1600	11201514	*
13	Memory, MT16KTF1G64HZ-1G6E1 8GB DDR3L 1600	11201304	*
14	WLAN, RTL8188EE MOW M PCIE NB HMC (B5400)	20200218	**
14	WLAN, RTL8188EE MOW M PCIE NB HMC (B5400)	20200441	**
14	WLAN, Cybertan Broadcom BCM4313 1*1 BGN MOW (B5400)	20200102	**
14	WLAN, BCM43142	20200222	**
14	WLAN, BCM43142	20200336	**
14	WLAN, Ltn RTL8723BE 1x1BGN+BT HMC WLAN	20200439	**
14	WLAN, Cbt RTL8723BE 1x1BGN+BT HMC WLAN	20200440	**
14	WLAN, Intel 7260 2x2AC+BT PCIE HMC WLAN	20200388	**
14	WLAN, Intel 7260BN 2x2BN+BT PCIE HMC WLAN	20200412	**
15	ODD, 9.5mm Tray-in Rambo, HLDS GU70N Slim Tray DVD Rambo ODD	25205807	*
15	ODD, 9.6mm Tray-in Rambo,HLDS GU90N Slim Tray DVD Rambo ODD (Async)	25214073	*
15	ODD, 9.8mm Tray-in Rambo,PSN UJ8DB Slim Tray DVD Rambo ODD	25212030	*
15	ODD, 9.10mm Tray-in Rambo,PLDS DU-8A5SH Slim Tray DVD Rambo ODD	25205806	*

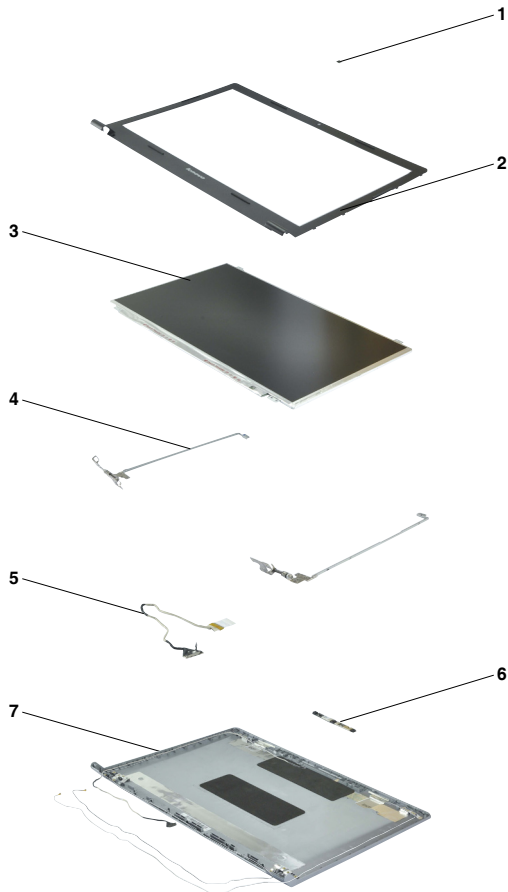
Table 4. Parts list—Overall (continued)

No.	FRU	FRU no.	CRU ID.
16	SSD, 24GB NGFF (tech-ready), LSS-24L6G (double-sided)	16200338	N
16	SSD, 24GB NGFF (tech-ready), SDSA6MM-024G (double-sided)	16200337	N
16	SSD, 24GB NGFF (tech-ready), THNSNX024GMNT (Single-sided)	16200340	N
17	Battery, 6CELL 2.2Ah, Sanyo 2.2Ah 48Wh 6cell battey	121500047	*
17	Battery, 6CELL 2.2Ah, LG 2.2Ah 48Wh 6cell battey	121500049	*
17	Battery, 6CELL 2.2Ah, SMP 2.2Ah 48Wh 6cell battey	121500050	*
17	Battery, 6CELL2.8Ah (tech ready), LG L11L6F01 3S2P 62Wh Batt C01 Origa	121500052	*
17	Battery, 6CELL2.8Ah (tech ready), SM/S L11M6F01 3S2P 62Wh Batt C01 Origa	121500053	*
18	BM5 Lower Case	90204194	N
19	BM5 HDD Door	90204202	N
—	AC adapter (see “AC adapters” on page 86).		

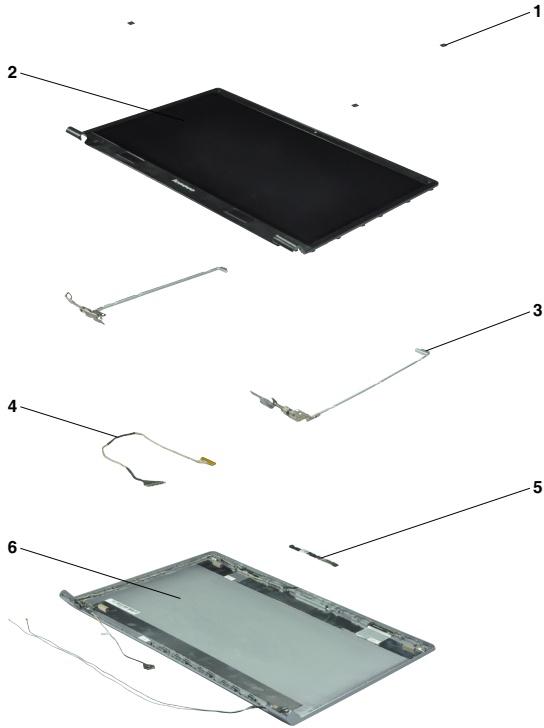
LCD FRUs

In Lenovo B5400/M5400/M5400 Touch, the type of LCD is 15.6-inch high definition (HD).

B5400/M5400



M5400 Touch



B5400/M5400

Table 5. Parts list—B5400/M5400 LCD FRUs

No.	FRU	FRU no.	CRU ID.
1	BM5 LCD Bezel Screw Pad	90204205	N
2	BM5 LCD Bezel (M5400)	90204204	
2	BM6 LCD Bezel W/Camera (B5400)	90204216	
3	15.6" Flat+lvds HD Glossy B156XW04 V5 (M5400)	18200433	
3	15.6" Flat+lvds HD Glossy N156BGE-L41 (M5400)	18200963	
3	15.6" Flat+lvds HD Glossy LP156WH3-TLS1 (M5400)	18200897	
3	15.6" Flat+lvds HD Glossy LTN156AT30-L01 (M5400)	18200896	
3	15.6" Flat+lvds HD AG B156XW04 V6 (M5400)	18200918	
3	15.6" Flat+lvds HD AG LTN156AT30-401 (M5400)	18200914	
3	15.6" Flat+lvds HD AG LP156WH3-TLT1 (M5400)	18200915	
3	15.6" Flat+lvds HD AG N156BGE-L31 (M5400)	18200962	
3	15.6" wedge+lvds HD Glossy B156XTN02.0 (B5400)	18200157	
3	15.6" wedge+lvds HD Glossy N156BGE-L21 (B5400)	18004787	
3	15.6" wedge+lvds HD Glossy LTN156AT32-L01 (B5400)	18200969	
3	15.6" wedge+lvds HD Glossy LP156WH4-TLN2 (B5400)	18200158	
3	15.6" wedge+lvds HD AG B156XTN02.1 (B5400)	18200649	
3	15.6" wedge+lvds HD AG N156BGE-L11 (B5400)	18200651	
3	15.6" wedge+lvds HD AG LTN156AT32-401 (B5400)	18200967	
3	15.6" wedge+lvds HD AG LP156WH4-TLP2 (B5400)	18200968	
4	BM5 Hinge Left/Right (M5400)	90204203	
4	BM6 Hinge Left/Right (B5400)	90204220	
5	BM5 LCD Cable (M5400)	90204195	
5	BM6 LCD Cable (B5400)	90204219	
6	BM5 Camera Module HD 720P (M5400)	90004622	
6	BM6 Camera Module VGA 0.3M (B5400)	90004629	
6	BM6 Camera Module HD 720P (B5400)	90004630	
7	BM5 LCD Cover Silver (M5400)	90204206	
7	BM6 LCD Cover (B5400)	90204215	

M5400 Touch

Table 7. Parts list—M5400 Touch LCD FRUs

No.	FRU	FRU no.	CRU ID.
1	BM5 LCD Bezel Screw Pad	90204205	N
2	BM5T LCD Module W/LCD Bezel	90400254	
3	BM5 Hinge Left/Right	90204203	
4	BM5 LCD Cable	90204195	
4	BM5T LCD Cable	90204622	
5	BM5 Camera Module HD 720P	90004622	
6	BM5 LCD Cover Silver	90204206	
6	BM5T LCD Cover	90204621	

Keyboard

Table 8. Parts list—Keyboard

Language		P/N	CRU ID.	
B5400	Chicony	English	25213291	N
		U.K. English	25213292	
		Italian	25213293	
		Spanish	25213294	
		Turkish	25213295	
		Thai	25213296	
		Portuguese	25213297	
		Latin	25213298	
		Canadian English&French	25213299	
		Korean	25213300	
		Traditional Chinese	25213301	
		Russian	25213302	
		French	25213303	
		German	25213304	
		Arabic	25213305	
		Brazilian	25213306	
		Japanese	25213307	
		Dutch	25213308	
		Greek	25213309	
		Hebrew	25213310	
	Hungarian	25213311		
	Four Nordic countries	25213312		
	Belgian	25213313		
	Icelandic	25213314		
	Slovenian	25213315		
	Swiss	25213316		
	International English	25213317		
	Czechoslovakian	25213318		
	Bulgarian	25213319		
	Indian	25213320		
	Sunrex	English	25213261	
		U.K. English	25213262	
		Italian	25213263	
		Spanish	25213264	
Turkish		25213265		
Thai		25213266		
Portuguese		25213267		
Latin		25213268		
Canadian English&French		25213269		
Korean		25213270		
Traditional Chinese		25213271		
Russian		25213272		
French		25213273		
German		25213274		
Arabic	25213275			

Table 8. Parts list—Keyboard (continued)

Language		P/N	CRU ID.	
B5400 (continued)	Sunrex (continued)	Brazilian	25213276	N
		Japanese	25213277	
		Dutch	25213278	
		Greek	25213279	
		Hebrew	25213280	
		Hungarian	25213281	
		Four Nordic countries	25213282	
		Belgian	25213283	
		Icelandic	25213284	
		Slovenian	25213285	
		Swiss	25213286	
		International English	25213287	
		Czechoslovakian	25213288	
		Bulgarian	25213289	
	Indian	25213290		
	Darfon	English	25213231	
		U.K. English	25213232	
		Italian	25213233	
		Spanish	25213234	
		Turkish	25213235	
		Thai	25213236	
		Portuguese	25213237	
		Latin	25213238	
		Canadian English&French	25213239	
		Korean	25213240	
		Traditional Chinese	25213241	
		Russian	25213242	
		French	25213243	
		German	25213244	
		Arabic	25213245	
		Brazilian	25213246	
		Japanese	25213247	
		Dutch	25213248	
		Greek	25213249	
		Hebrew	25213250	
		Hungarian	25213251	
Four Nordic countries		25213252		
Belgian	25213253			
Icelandic	25213254			
Slovenian	25213255			
Swiss	25213256			
International English	25213257			
Czechoslovakian	25213258			
Bulgarian	25213259			
Indian	25213260			

Table 8. Parts list—Keyboard (continued)

Language		P/N	CRU ID.	
M5400/ M5400 Touch	Chicony	English	25213381	N
		U.K. English	25213382	
		Italian	25213383	
		Spanish	25213384	
		Turkish	25213385	
		Thai	25213386	
		Portuguese	25213387	
		Latin	25213388	
		Canadian English&French	25213389	
		Korean	25213390	
		Traditional Chinese	25213391	
		Russian	25213392	
		French	25213393	
		German	25213394	
		Arabic	25213395	
		Brazilian	25213396	
		Japanese	25213397	
		Dutch	25213398	
		Greek	25213399	
		Hebrew	25213400	
		Hungarian	25213401	
		Four Nordic countries	25213402	
		Belgian	25213403	
		Icelandic	25213404	
	Slovenian	25213405		
	Swiss	25213406		
	International English	25213407		
	Czechoslovakian	25213408		
	Bulgarian	25213409		
	Indian	25213410		
	Sunrex	English	25213351	
		U.K. English	25213352	
		Italian	25213353	
		Spanish	25213354	
Turkish		25213355		
Thai		25213356		
Portuguese		25213357		
Latin		25213358		
Canadian English&French		25213359		
Korean		25213360		
Traditional Chinese		25213361		
Russian		25213362		
French		25213363		
German		25213364		
Arabic		25213365		
Brazilian		25213366		

Table 8. Parts list—Keyboard (continued)

Language		P/N	CRU ID.
M5400/ M5400 Touch (continued)	Sunrex (continued)	Japanese	25213367
		Dutch	25213368
		Greek	25213369
		Hebrew	25213370
		Hungarian	25213371
		Four Nordic countries	25213372
		Belgian	25213373
		Icelandic	25213374
		Slovenian	25213375
		Swiss	25213376
		International English	25213377
		Czechoslovakian	25213378
		Bulgarian	25213379
		Indian	25213380
	Darfon	English	25213321
		U.K. English	25213322
		Italian	25213323
		Spanish	25213324
		Turkish	25213325
		Thai	25213326
		Portuguese	25213327
		Latin	25213328
		Canadian English&French	25213329
		Korean	25213330
		Traditional Chinese	25213331
		Russian	25213332
		French	25213333
		German	25213334
		Arabic	25213335
		Brazilian	25213336
		Japanese	25213337
		Dutch	25213338
		Greek	25213339
		Hebrew	25213340
		Hungarian	25213341
		Four Nordic countries	25213342
Belgian	25213343		
Icelandic	25213344		
Slovenian	25213345		
Swiss	25213346		
International English	25213347		
Czechoslovakian	25213348		
Bulgarian	25213349		
Indian	25213350		

N

Miscellaneous parts

Table 9. Parts list—Miscellaneous parts

FRU	P/N	CRU ID.
System miscellaneous parts:		
• (a) BM5 CRT Bracket	90204198	N
• (b) BM5 Docking Bracket	90204199	
• (c) ODD Bracket	90204497	
• (d) BM5 HDD Bracket	90204201	
• (e) BM5 Docking Dummy Rubber Cap	90204200	
Cable miscellaneous parts:		
• (f) BM5 DC-IN Cable	90204221	
• (g) Docking Cable	90204196	
• (h) BM5 USB Board Cable	90204197	
Note: Italicized letters in parentheses are references to the exploded view in "Overall" on page 73.		

Screws

Table 10. Parts list—screws

FRU	P/N	CRU ID.
BM5 Screw M2.0*3.0-I (BKAG) (NYLOK) Iron	90204208	N
BM5 Screw M2.0*4-I (BK) (NYLOK) Iron	90204209	
BM5 ScrewM2.5*5.0-I (BZN) (NYLONPatch) Iron	90204210	
BM5 Screw Base To Top (ODD Bridge)	90204211	
LZB Screw M2.5*3.0-I	90204062	

AC adapters

Table 11. Parts list—AC adapters

FRU	P/N	CRU ID.
90w AC Adapter (2Pin) 20V Common with Rectangle plug, Delta ADP-90XD AB	36200285	*
90w AC Adapter (2Pin) 20V Common with Rectangle plug, Liteon PA-1900-711F	36200286	
90w AC Adapter (2Pin) 20V Common with Rectangle plug, Chicony Power A090A052L	36200287	
90w AC Adapter (2Pin) 20V Common with Rectangle plug, Delta ADP-90XD BB	36200250	
90w AC Adapter (3Pin) 20V Common with Rectangle plug, Liteon PA-1900-721F	36200252	
90w AC Adapter (3Pin) 20V Common with Rectangle plug, Chicony Power A090A053L	36200254	
65w AC Adapter (2Pin) 20V Common with Rectangle plug, Delta ADP-65FD AB	36200282	
65w AC Adapter (2Pin) 20V Common with Rectangle plug, Liteon PA-1650-711F	36200283	
65w AC Adapter (2Pin) 20V Common with Rectangle plug, Chicony Power A065R045L	36200284	
65w AC Adapter (3Pin) 20V Common with Rectangle plug, Delta ADP-65FD BB	36200249	
65w AC Adapter (3Pin) 20V Common with Rectangle plug, Liteon PA-1650-721F	36200251	
65w AC Adapter (3Pin) 20V Common with Rectangle plug, Chicony Power A065R046L	36200253	

Power cords

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

Table 12. Parts list—2-pin power cords

Region	P/N	CRU ID.
CCC • LINETEK PC205+RVV300/300 0.75/2C+COC03 1m	145500018	*
CCC • Longwell LSG-21+RVV300/300+LS-72 1m	145500069	
UK • LINETEK LP61L+H03VVH2-F 0.75/2C+ LS7H 1m	145500019	
UK • Longwell LP-61L+H03VVH2-F+ LS-7 1m	145500074	
India • LINETEK LP28+IS:694 0.75/2C+ LS7H 1m	145500020	
India • Longwell LP-77+Longwell-p 2X+LS-7 1m	145500075	
US • LINETEK LP5+SPT-2 #18/2C+ LS7C 1m	145500021	
US • Longwell LP-11+SPT-2+LS-7C/7J 1m	145500073	
Denmark, Italy, Europe, Switzerland • LINETEK LP21+H03VVH2-F 0.75/2C+ LS7 1m	145500022	
Denmark, Italy, Europe, Switzerland • Longwell LP-21+ H03VVH2-F+LS-7 1m	145500081	
Australia • LINETEK LP15A+H03VVH2-F 0.75/2C+ LS7 1m	145500023	
Australia • Longwell LP-15A+LFC-2F+LS-7 1m	145500077	
SA • LINETEK PE364("O")+H03VVH2-F 0.75/2C+ LS7H 1m	145500024	
SA • Longwell LP-39+H03VVH2-F+LS-7 1m	145500080	
Korea • LINETEK LPE03A+H03VVH2-F 0.75/2C+LS7 1m	145500025	
Korea • Longwell LP-57+H03VVH2-F+LS-7KS 1m	145500076	
PSE • LINETEK LP51A+HVCTFK 0.75/2C+LS7J 1m	145500026	
PSE • Longwell LP-51A+VCTFK+LS-7C/7J 1m	145500079	
Taiwan • LINETEK LP51A+VCTFK 0.75/2C+LS7J 1m	145500027	
Taiwan • Longwell LP-70+VCTFK+LS-31 1m	145500078	

Table 12. Parts list—2-pin power cords (continued)

Region	P/N	CRU ID.
Brazil • LINETEK LP25+H03VVH2-F 0.75/2C+LS7H 1m	145500028	*
Brazil • Longwell LP-18A+H03VVH2-F+LS-18 1m	145500071	
Israel • LINETEK LP45+H03VVH2-F 0.75/2C+LS7H 1m	145500029	
Israel • Longwell LP-55+H03VVH2-F+LS-7 1m	145500072	
LA • LINETEK LP39+H03VVH2-F 0.75/2C+LS7H 1m	145500030	
LA • Longwell LP-16+H03VVH2-F+LS-7 1m	145500070	

Table 13. Parts list—3-pin power cords

Region	P/N	CRU ID.
UK • LINETEK LP-61L+ H03VV-F+ LS15 1m	145000593	*
UK • Longwell LP-61L+H03VV-F+LS-18 1m	145000561	
UK • VOLEX MP5004+H03VV-F+VAC5S 1m	145000605	
UK • lux 0031+H03VV-F 0.75/3C+0011 1m	145500000	
Europe • LINETEK LP-34+H03VV-F + LS15 1m	145000585	
Europe • Longwell LP-34A+H03VV-F+LS-18 1m	145000553	
Europe • VOLEX M2511+HO3VV-F+VAC5S 1m	145000525	
Europe • lux 0033+H03VV-F 0.75/3C+0011 1m	145500001	
US • LINETEK LP-30B + SPT-2 + LS15 1m	145000594	
US • Longwell LP-30B+SPT-2 18AWG+LS-18 1m	145000562	
US • Volex US15S3+SPT-2 + VAC5S 1m	145000537	
US • lux 0014+SPT-2 60°C 18/3C+0016 1m	145500002	
China • LINETEK PC323+RVV300/300+LS15 1m	145000600	
China • Longwell LSG-31+RVV300/300+LS-18 1m	145000568	
China • VOLEX GB10S3+RVV 300/500+VAC5S 1m	145000538	
China • lux 0036+RVV 300/300 0.75/3C+0002 1m	145500003	
India • LINETEK PE-361+ H05VV-F+ LS15 1m	145000592	
India • Longwell LP-67+BIS+LS-18 1m	145000560	
India • VOLEX IA6A3+IS694+VAC5S 1m	145000536	
India • lux 0046+IS694 0.75/3C+0011 1m	145500004	

Table 13. Parts list—3-pin power cords (continued)

Region	P/N	CRU ID.
Japan • LINETEK LS15+VCTF+LP-54 1m	145000587	*
Japan • Longwell LP-54+VCTF+LS-18 1m	145000555	
Japan • VOLEX VAC5S+VCTF+M755 1m	145000530	
Japan • lux 0018(E)+VCTF 0.75/3C+0021 1m	145500005	
Australia • LINETEK LS15+H03VV-F+LP-23A 1m	145000589	
Australia • Longwell LP-23A+LFC-3R+LS-18 1m	145000557	
Australia • VOLEX AU10S3+H03VV-F+VAC5S 1m	145000532	
Australia • lux 0038+H03VV-F 0.75/3C+0011 1m	145500006	
Taiwan • LINETEK LS15+VCTF+LP-53 1m	145000588	
Taiwan • Longwell LP-71+VCTF+LS-33 1m	145000556	
Taiwan • VOLEX TW15CS3+VCTF+VAC5S 1m	145000531	
Taiwan • lux 0019+VCTF 0.75/3C+0021 1m	145500007	
Korea • LINETEK LS15+H05VV-F+LP-E04A 1m	145000590	
Korea • Longwell LP-486+KTLH03VV-F+LS-5 1m	145000558	
Korea • VOLEX M2511+KETI IEC+VAC5S 1m	145000533	
Korea • lux 0033+H03VV-F 0.75/3C+0011 1m	145500008	
Italy • LINETEK LS15+H03VV-F+PE-336 1m	145000591	
Italy • Longwell LP-22+H03VV-F+LS-18 1m	145000559	
Italy • VOLEX IT10S3+H03VV-F+VAC5S 1m	145000535	
Italy • lux 0029+H03VV-F 0.75/3C+0011 1m	145500009	
South Africa • LINETEK LS15+H03VV-F+PE-364 1m	145000586	
South Africa • Longwell LP-39+H03VV-F+LS-18 1m	145000554	

Table 13. Parts list—3-pin power cords (continued)

Region	P/N	CRU ID.
South Africa • VOLEX SA16A+H03VV-F+VAC5S 1m	145000529	*
South Africa • lux 0044+H03VV-F 0.75/3C+0011 1m	145500010	
Brazil • LINETEK LS15 H03VV-F LP26A 1m	145000596	
Brazil • Longwell LP-46+H03VV-F+LS-18 1m	145000564	
Brazil • VOLEX CH10S3+H03VV-F+VAC5S 1m	145000527	
Brazil • lux 0034+H03VV-F 0.75/3C+0011 1m	145500011	
Israel • LINETEK LS15+H03VV-F+LP-41 1m	145000595	
Israel • Longwell LP-41+H03VV-F+LS-18 1m	145000563	
Israel • VOLEX SI16S3+H03VV-F+VAC5S 1m	145000526	
Israel • lux 0041+H03VV-F 0.75/3C+0011 1m	145500012	
Switzerland • LINETEK LS15+H03VV-F+LP-37 1m	145000597	
Switzerland • Longwell LP-37+H03VV-F+LS-18 1m	145000565	
Switzerland • VOLEX MP232+H03VV-F+VAC5S 1m	145000524	
Switzerland • lux 0027+H03VV-F 0.75/3C+0011 1m	145500013	
Denmark • LINETEK LS15+H03VV-F+LP-38 1m	145000598	
Denmark • Longwell LP-40+H03VV-F+LS-18 1m	145000566	
Denmark • VOLEX MP233D+H03VV-F+VAC5S 1m	145000534	
Denmark • lux 0048+H03VV-F 0.75/3C+0011 1m	145500014	
Argentina • LINETEK LS15+H03VV-F+LP39 1m	145000599	
Argentina • Longwell LP-24+H03VV-F+LS-18 1m	145000567	
Argentina • VOLEX VA2073+H03VV-F+VAC5S 1m	145000528	
Argentina • lux 0040+H03VV-F 0.75/3C+0011 1m	145500015	

Notices

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

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

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

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

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

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

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

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

Trademarks

The following terms are either registered trademarks or trademarks of Lenovo in the United States and/or other countries:

- Lenovo®
- Lenovo logo®
- VeriFace®
- OneKey Rescue® (OneKey Recovery, OneKey Antivirus)
- APS®
- Power Express®
- Energy Management and ReadyComm®

The following terms are trademarks of Microsoft Corporation in the United States, other countries, or both:

- Windows®
- Windows® 7
- Windows® 8

The following are trademarks of Intel Corporation or its subsidiaries in the United States, other countries, or both:

- Intel®
- Intel® Core™ 2 Duo
- The following is a trademark of Advanced Micro Devices, Inc. AMD®

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