lenovo

Lenovo YOGA 3 Pro-1370

Hardware Maintenance Manual

Notes:

• Before using this information and the product it supports, be sure to read the general information under "Notices" on page 60.

Contents

About this manual

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

Lenovo YOGA 3 Pro-1370

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 YOGA 3 Pro-1370 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
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General safety

Follow these rules below to ensure general safety:

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

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

Electrical safety

Observe the following rules when working on electrical equipments.

> **Important:**
>
> Use only approved tools and test equipments. Some hand tools have handles covered with a soft material that does not insulate you when working with live electrical currents.
>
> Many customers have rubber floor mats near their machines that contain small conductive fibers to decrease electrostatic discharges. Do not use such kind of mat to protect yourself from electrical shock.

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

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

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

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

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

Safety inspection guide

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

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

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

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

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

Handling devices that are sensitive to electrostatic discharge

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

Notes:

1. Use product-specific ESD procedures when they exceed the requirements noted here.

2. Make sure that the ESD protective devices you use have been certified (ISO 9000) as fully effective.

When handling ESD-sensitive parts:

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

Note:

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

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

Grounding requirements

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

Safety notices: multilingual translations

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

Safety notice 1

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

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

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

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

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

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

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

Safety notice 2

⚠ **DANGER**

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

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

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

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

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

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

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

Safety notice 3

⚠ DANGER

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

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

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

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

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

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

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

Safety notice 4

⚠ **DANGER**

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

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

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

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

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

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

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

Safety notice 5

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

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

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

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

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

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

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

Safety notice 6

⚠ **DANGER**

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

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

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

כדי למנוע התחשמלות, אין להסיר את מכסה הפלסטיק
המגן על חלקו התחתון של 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 מוארקת 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 מארז הסוללה, ואז לנתק כבלי חיבור אחרים
אם יש כאלה.

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

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

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

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. Connect the AC adapter.
3. Make sure that power is supplied when you turn on the computer.
4. Turn off the computer.
5. Disconnect the AC adapter.
6. Make sure that the battery pack supplies power when you turn on the computer.

If you suspect a power problem, see the appropriate power supply checkout:
*   "Checking the AC adapter" on page 21
*   "Checking operational charging" on page 21

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
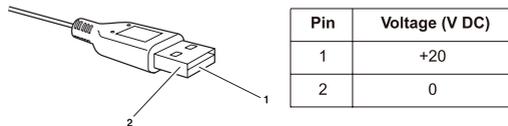
Note: Output voltage for the AC adapter pin No. 2 may differ from the one you are servicing.
3. If the voltage is not correct, replace the AC adapter.
4. If the voltage is acceptable, do the following:
*   Replace the system board.
*   If the problem persists, go to "Lenovo YOGA 3 Pro-1370" on page 27.

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

Checking operational charging

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

Perform operational charging. If the battery status indicator or icon is not lit, 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 is still not lit, replace the system board.

Related service information

This chapter presents the following information:
• "Restoring the factory contents by using OneKey Recovery" on page 23
• "Passwords" on page 24
• "Power management" on page 25

Restoring the factory contents by using OneKey Recovery

Restore of factory default

The Lenovo YOGA 3 Pro-1370 computer comes with pre-installed OneKey Recovery System.In order to save application files and the initial backed up files of the system, the hard disk in a Lenovo computer includes a hidden partition when it is shipped. If you need to restore the system to the point of your first boot up, just enter Lenovo OneKey Recovery System and run **System Recovery**. For details of OneKey Recovery System, see *the User Guide for Lenovo OneKey Recovery system*.

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

Passwords

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

To end screen blank state and resume normal operation, press **Fn + ↑**.

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

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

• Close the display lid.
• Press the Power button.
• Press and hold or right-click the **Start** button in the lower-left corner and select **Shut down → Sleep**.
• Open the charms and then select **Settings** ⚙ **→ Power** ⏻ **→ Sleep**.

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

To wake the computer, do one of the following:

• Press any key on the keyboard. (Notebook mode only)
• Press the Power button.
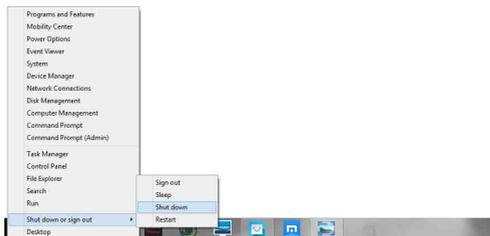• Press the Windows button.

Shutting down the computer

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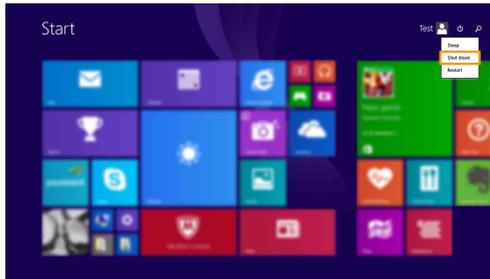To shut down your computer, do one of the following:

• Open the charms bar and select **Settings** ⚙ → **Power** ⏻ → **Shut down**.

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

• On the Start screen, click ⏻ and select **Shut down**.

Note: This operation depends on your BIOS settings. Please refer to the actual product.

Lenovo YOGA 3 Pro-1370

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

Specifications

The following table lists the specifications of the Lenovo YOGA 3 Pro-1370:

Table 1. Specifications

Feature	Description
Processor	View the system properties of your computer.You can do this as follows: Open the **Control Panel**, and then select **System and Security → System**.
Bus architecture	• LP-DDR3 • PCI Express bus • DMI
Graphic Chipset	• Intel BDW GT2
Display	• 13.3-inch
Standard memory	• LP-DDR3 (max 8 GB)
CMOS	• 256 bytes
SSD	• 128 GB, 256 GB, 512 GB
Optical drive	• NA
I/O port	• Combo audio jack × 2 • Micro HDMI × 1 • USB 2.0 port × 1, USB 3.0 port × 2 • 2 in 1 card reader (SD/SDHC/SDXC/MMC)

Table 1. Specifications (continued)

Feature	Description
Audio	• 1/8" Stereo Headphone Output & Microphone input combo jack • Integrated Speakers Stereo × 2 • Built-in microphone × 2
PCI Express Mini Card slot	Intel 802.11 A/C 2×2
Bluetooth wireless	Combined in combo card
Keyboard	5 Rows, ISO Full Size Keyboard, Back-light
Touch pad	Multi-touch type
Integrated camera	1.0 Mega or 720P HD
Battery	Li-Polymer, 44 Wh
AC adapter	20 V, 40 W
Pre-installed operating system	Win8.1 (Windows Blue) (×64)

Status indicators

The system status indicators below show the computer status:
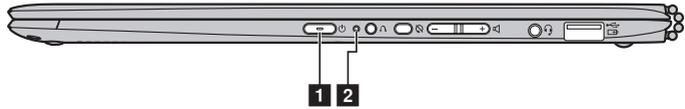
a **Power button and** Press this button to turn on the computer.
power status
indicator

Indicator	Indicator status	Meaning
Power status indicator	On (solid white)	The computer is powered on.
	Blinking	The computer is in sleep mode.
	Off	The computer is powered off or in hibernation mode.

b **Battery status**
indicator

Indicator	Indicator status	Meaning
Battery status indicator	On (solid white)	The battery has more than 20% charge.
	Solid amber	The battery has between 5% and 20% charge.
	Fast blinking amber	The battery has less than 5% charge.
	Slow blinking amber	The battery is being charged. When battery charge reaches 20%, the blinking color changes to white.
	Slow blinking white	The battery has between 20% and 80% charge and is still charging. When the battery reaches 80% charge the light will stop blinking, but charging will continue until the battery is fully charged.

Fn key combinations

The following describes the features of each function key.

Fn + Esc:	Switches to paper display mode.
Fn + 1:	F1
Fn + 2:	F2
Fn + 3:	F3
Fn + 4:	F4
Fn + 5:	F5
Fn + 6:	F6
Fn + 7:	F7
Fn + 8:	F8
Fn + 9:	F9
Fn + 0:	F10
Fn + -:	F11
Fn + =:	F12
Fn + Backspace:	Closes the currently active window.
Fn + Delete:	Enables/disables the touch pad.
Fn + `:	Turns on/off the backlight of the LCD screen.
Fn + PgUp:	Activates the pause function.
Fn + PgDn:	Activates the break function.
Fn + PrtSc:	Mutes/unmutes the sound.
Fn + ↑ / ↓:	Increases/decreases display brightness.
Fn + → / ←:	Increases/decreases sound volume.
Fn + Space:	Enable/Disable the keyboard backlight.

Note: If you changed the HotKey Mode from Disabled to Enabled in the BIOS setup utility, there is no need to press the Fn key. Only press the appropriate hotkey.

FRU replacement notices

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

Screw notices

Loose screws can cause a reliability problem. In the Lenovo computer, this problem is addressed with special nylon-coated screws that have the following characteristics:
- They maintain tight connections.
- They do not easily come loose, even with shock or vibration.
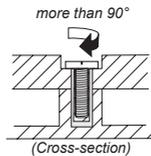- They are harder to tighten.

Do the following when you service this machine:
- Keep the screw kit in your tool bag.
- Carefully remove screws for reuse when replacing FRUs.
- Use a torque screwdriver if you have one.
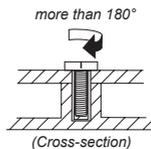
Tighten screws as follows:
- **Plastic to plastic**

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

    more than 90°

    (Cross-section)

- **Logic card to plastic**

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

    more than 180°

    (Cross-section)

- **Torque driver**

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

Removing and replacing an FRU

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

1. Do not attempt to service any computer unless you have been trained and certified. An untrained person runs the risk of damaging parts.

2. Before replacing any FRU, review "FRU replacement notices" on page 31.

3. Begin by removing any FRUs that have to be removed before the failing FRU. Any of such FRUs are listed at the top of the page. Remove them in the order in which they are listed.

4. Follow the correct sequence in the steps to remove the FRU, as given in the figures by the numbers in square callouts.

5. When turning a screw to replace an FRU, turn it in the direction as given by the arrow in the figure.

6. When removing the FRU, move it in the direction as given by the arrow in the figure.

7. To put the new FRU in place, reverse the removal procedures and follow any of the notes that pertain to replacement. For information about connecting and arranging internal cables, see "Locations" on page 58.

8. When replacing an FRU, use the correct screw as shown in the procedures.

⚠ **DANGER**

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

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

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

1010 Base cover

Figure 1. Removal steps of base cover

Remove the screws ■. Then remove the base cover **2**.
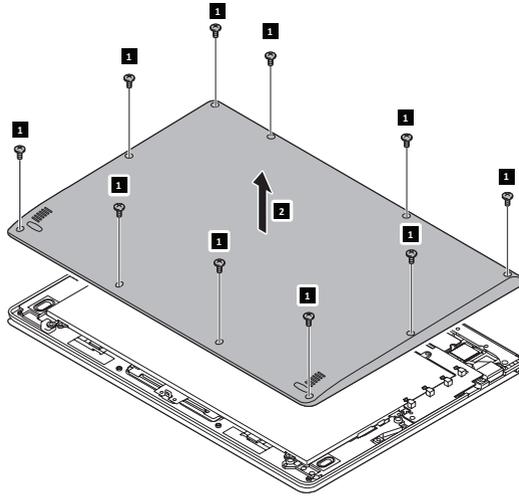
| Step	Screw (quantity)	Color	Torque	P/N
■	M2 × 3.3 mm, Torx, nylok-coated (10)	Silver	2.0~2.5 kgf*cm	MA00000T6G0

Note: Applying labels to the base cover

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

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

a   Rating label (WW or China)
b   Rating label print
c   BT label for US/CA/TW/Brazil/Indonesia/Israel/Malaysia
d   WLAN label for US/CA/TW/Brazil/Indonesia/Israel/Malaysia
e   KCC label
f   Indonesia D side 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:
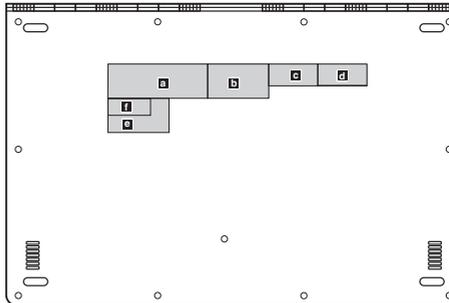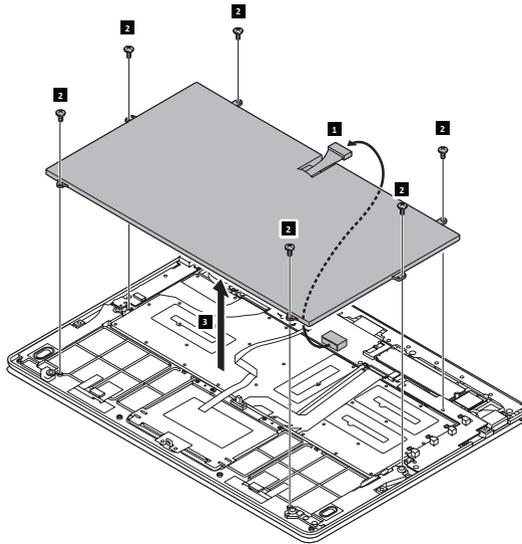
1020 Battery pack

For access, remove this FRU:
• "1010 Base cover" on page 33

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

Figure 2. Removal steps of battery pack

Unplug the battery connector ■ and remove the screws **2**. Then remove the battery pack in the direction shown by arrow **3**.

Step	Screw (quantity)	Color	Torque
2	M2 × 3.5 mm, cross-head, nylok-coated (6)	Black	1.5~2.0 kgf*cm

When installing: Make sure that the battery connector is attached firmly.
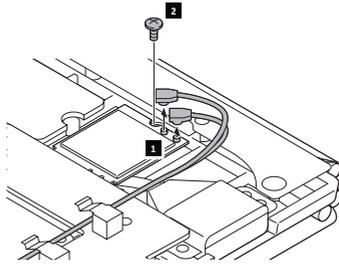
1030 PCI Express Mini Card for wireless LAN

For access, remove these FRUs in order:
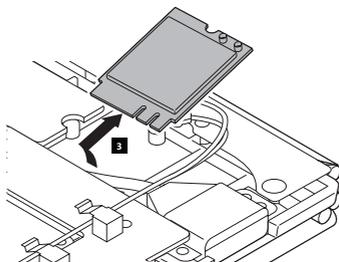*   "1010 Base cover" on page 33
*   "1020 Battery pack" on page 35

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

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

Step	Screw (quantity)	Color	Torque
2	M2 × 2.5 mm, cross-head, nylok-coated (1)	Black	1.5~2.0 kgf*cm

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

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

Notes: The wireless LAN card has 2 cables in step ■.

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

When installing:

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

• In models with a wireless LAN card that has three antenna connectors, plug the black cable (1st) (MAIN) into the jack labeled 1, the grey cable (3rd) into jack labeled 3, and the white cable (2nd) (AUX) into jack labeled 2 on the card.
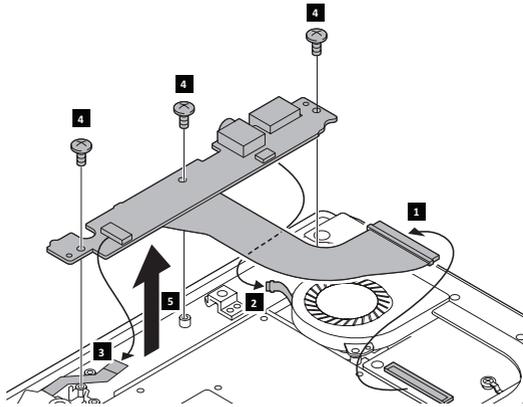
1040 Audio board

For access, remove these FRUs in order:
• "1010 Base cover" on page 32
• "1020 Battery pack" on page 34

Figure 4. Removal steps of audio board

Detach the connectors ▮, **2**, and **3** in sequence. Remove the screws **4**. Lift the audio board in the direction shown by arrow **5**. Be careful not to damage the connector.

Step	Screw (quantity)	Color	Torque
4	M2 × 3.5 mm, cross-head, nylok-coated (3)	Black	1.5~2.0 kgf*cm

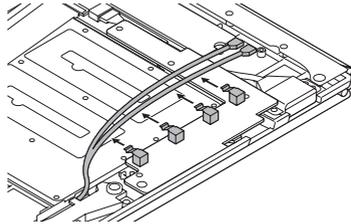**When installing:** Make sure that the connectors are attached firmly.

1050 HDMI board

For access, remove these FRUs in order:
• "1010 Base cover" on page 32
• "1020 Battery pack" on page 34
• "1030 PCI Express Mini Card for wireless LAN" on page 35

Figure 5. Removal steps of HDMI board

Release the antenna cables as shown below.

Remove the screws ■. Lift the HDMI board in the direction shown by arrow **2**.
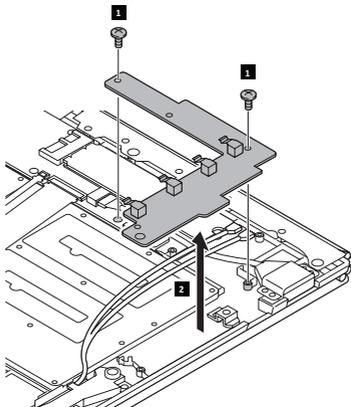
Step	Screw (quantity)	Color	Torque
■	M2 × 3.5 mm, cross-head, nylok-coated (2)	Black	1.5~2.0 kgf*cm

1060 Fan and heat sink assembly

For access, remove these FRUs in order:
• "1010 Base cover" on page 32
• "1020 Battery pack" on page 34
• "1040 Audio board" on page 37

Figure 6. Removal steps of Fan and heat sink assembly

Remove the screws ■. Lift the fan and heat sink assembly in the direction shown by arrow **2**. Be careful not to damage the connector.
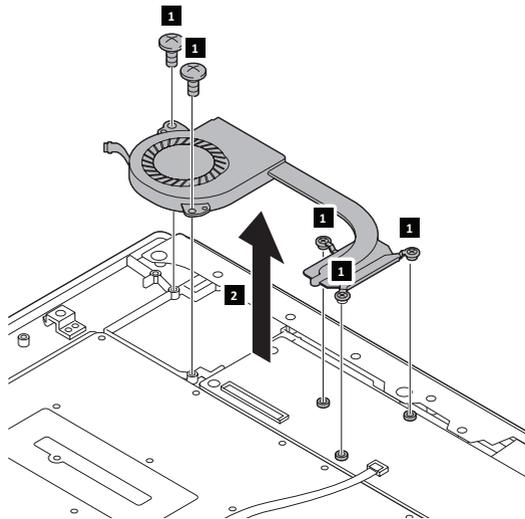
Step	Screw (quantity)	Color	Torque
■	M2 × 2.5 mm, cross-head, nylok-coated (5)	Black	1.5~2.0 kgf*cm

Attention: Do not handle the fan and heat sink assembly roughly. Improper handling can cause distortion or deformation and imperfect contact with components.
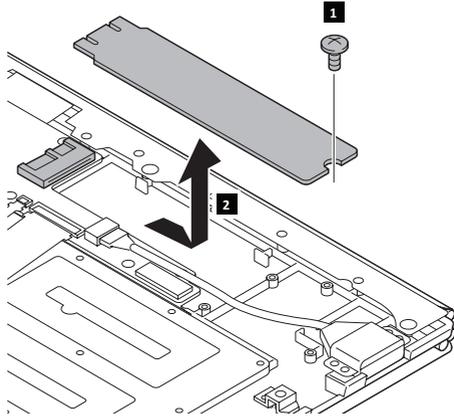
1070 SSD

For access, remove these FRUs in order:
• "1010 Base cover" on page 32
• "1020 Battery pack" on page 34

Figure 7. Removal steps of SSD

Remove the screws ■. Lift the SSD in the direction shown by arrow **2**.

Step	Screw (quantity)	Color	Torque
■	M2 × 2.5 mm, cross-head, nylok-coated (1)	Black	1.5~2.0 kgf*cm

1080 Mainboard

Important notices for handling the mainboard:

When handling the mainboard, bear the following in mind.

- Be careful not to drop the mainboard 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 mainboard.
- If you put a mainboard down, make sure to put it only on a padded surface, such as an ESD mat or conductive corrugated material.

For access, remove these FRUs in order:
- "1010 Base cover" on page 32
- "1020 Battery pack" on page 34
- "1040 Audio board" on page 37
- "1050 HDMI board" on page 38
- "1060 Fan and heat sink assembly" on page 39
- "1070 SSD" on page 40

Figure 8. Removal steps of mainboard

Detach the connectors ▮, **2**, **3**, and **4**. Remove the screws **5**. Be careful not to damage the connector.
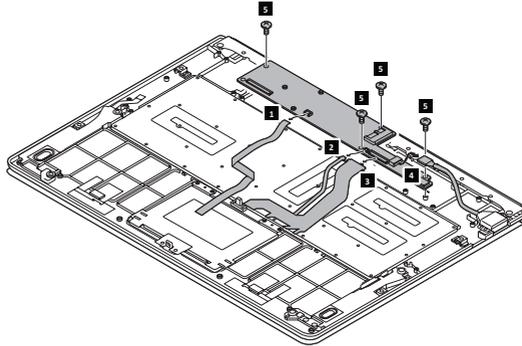
Step	Screw (quantity)	Color	Torque
5	M2 × 2.0 mm, cross-head, nylok-coated (4)	Black	1.5~2.0 kgf*cm

Turn over the mainboard in the direction shown by arrow ▮ and detach the LCD FPC connector **2**. Be careful not to damage the connector.
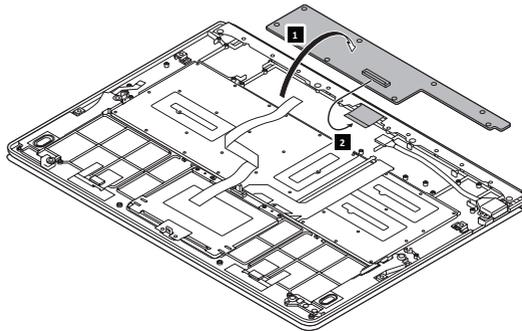
When installing: Make sure that the connectors are attached firmly.

1090 LCD module

For access, remove these FRUs in order:
• "1010 Base cover" on page 32

Figure 9. Removal steps of LCD module

Remove the screws ■. Lift the LCD module in the direction shown by arrow **2**.

Step	Screw (quantity)	Color	Torque
■	M2 × 3.5 mm, cross-head, nylok-coated (8)	Black	1.5~2.0 kgf*cm

1100 DC-in cable

For access, remove these FRUs in order:
• "1010 Base cover" on page 32

Figure 10. Removal steps of DC-in cable
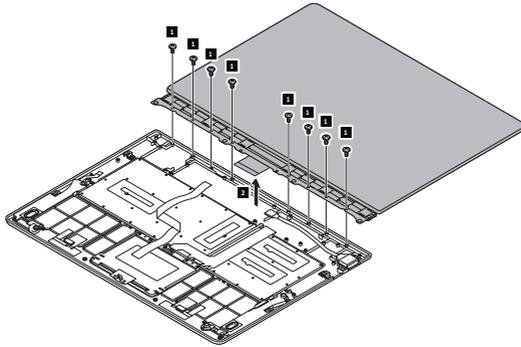
Remove the screws ■. Lift the DC-in cable in the direction shown by arrow **2**.
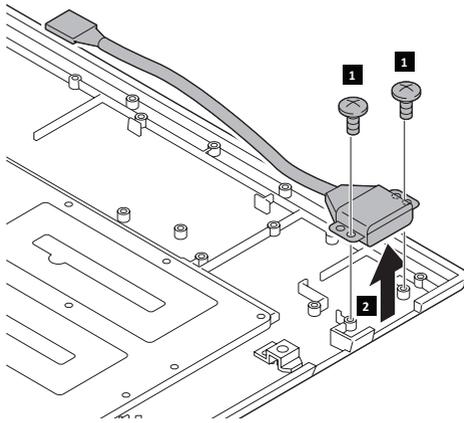
Step	Screw (quantity)	Color	Torque
■	M2 × 2.5 mm, cross-head, nylok-coated (2)	Black	1.5~2.0 kgf*cm

1110 Speakers and antennas

For access, remove these FRUs in order:
• "1010 Base cover" on page 32
• "1020 Battery pack" on page 34
• "1030 PCI Express Mini Card for wireless LAN" on page 35

Figure 11. Removal steps of speakers and antennas

Remove the screws ■. Lift the speakers in the direction shown by arrow **2**.
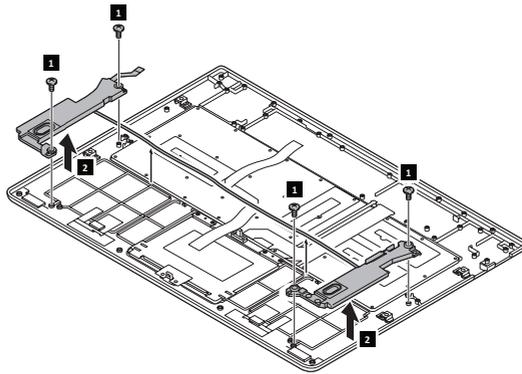
Step	Screw (quantity)	Color	Torque
■	M2 × 4.0 mm, cross-head, nylok-coated (4)	Black	1.5~2.0 kgf*cm

Figure 11. Removal steps of speakers and antennas

Detach the antennas in the direction shown by arrow ■.
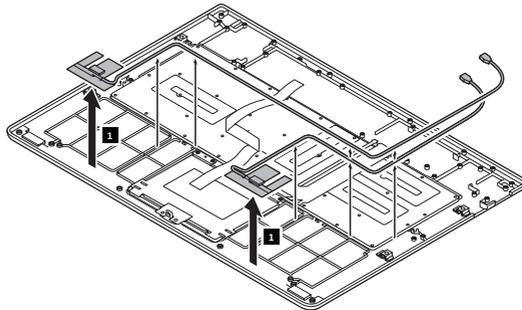
1120 Touch pad module

For access, remove these FRUs in order:
•   "1010 Base cover" on page 32
•   "1020 Battery pack" on page 34

Figure 12. Removal steps of touch pad module

Remove the screws ■. Lift the touch pad module in the direction shown by arrow **2**.
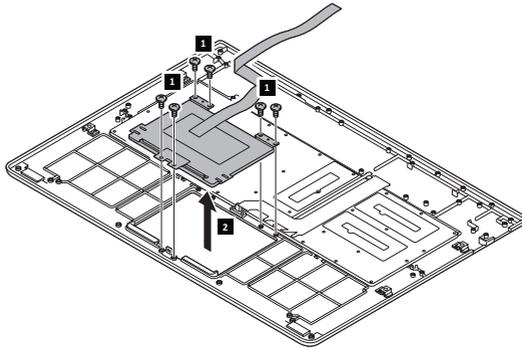
Step	Screw (quantity)	Color	Torque
■	M2 × 2.5 mm, cross-head, nylok-coated (6)	Black	1.5~2.0 kgf*cm

1130 Mylar, hinge cover, LCD bezel

For access, remove these FRUs in order:
• "1010 Base cover" on page 32
• "1090 LCD module" on page 43

Figure 16. Removal steps of mylar, hinge cover, LCD bezel

Remove the mylar in the direction of arrow shown by ■.
Remove the eight screws **2** covered by the mylar.
Remove the LCD bezel in the direction of arrow shown by arrow **3**.
Remove the two screws **4**. Remove the hinge cover.
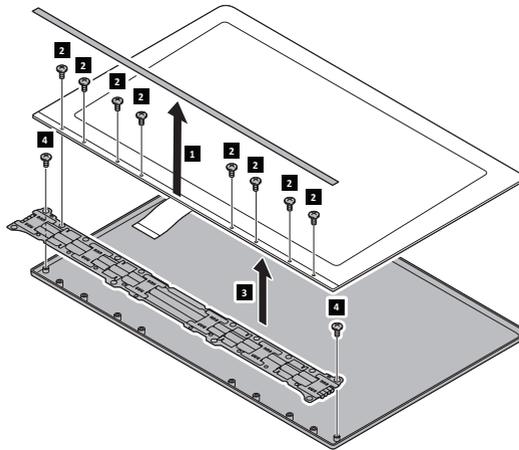
Step	Screw (quantity)	Color	Torque
■, **4**	M2 × 2.0 mm, cross-head, nylok-coated (10)	Black	1.5~2.0 kgf*cm

1140 Camera, sensor board, MIC board, vibrator, and LCD panel

For access, remove these FRUs in order:
- "1010 Base cover" on page 32
- "1090 LCD module" on page 43
- "1130 Mylar, hinge cover, LCD bezel" on page 47

Figure 17. Removal steps of camera, sensor board, MIC board, vibrator, and LCD panel

Remove the vibrator ■. Detach connectors **2**, **3**, and **6**.
Remove the LCD panel connector in the direction as shown by arrow **4**.
Remove the camera and sensor board in the direction as shown by arrow **5**.
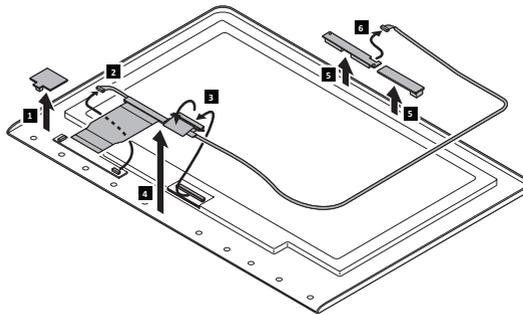
1150 LCD magnets

For access, remove these FRUs in order:
• "1010 Base cover" on page 32
• "1090 LCD module" on page 43
• "1130 Mylar, hinge cover, LCD bezel" on page 47

Figure 18. Removal steps of LCD module

Remove the LCD magnets as shown below.
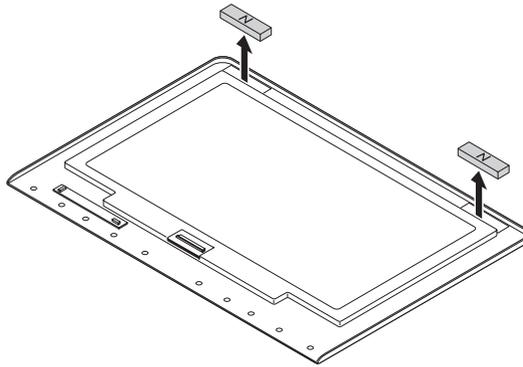
Locations

Front view and right-side view

■ Integrated camera
2 Multi-touch screen
3 Windows button
4 Built-in microphones
5 Wireless LAN antennas
6 Touch pad
7 Power button and power status indicator
8 Battery status indicator
Note: For the description of each indicator, see "Status indicators" on page 29.
9 Novo button
10 Rotation lock button
11 Volume buttons
12 Micro HDMI port
13 USB 3.0 port
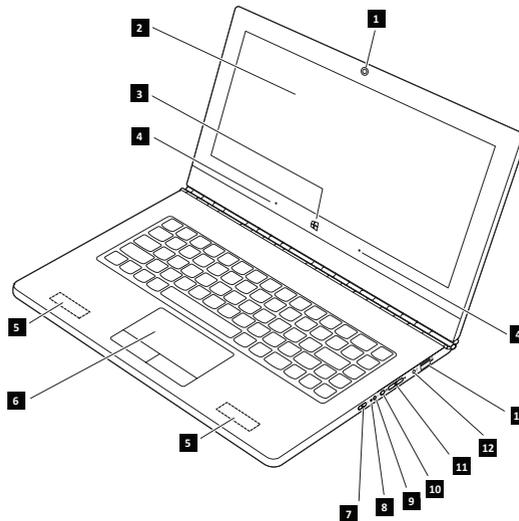
Bottom and Left-side view

■ Speakers
2 Memory card slot
3 Micro HDMI port
4 USB 3.0 port
5 AC power adapter jack
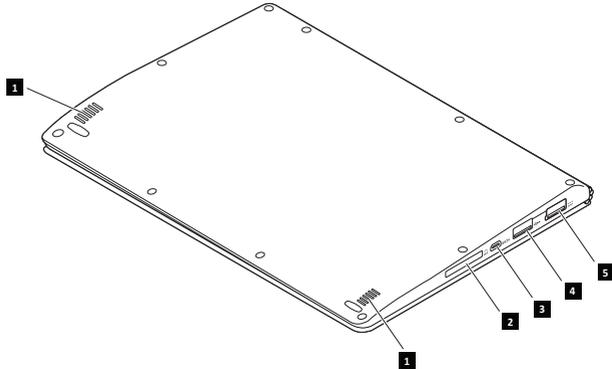
Parts list

This section presents the following service parts:
- "Overall" on page 53
- "LCD FRUs" on page 56
- "Keyboard" on page 57
- "Screws" on page 59
- "AC adapters" on page 59
- "USB cords" on page 59

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

Overall

Table 2. Parts list – Overall

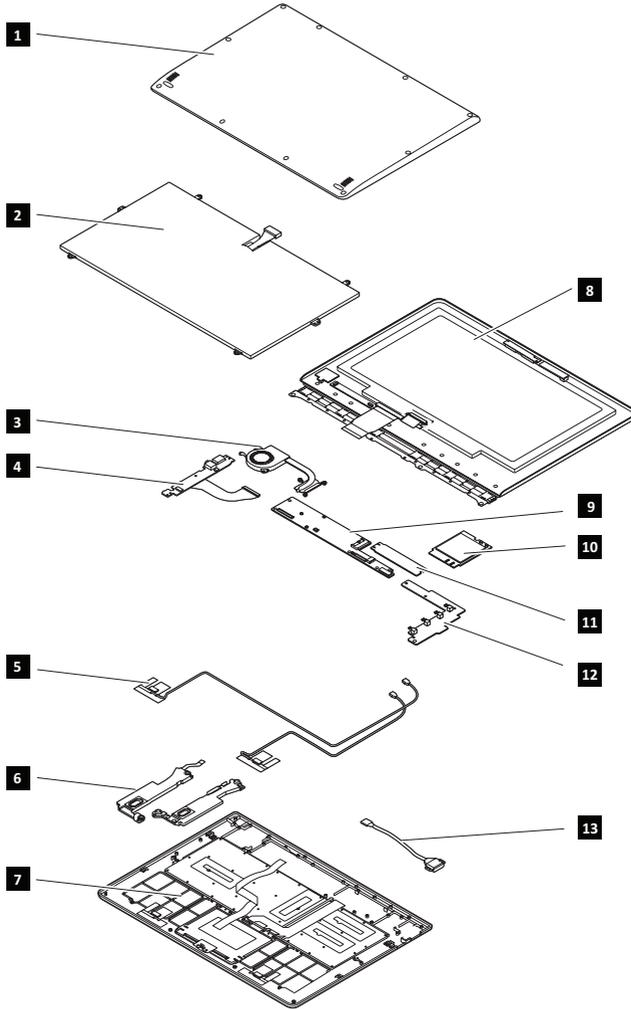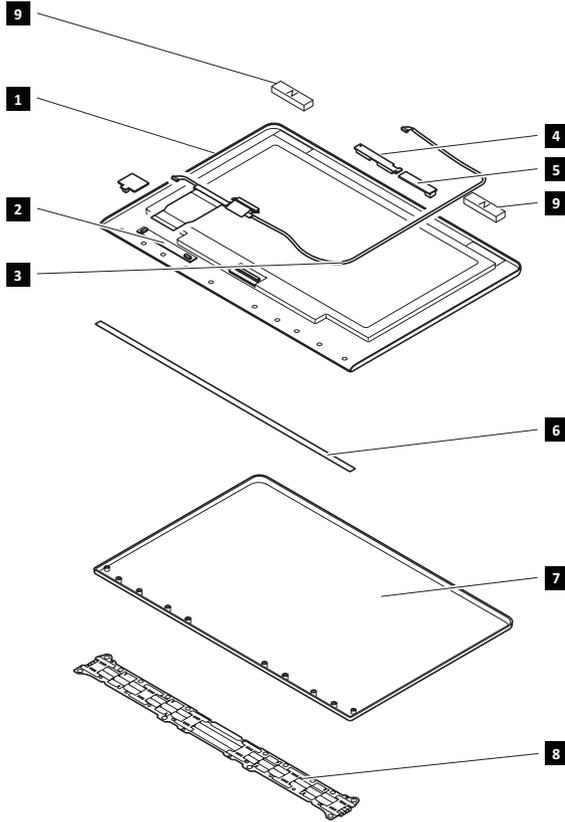| No.	FRU	FRU no.	CRU ID.
1	Lower Case L YOGA 3 Pro SV	5CB0G97363	N
1	Lower Case L YOGA 3 Pro Gold	5CB0G97336	N
1	Lower Case L YOGA 3 Pro Orange	5CB0G97350	N
2	Bach SP/A L13M4P71 7.6V44.8Wh 4cellBty	121500264	N
2	Bach SY/A L14S4P71 7.7V44Wh 4cellBty	121500267	N
3	Thermal Module L YOGA 3ProW/FAN	5H40G97367	N
4	Audio Board L YOGA 3 Pro	5C50G97364	N
5	Antenna L YOGA 3 Pro Honglin	5A30G97354	N
5	Antenna L YOGA 3 Pro Tyco	5A30G97368	N
6	Yoga3 Pro JBL BladeIV Speaker	5SB0G81146	N
7	Keyboard (see "Keyboard" on page 57.)		N
7	Upper case L YOGA 3 ProW/KB/SCW BU	5CB0G97328	N
7	Upper case L YOGA 3 ProW/KB/SCW US	5CB0G97347	N
7	Upper case L YOGA 3 ProW/KB/SCW BZ	5CB0G97361	N
7	Upper case L YOGA 3 ProW/KB/SCWICE	5CB0G97376	N
7	Upper case L YOGA 3 ProW/KB/SCW JA	5CB0G97329	N
7	Upper case L YOGA 3 ProW/KB/SCW LA	5CB0G97345	N
7	Upper case L YOGA 3 ProW/KB/SCW UK	5CB0G97373	N
7	Upper case L YOGA 3 ProW/KB/SCW SA	5CB0G97325	N
7	Upper case L YOGA 3 ProW/KB/SCW IT	5CB0G97340	N
7	Upper case L YOGA 3 ProW/KB/SCW IN	5CB0G97355	N
7	Upper case L YOGA 3 ProW/KB/SCW CF	5CB0G97370	N
7	Upper case L YOGA 3 ProW/KB/SCW KO	5CB0G97321	N
7	Upper case L YOGA 3 ProW/KB/SCW NL	5CB0G97337	N
7	Upper case L YOGA 3 ProW/KB/SCW GK	5CB0G97353	N
7	Upper case L YOGA 3 ProW/KB/SCW SP	5CB0G97369	N
7	Upper case L YOGA 3 ProW/KB/SCW CH	5CB0G97320	N
7	Upper case L YOGA 3 ProW/KB/SCW HB	5CB0G97334	N
7	Upper case L YOGA 3 ProW/KB/SCW TR	5CB0G97352	N
7	Upper case L YOGA 3 ProW/KB/SCW SW	5CB0G97335	N
7	Upper case L YOGA 3 ProW/KB/SCW RU	5CB0G97351	N
7	Upper case L YOGA 3 ProW/KB/SCW FR	5CB0G97366	N
7	Upper case L YOGA 3 ProW/KB/SCW HG	5CB0G97319	N
7	Upper case L YOGA 3 ProW/KB/SCW TI	5CB0G97333	N
7	Upper case L YOGA 3 ProW/KB/SCWUSI	5CB0G97349	N
7	Upper case L YOGA 3 ProW/KB/SCW ND	5CB0G97323	N
7	Upper case L YOGA 3 ProW/KB/SCW PO	5CB0G97338	N
7	Upper case L YOGA 3 ProW/KB/SCW GR	5CB0G97360	N
7	Upper case L YOGA 3 ProW/KB/SCW CS	5CB0G97375	N
7	Upper case L YOGA 3 ProW/KB/SCW BE	5CB0G97327	N
7	Upper case L YOGA 3 ProW/KB/SCW AR	5CB0G97342	N
7	Upper case L YOGA 3 ProW/KB/SCWUSA	5CB0G97357	N
8	LCD unit (see "LCD FRUs" on page 56.)		N

Table 2. Parts list – Overall (continued)

No.	FRU	FRU no.	CRU ID.
9	MB L YOGA 3 Pro NOK 5Y10 8G	5B20G97344	N
9	MB L YOGA 3 Pro W8S 5Y10 8G	5B20G97359	N
9	MB L YOGA 3 Pro W8P 5Y10 8G	5B20G97374	N
9	MB L YOGA 3 Pro NOK 5Y10 4G	5B20G97343	N
9	MB L YOGA 3 Pro W8S 5Y10 4G	5B20G97358	N
9	MB L YOGA 3 Pro W8P 5Y10 4G	5B20G97372	N
9	MB L YOGA 3 Pro NOK 5Y70 8G	5B20G97326	N
9	MB L YOGA 3 Pro W8S 5Y70 8G	5B20G97341	N
9	MB L YOGA 3 Pro W8P 5Y70 8G	5B20G97356	N
9	MB L YOGA 3 Pro NOK 5Y70 4G	5B20G97371	N
9	MB L YOGA 3 Pro W8S 5Y70 4G	5B20G97324	N
9	MB L YOGA 3 Pro W8P 5Y70 4G	5B20G97339	N
10	Intel 7265 2x2AC+BT PCIE M.2 WLAN SAR NV	SW10A11522	N
10	Cbt BCM4352 2x2AC+BT4.0 PCIE M.2 WLAN	20200480	N
11	128G SSD, MZNTE128HMGR-000L2	16200609	N
11	128G SSD, L8T-128L9G 128GB M.2	5SD0F65755	N
11	256G SSD, MZNTE256HMHP-000L2	16200610	N
11	256G SSD, L8T-256L9G 256GB M.2	5SD0F65751	N
11	512G SSD, MZNTE512HMJH-000L2	16200611	N
12	HDMI Board L YOGA 3 Pro	5C50G97346	N
12	HDMI Board Cable L YOGA 3 Pro	5C10G97378	N
13	DC-IN Cable L YOGA 3 Pro	5C10G97330	N

LCD FRUs

In Lenovo YOGA 3 Pro-1370, the type of LCD is 13.3-inch high definition (HD).

Table 3. Parts list – 13.3-inch LCD FRUs

No.	FRU	FRU no.	CRU ID.
1	LCD Module L YOGA 3ProW/LCD/AHVE	5D10G97569	N
2	MIC Board L YOGA 3 Pro W/Ahve	5C50G97332	N
3	EDP Cable L YOGA 3 Pro Luxshare	5C10G97348	N
3	EDP Cable L YOGA 3 Pro Sumitomo	5C10G97362	N
4	Camera L YOGA 3 Pro 720P HD	5C20G97570	N
5	Sensor Board L YOGA 3 Pro W/Ahve	5C50G97318	N
6	Hinge Cover L YOGA 3 Pro W/Mylar	5H50G97322	N
7	LCD Cover L YOGA 3 Pro SV	5CB0G97365	N
7	LCD Cover L YOGA 3 Pro Gold	5CB0G97317	N
7	LCD Cover L YOGA 3 Pro Orange	5CB0G97331	N
8	Bach_hinge_assy_AVC	5H50F98706	N
9	Magnet L YOGA 3 Pro S+N	5M20G97377	N

Keyboard

Table 4. Parts list – Keyboard

FRU	Language	P/N	CRU ID.
Arabic69KeyST3YBJMEBlackKeyKBD	Arabic	SN20F66296	N
Belgian70KeyST3YBJMEBlackKeyKBD	Belgian	SN20F66297	N
Bulgarian70KeyST3YBJMEBlackKeyKBD	Bulgarian	SN20F66301	N
Brazilian70KeyST3YBJMEBlackKeyKBD	Brazil-Portuguese	SN20F66303	N
Iceland70KeyST3YBJMEBlackKeyKBD	Icelandic	SN20F66304	N
US69KeyST3YBJMEBlackKeyKBD	English	SN20F66305	N
LatinSpa70KeyST3YBJMEBlackKeyKBD	La-Spanish	SN20F66308	N
Japanese73KeyST3YBJMEBlackKeyKBD	Japanese	SN20F66310	N
Slovenian70KeyST3YBJMEBlackKeyKBD	Slovenian	SN20F66311	N
UK70KeyST3YBJMEBlackKeyKBD	English-UK	SN20F66312	N
India69KeyST3YBJMEBlackKeyKBD	Hindi	SN20F66313	N
CanadFrEn70KeyST3YBJMEBlackKeyKBD	English-French	SN20F66316	N
Italian70KeyST3YBJMEBlackKeyKBD	Italian	SN20F66318	N
Dutch70KeyST3YBJMEBlackKeyKBD	Dutch	SN20F66319	N
Korean69KeyST3YBJMEBlackKeyKBD	Korean	SN20F66322	N
Spanish70KeyST3YBJMEBlackKeyKBD	Spanish	SN20F66324	N
Greek69KeyST3YBJMEBlackKeyKBD	Greek	SN20F66325	N
TradChine69KeyST3YBJMEBlackKeyKBD	Traditional Chinese	SN20F66328	N
Hebrew69KeyST3YBJMEBlackKeyKBD	Hebrew	SN20F66331	N
Turkish70KeyST3YBJMEBlackKeyKBD	Turkish	SN20F66332	N
Russian69KeyST3YBJMEBlackKeyKBD	Russian	SN20F66336	N
Swiss70KeyST3YBJMEBlackKeyKBD	Swiss	SN20F66338	N
Hungarian70KeyST3YBJMEBlackKeyKBD	Hungarian	SN20F66339	N
Thailand69KeyST3YBJMEBlackKeyKBD	Thai	SN20F66340	N
French70KeyST3YBJMEBlackKeyKBD	French	SN20F66342	N
USInter69KeyST3YBJMEBlackKeyKBD	English International	SN20F66346	N
Portugue70KeyST3YBJMEBlackKeyKBD	Portuguese	SN20F66347	N
German70KeyST3YBJMEBlackKeyKBD	German	SN20F66348	N
Nordic70KeyST3YBJMEBlackKeyKBD	Nordic	SN20F66349	N
Czh-Slk70KeyST3YBJMEBlackKeyKBD	Czech-Slovakian	SN20F66354	N
German70KeyST3YBOKIBlackKeyKBD	German	SN20F66295	N
Belgian70KeyST3YBOKIBlackKeyKBD	Belgian	SN20F66298	N
Portugue70KeyST3YBOKIBlackKeyKBD	Portuguese	SN20F66299	N
India69KeyST3YBOKIBlackKeyKBD	Hindi	SN20F66300	N
Arabic69KeyST3YBOKIBlackKeyKBD	Arabic	SN20F66302	N
Iceland70KeyST3YBOKIBlackKeyKBD	Icelandic	SN20F66306	N

Table 4. Parts list – Keyboard (continued)

FRU	Language	P/N	CRU ID.
LatinSpa70KeyST3YBOKlBlackKeyKBD	La-Spanish	SN20F66307	N
Brazilian70KeyST3YBOKlBlackKeyKBD	Brazil-Portuguese	SN20F66309	N
Slovenian70KeyST3YBOKlBlackKeyKBD	Slovenian	SN20F66314	N
CanadFrEn70KeyST3YBOKlBlackKeyKBD	English-French	SN20F66315	N
Japanese73KeyST3YBOKlBlackKeyKBD	Japanese	SN20F66317	N
Korean69KeyST3YBOKlBlackKeyKBD	Korean	SN20F66320	N
UK70KeyST3YBOKlBlackKeyKBD	English-UK	SN20F66321	N
Dutch70KeyST3YBOKlBlackKeyKBD	Dutch	SN20F66323	N
TradChine69KeyST3YBOKlBlackKeyKBD	Traditional Chinese	SN20F66326	N
Italian70KeyST3YBOKlBlackKeyKBD	Italian	SN20F66327	N
Swiss70KeyST3YBOKlBlackKeyKBD	Swiss	SN20F66329	N
Greek69KeyST3YBOKlBlackKeyKBD	Greek	SN20F66330	N
Russian69KeyST3YBOKlBlackKeyKBD	Russian	SN20F66333	N
Hebrew69KeyST3YBOKlBlackKeyKBD	Hebrew	SN20F66334	N
USInter69KeyST3YBOKlBlackKeyKBD	English International	SN20F66335	N
Spanish70KeyST3YBOKlBlackKeyKBD	Spanish	SN20F66337	N
French70KeyST3YBOKlBlackKeyKBD	French	SN20F66341	N
Hungarian70KeyST3YBOKlBlackKeyKBD	Hungarian	SN20F66343	N
Turkish70KeyST3YBOKlBlackKeyKBD	Turkish	SN20F66344	N
Czh-Slk70KeyST3YBOKlBlackKeyKBD	Czech-Slovakian	SN20F66345	N
Nordic70KeyST3YBOKlBlackKeyKBD	Nordic	SN20F66350	N
Thailand69KeyST3YBOKlBlackKeyKBD	Thai	SN20F66351	N
US69KeyST3YBOKlBlackKeyKBD	English	SN20F66352	N
Bulgarian70KeyST3YBOKlBlackKeyKBD	Bulgarian	SN20F66353	N

Screws

Table 5. Parts list – screws

FRU	P/N	CRU ID.
SAE 1018 M 2.0D 2.0L K 6.5D 0.5T	MA00000PQG0	N
SAE 1018 M 2.0D 2.5L K 3.5D 0.3T	MA00000RTG0	N
SAE 1018 M 2.0D 1.7L K 3.5D 0.3T	MA00000S1G0	N
SAE 1018 M 2.0D 2.0L K 5.5D 0.5T	MA00000T3G0	N
SAE 1018 M 2.0D 2.5L K 4.5D 0.5T	MA00000PNG0	N
SAE 1018 M 2.0D 4.0L 6.0D 0.5T	MA00000T1G0	N
SAE 1018 M 2.0D 3.5L K 4.2D 0.4T	MA00000SAG0	N
SUS304 M 2.0D 3.3L K 3.5D 0.7T	MA00000T6G0	N

AC adapters

Table 6. Parts list – AC adapters

FRU	P/N	CRU ID.
Delta ADL40WDA 20V/5.2V 2A 40W adapter	36200561	*
Delta ADL40WDJ 20V/5.2V 2A 40W adapter	36200562	*
Delta ADL40WDB 20V/5.2V 2A 40W adapter	36200563	*
Delta ADL40WDD 20V/5.2V 2A 40W adapter	36200564	*
Delta ADL40WDG 20V/5.2V 2A 40W adapter	36200565	*
Delta ADL40WDE 20V/5.2V 2A 40W adapter	36200566	*
Delta ADL40WDC 20V/5.2V 2A 40W adapter	36200567	*
Chicony ADL40WCA 20V/5.2V 2A40W adapter	36200579	*
Chicony ADL40WCB 20V/5.2V 2A40W adapter	36200580	*
Chicony ADL40WCC 20V/5.2V 2A40W adapter	36200581	*
Chicony ADL40WCD 20V/5.2V 2A40W adapter	36200582	*
Chicony ADL40WCE 20V/5.2V 2A40W adapter	36200583	*
Chicony ADL40WCF 20V/5.2V 2A40W adapter	36200584	*
Chicony ADL40WCG 20V/5.2V 2A40W adapter	36200585	*

USB cords

Table 7. Parts list – USB cords

FRU	P/N	CRU ID.
Linetek fool proof USB 1.85m USB cord	145500119	*
Luxshare fool proof USB 1.85m USB cord	145500121	*

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