

## Chapter

## 1

## Service Overview

*Carefully read through this chapter for a look at various components of the notebook and necessary cautions and tools before performing any service and repairs.*

To provide the best service and support for the ASUS Z93E Series, we have provided the below information for technicians from distributors and resellers to perform the complete notebook disassembly and assembly. But before performing the procedures, please be sure to read through the overview in this chapter for component overview, cautions and tools to avoid any unwarranted damages to the notebook's hardware.

The following chapter includes:

- Z93E Overview
- Components
- Precautions
- Appropriate Tools

## Z93E Series Overview and Components

The ASUS Z93E Series Notebook is a product combining the power of INTEL Pentium-M CPU. In this section, an overview for the Z93E, along with its components, will be presented.

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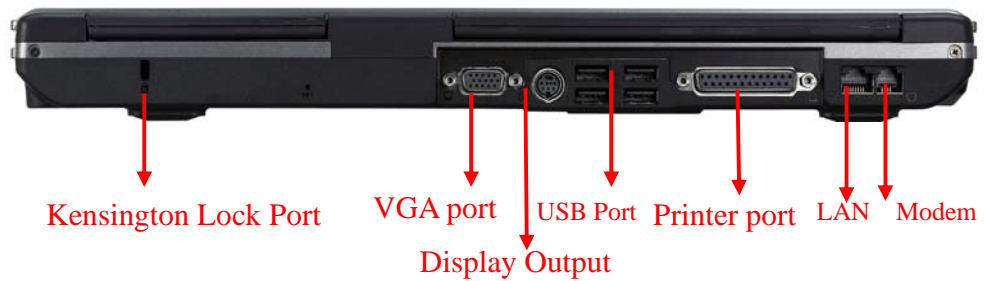
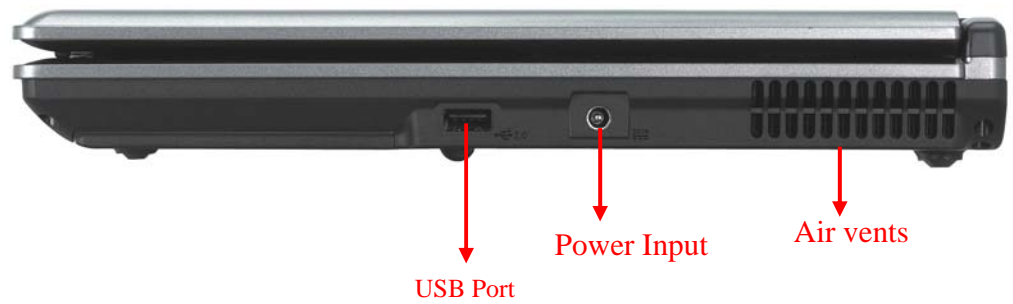
OVERVIEW

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### Z93E Overview

The illustrations below show the notebook's overview from front view, rear view, right side view, left side view and bottom view. Most of the parts will be discussed in this manual.





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**COMPONENTS**

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## Components

The illustrations below show the components of the Z93E Series.

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**LCD**

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### LCD Panel\*

The illustration below shows the LCD display panel. The Z93E Series notebook comes with 17" Wide TFT LCD.



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**INVERTER  
MODULE**

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### Inverter Board Module

The illustration below shows the inverter board, cable and LED indicators.



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LCD HINGES

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LCD Hinge brackets

The illustration below shows the hinge brackets that support the LCD module.



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LCD CASE

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LCD Case

The illustration below shows the LCD case that encloses the LCD panel, inverter and hinge feet. Here is the LCD front cover, back cover.



Front Cover



Back Cover

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**KEYBOARD**

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**Keyboard**

The illustration below shows the keyboard plate. It can be exchanged with keyboard plates with different language layouts, such as U.S., Taiwanese, German, Swedish, Italian, Russian, Japanese, and Turkish, Czechoslovakian, British and others.



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**HDD**

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**Hard Disk Drive**

The illustration below shows the 2.5" industry-standard HDD with 9.5mm height.



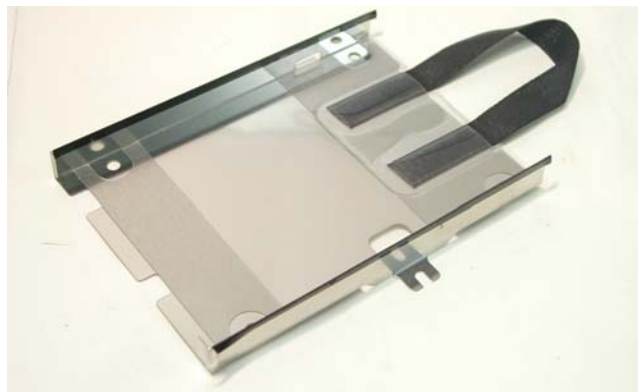
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**HDD BRACKET**

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**HDD Bracket**

The illustration below shows the HDD Bracket that is placed over the HDD.



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**C P U**

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**CPU**

The illustration below shows the Intel Pentium-M CPU view; it's located on the upper right corner under keyboard.



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**C P U H E A T  
S I N K**

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**CPU Heat Sink**

The illustration below shows the heat sink for the CPU. It's located on the top of CPU.



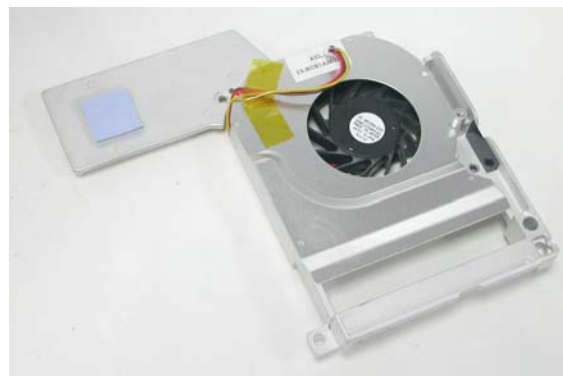
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**F A N**

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**FAN**

The illustration below shows the fan for the CPU. It's located near CPU heat sink.



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**MEMORY**

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**Memory Module**

The illustration below shows the industry-standard DDR RAM module for the notebook. It is installed under the SO-DIMM cover of the notebook.



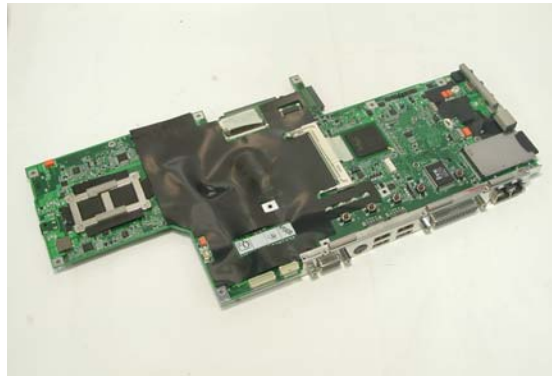
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**MOTHER  
BOARD  
MODULE**

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**Motherboard Module**

The illustration below shows the motherboard module of the notebook.



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**BOTTOM CASE**

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**Bottom Case**

The illustration below shows the bottom case of the notebook.





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FUNCTION  
CAP  
MODULE

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Function Cap

The illustration below shows the function cap of the notebook.



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CDROM  
MODULE

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CDROM Module

The illustration below shows the CDROM module of the notebook.



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## Service Overview

Please pay special attention to the cautions below to prevent any damages to the notebook and also please be sure to select the appropriate tools described in this section to perform any services desired.

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### CAUTIONS

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## Precautions

Before you perform any service and/or repair on the notebook, please follow the steps below first.

1. Be sure that the notebook is powered down.
2. Disconnect the AC plug from the right side of the notebook (No.1 on the illustration below).



3. Slide the battery lock (No.2) to unlock and slide the battery release outwards (No.3) and pull the battery pack out.



4. Remove all rings, watches and any other metal objects from your hands.
5. Always wear a ground strap on your hand to protect the notebook from static discharge.

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**TOOLS**


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**Appropriate Tools**

The illustrations below show the appropriate tools that should be used for the notebook's service and repair.

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**CROSS  
SCREW-  
DRIVER**


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**Phillips-head Screwdriver**

Use a Phillips-head screwdriver to fasten/remove the K- or B-typed screws.




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**FLATHEAD  
SCREW-  
DRIVER**


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**Single-Slotted Screwdriver**

Use a single-slotted screwdriver to lock/unlock the flexible cable connector locks




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**TWEEZERS**


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**Tweezers**

Use a pair of tweezers to remove/insert flexible cables.




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**SPACER  
SCREW-  
DRIVER**


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**Spacer Screwdriver**

Use a spacer screwdriver to fasten/remove spacer screws or hex screws.




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**PLIERS**


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**Pliers**

Use a pair of pliers to handle regular cables.




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**VACUUM  
HANDLING  
TOOL**


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**Vacuum Handling Tool**

Use Vacuum handling tool to handle CPU.



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MOLEX  
CPU SOCKET  
TOOL

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**Molex CPU Socket Tool**

Use Molex CPU Socket tool to lock/unlock the Molex socket of CPU.



Width: 4.00mm    Depth: 0.45+/-0.1mm    The angle of tip: approximate 9 degree

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INSERTION  
AND  
EXTRACTION  
TOOL FOR  
FPC  
CONNECTOR

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**Insertion and extraction tool for FPC connector**

Use insertion and extraction tool for FPC connector to handle locking and unlocking of FPC connectors.

