

## Disassemble Process: TTL PORTATIL

### INDEX:

1. Model.
2. Result after disassembling all.
3. Process step by step.
  - 3.0 Unplug the Power Cord
  - 3.1 Take out battery by and Covers.
    - 3.1.1 Battery
    - 3.1.2 Lithium Cell Battery
    - 3.1.3 Cdrom
    - 3.1.4 Bottom Plastic Cover.
  - 3.2 Take out keyboard.
  - 3.3 Take Serial, wireless, cpu modules, and IonLithum Cell.
    - 3.3.1 Wifi pcb, Memory pcb,fan,Cpu pipe,substrateCover
    - 3.3.2 Usb Circuit Board
  - 3.4 Take out the Touch Pad circuit Board
  - 3.5 Display out.  
( LCD display, frontal cover, substrate cover, LCD Panel circuit Board).
  - 3.6 Power Supply.
4. WEEE.

### 1. Model.

The following process is applied for the product TTL PORTATIL.

Fig.1a.

Fig. 1b.



For this model fig.1a we need only two tools:

Use the following tools:

- Screwdriver Philips ox65, fig.1b.
- Tweezers bent Tip, fig1b.

## 2. Result after disassembling all

After we have disassembled the product, figures fig.2, fig.3, fig3a and fig.3b.

Fig. 2:



Fig.3:

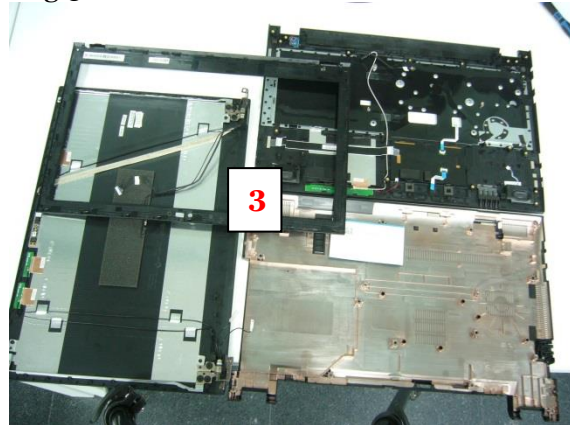
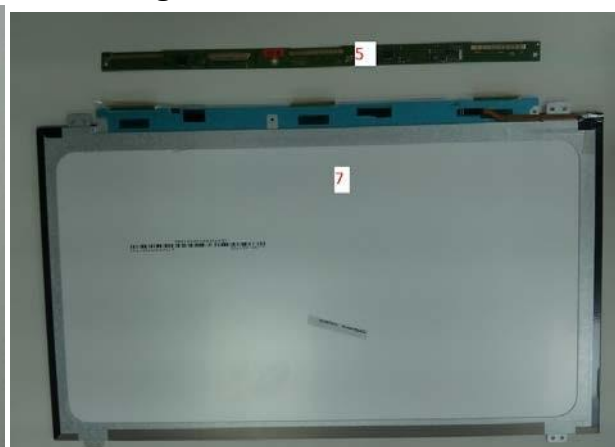


Fig.3a:



Fig.3b:



This is the list of the disassembling parts. The numbers in red meets the list.

1. Printed Circuit USB. → Metal
2. Memory Circuit Board( mainboard). → Metal
3. Top Cover, Bottom Keyboard, Bottom Cover and top Cover Display. → Plastic
4. Touch Pad CircuitBoard. → Metal
5. LCD Panel CircuitBoard. → Metal
6. CDROM Circuit Board. → Metal/Plastic
7. LCD display. → Metal
8. Li ion battery. → Metal
9. Fan. → Metal/Plastic
10. Cpu Cooper Pipe. → Metal  
KeyBoard. → Metal/Plastic  
Plastics covers. → Plastic
11. Main battery Pack. → Metal
12. Power Cord. → Metal/Plastic
13. Power Supply. → Metal/Plastic

### 3. Process step by step.

#### 3.0 Unplug the Power Cord by Hand.

Pull out from the connector in the right bottom corner, fig 4a. The Power cord has two parts; a wire and a PCB circuit ACDC.



### 3.1 Take out battery by and Covers. 3.1.1 Main Battery Pack by hand.

1.- We must place ourselves in front of the back of the team. Slide the latch (left and right) in the direction of the arrow.



2.- While holding the latch in place, pull the battery up in the direction of the arrow and lift it out.



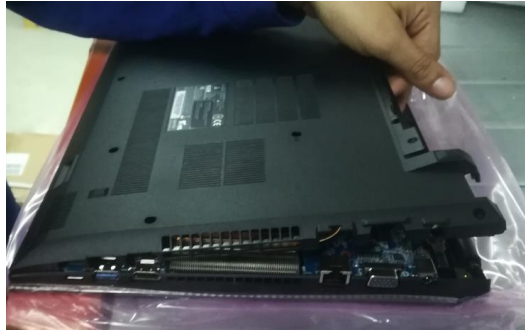
3.- The battery has already been removed.

### 3.1.2 Lithium Cell Battery.

1.- With a screwdriver we remove the screws from the bottom cover.



2.- We remove the bottom cover.



3.- We locate the lithium battery.



4.- Leverage with the help of a screwdriver.



5.- The lithium battery is already removed.



### 3.1.3 Cdrom.

There is only one screw that must be taken out fig.4c. then pull out the Cdrom.

Fig.4c



### 3.1.4 Bottom Plastic Cover.

Unscrew all the remains screws from the back cover.

To take out the bottom plastic cover, put your fingers inside the cdrom's hole and pull up, like fig 5. The result is the fig.5a and fig.6.

Fig 5



Fig 5a

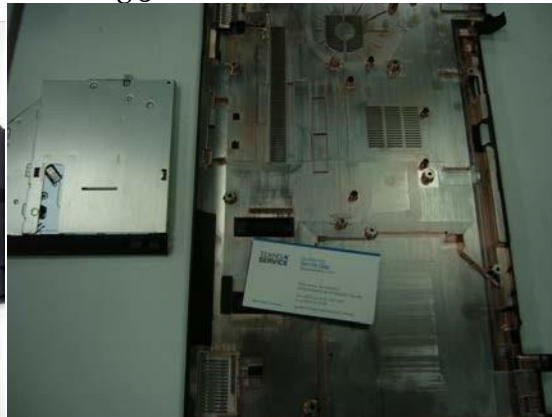


Fig. 6



### 3.2 Take out the keyboard.

Use the plane metal part of the tweezers in the upper side. Do a lever and pull out the keyboard, fig. 7 and fig.8

Fig. 7:



Fig. 8:



### 3.3 Take serial, wireless, cpu modules, and Ion-Lithium Cell.

#### 3.3.3 Wifi pcb, Memory pcb, fan, CPU pipe, substrate Cover

Unscrew all the remains screws that you can see in the fig.6. Some screws attaches Wireless module, CPU heat and fan to the motherboard, and others attaches the motherboard to the substrate plastic cover.

There are some flats wires connections that have to be undone.

The result in the fig.9.

To pull out the Button battery, use for this the tweezers, pushing and pulling.

The fig.10 shows the memory board or main board.

ig.9:

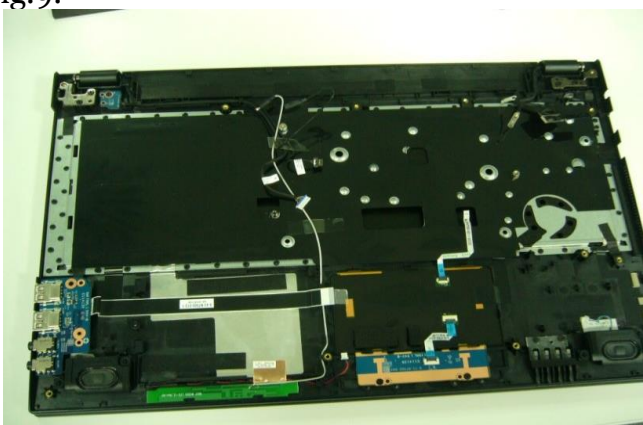


Fig.10:



### 3.3.4 Usb Circuit Board

The fig.10a shows the screw that must be take out to separate the Usb circuit Board. There is a flat cable that can be removed just pull it out.

Fig.10a



### 3.4 Touch Pad Circuit Board.

Take out the two screws fig.10b:

Fig.10b:





### 3.5 Display out.

Take out the screws fixed in the corners to separate the top cover from the back one. One time this done we will have the display unit prepared to dissembling fig.11:

Fig. 11



In the right and left bottom from the fig.11 there are two screws. Unscrew them to pull out the frontal plastic Cover fig. 12. The result is the fig. 13.

Fig.12:

Fig. 13:



In the bottom and up corner of fig. 13 there us some screws fixed. Unscrew them to separate the LCD unit from its plastic substrate fig.15 y fig.16. The result is the fig 17.

Fig. 15:



Fig.16



Fig 17.:



Use the tweezers to unstuck the circuit plastic guard.

Unscrew the small screws and pull out from the piece. The result is two elements the LCD panel and its LCD circuit, fig .18 and fig.19.



Fig. 18

Fig.19



### 3.6. - Power Supply.

#### 3.6.1. - Use the cutter and the screwdriver.

An opening is created on the side with the cutter and then separated using the screwdriver.

Fig. 26.



### 3.6.2. - We separate with our hands.

With the help of our hands we separate the plastic sides.

Fig. 27.



### 3.6.3. - Result previous step.

Once we manage to separate the plastic covers we have these two elements:

Fig 28.



### 3.6.4. - Cut the cable.

We cut the cable with scissors.

Fig.29.



### 3.6.5. - Completed Process.

Finally we see all the pieces disassembled individually.

Fig. 30.



### 3.6.6. - Cable disassembly.

First, the plug cable is cut, then with the cutter we cut the cable coverage.

Fig. 31.



### 3.6.7. - Result.

We get two cables: cable jacket (black) and cable insulation (white).

Fig.32.



## 4. - RAAW / WEEE.

The composition of the elements must be taken account if they are going to be reused o recycled.

To know that information visit the following URL:

[http://tiendattl.es/upload/ttlport/Weee\\_declaration.port.pdf](http://tiendattl.es/upload/ttlport/Weee_declaration.port.pdf)