

	宏達國際電子股份有限公司 High Tech Computer, Corp.	Doc. No.	DOC-00018457	REV.
		Issued Date	2006/07/06	A03
		Revised Date	2006/8/7	
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Hermes

Service Manual

HTC Proprietary
Confidential Treatment Requested

Rev. A03

Aug,4,2006

HTC Corp.

Engineering Mobility



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REVISION CONTROL TABLE

Rev	Date	Contents	Dept.	Revised	App Dept	Stage/Per
AX01	2006/5/8	First Draft	PSE	Felix Lu	TSC	DVT3
AX02	2006/6/8	1. Update Disassembly/Assembly 2. Update test plan 3. Update generic photo for SPL 4. Update battery and leakage current measurement procedure	PSE	Felix Lu	TSC	PVT
AX03	2006/6/15	1. Add gap inspection 2. Update board level repair	PSE	Felix Lu	TSC	PVT
A01	2006/7/6	First Release	PSE	Felix Lu	TSC	MV
A02	2006/7/27	1. Revise assembly/disassembly process. 2. Revise generic spare part list and Photos. 3. Update SPL of board level 2.5.	PSE	Felix Lu	TSC	MP
A03	2006/8/7	Add mylar on housing of LCM in page 16.	PSE	Felix Lu	TSC	MP





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INTRODUCTION

- This manual provides the technical information to support the service activities of the PPCP. This document contains highly confidential information, so any or all of this document should not be revealed to any third party.

1.1 Product Specification/Feature

- Platform
 - Dual-Mode PDA form factor
 - OS: Microsoft Windows Mobile 5.0-Phone Edition
- Dimension
 - 112.5mm (L) x 58mm (W) x 21.95mm (T), 176g with battery
- Processor/Chipset
 - CPU + Base band: Samsung with 400MHz + Qualcomm 6275
- Memory
 - Flash ROM: 128MB (for program and users' storage)
 - SDRAM: 64MB DDR SDRAM
- LCD Module
 - Main LCD Module
 - 2.8", 240x320 dots resolution with 65K color TFT LCD
 - 64K-color TFT Transflective LCD with white LED backlight
 - Sensitive Touch Screen
- WCDMA/GSM/EDGE Function
 - Dual mode: HSDPA/UMTS and GSM//GPRS/EDGE
 - HSDPA/UMTS:
 - Tri-band (2100MHz and 850MHz/1900MHz)
 - GSM/GPRS/EDGE:
 - Quad-band (850/900/1800/1900MHz)
 - Auto Band Switching
 - Global roaming
 - Handover and cell selection between GSM/EDGE and WCDMA
 - Audio codec: AMR, EFR, FR, HR
 - SMS (MO, MT), concatenated SMS (640 characters)
 - Supplement services
 - Call holding, waiting, and forwarding.
 - Call barring.
 - CLI (Call Line Identity)
 - Display own number
 - Network selection
 - Cell broadcast
 - Multi party capability conference call
 - Spool icon
 - Network lock
 - Phase 2+ unstructured supplementary service data
 - EDGE Function
 - EGPRS Class B
 - Multi-slot Standard Class 10
 - PBCCH
 - USIM/SIM





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- 1.8V/3V of UICC
- USIM application
- SIM application tool kit
- Over the Air (OTA) programming
- FDN (Fixed Dialing Number)
- ADN (Abbreviated Dialing Number)
- Security PIN 1&2 control
- Keyboard/Button
 - Keyboard
 - Qwerty keyboard with 2 additional soft keys
 - Ambient sensor for power saving on Qwerty
 - Button
 - Power button, Five-way navigation button, Send/Hands-free button, End button, Ok button
 - Comm. Manager, Camera capture button
 - 360 degree jog wheel
 - Voice dial/Voice record button
 - 2 soft keys, Video telephony button
 - Start button
 - 2 AP buttons (Messaging and Pocket IE)
- Notification
 - One bi-color LED for UMTS/GSM standby, UMTS/GSM message, UMTS/GSM network status, And charging status
 - Two respective (blue and green) LEDs for Bluetooth/Wi-Fi notification
 - Notification by sound, Message, Vibration on the display
- Audio
 - Build-in Microphone
 - Receiver
 - Loud speaker for Hands-free supported
 - Full duplex
 - WAV/WMA/AMR/AAC/MP3 codec
 - 16 bits with 8KHz, 11KHz, 22KHz, 44.1KHz
- Camera
 - Main camera
 - Color CMOS 2 mega-pixel macro function camera
 - Second camera
 - Color CMOS CIF camera
 - Video/Flash light
 - Preview mirror
- Bluetooth
 - V2.0 supported without EDR
 - Class 2 transmit power
 - Co-exist with WLAN
 - Supported profiles:
 - Generic Access Profile
 - Serial Port Profile
 - Headset Profile
 - Object Push Profile
 - DUN Profile
 - Heads-free Profile
 - Generic Object Exchange Profile





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- Advanced Audio Distribution Profile (A2DP)
- Audio/Video Remote Control Profile (AVRCP)
- SIM Access Profile
- HID Profile
- Infrared IrDA SIR
- WLAN
 - IEEE 802.11b/g supported
 - Internal WLAN antenna
- Interface
 - Infrared IrDA SIR
 - 3V USIM/SIM card
 - 11-pin min-USB (USB 1.1)/audio jack in one
 - Micro SD
- Power
 - Removable rechargeable Lithium Polymer battery
 - Capacity: 1300mAh
 - Charging time: 3 hours
 - GSM Talk-Time: 4~5 hours
 - UMTS Talk-Time: 2~4 hours
 - GSM Standby Time: 200+ hours
 - UMTS Standby Time: 180~250 hours
 - AC Adapter.
 - AC input rating: 100-240Vac, 50-60 Hz.
 - DC output: 5V / 1A
- Hanger Hole
 - Stylish hanger on the cover to wear phone with neck strap as pendant or to attach various phone hangers.
 - Lanyard support.
- Accessories
 - Inbox
 - AC adapter with mini-USB power plug
 - Sync. Cable (mini-USB)
 - Battery (rechargeable and replaceable)
 - Stylus
 - Carrying case
 - Stereo-wired headset with microphone
 - Option
 - Car adapter.
 - Cradle
 - 11-pin to 3.5 connector
 - TTY adapter
 - Battery Charger
- Microsoft Windows Mobile 5.0 Applications
 - Pocket Outlook: Calendar, Contacts, Messaging, Tasks, and Voice Notes
 - Push Mail
 - Internet Explorer Mobile
 - Office Mobile: Word, Excel & PowerPoint Mobile
 - Windows Media Player 10 Mobile
 - Pictures & Videos





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- ActiveSync Client
- Pocket MSN
- Calculator
- Value Added Application
 - Camera/Camcorder
 - Picture Enhancement for Pictures & Videos
 - Polyphonic MIDI Ringtone
 - Audio/Video enhancement for WMP
 - 3G-324M Video Telephony
 - ZIP
 - Smart Dialing
 - MMS Client: MMS 1.1 supported
 - Java virtual machine (J2ME, CLDC 1.1, MIDP 2.0)
 - Voice Dial & Command
 - Document Viewer – PDF
 - OMA DRM 1.0 supported
 - SIM Manager
 - Comm. Manager
 - Wireless Modem
 - STK
 - TTY for US Market
- Regulatory
 - PTCRB
 - R&TTE
 - FCC
 - BQB (Bluetooth Qualification Body) certification
 - Windows Mobile Logo (NTSL)
 - USB certification



DEVICE ASSEMBLING AND DISASSEMBLING PROCEDURE

1.2 Disassembly procedure



TOOLS NEEDED FOR ASSEMBLING AND DISASSEMBLING.

1. LENS CLEANING TISSUE
2. FLAT PLASTIC STICK
3. TOREX SCREW DRIVER T6X40
4. PHILIP SCREW DRIVER 000X40
5. TWEEZERS.(SUGGEST TO USE PLASTIC MADE)



1. REMOVE ANTENNA RUBBER.
2. EJECT THE STYLUS.
3. EJECT THE MICRO SD CARD IF AVAILABLE.



PUSH BATTERY LATCH TO THE RIGHT TO RELEASE BATTERY COVER.





REMOVE THE BATTERY



Warning: To reduce risk of fire or burns, do not disassemble, crush, puncture, short external contacts, or dispose of in fire or water. Replace only with specified batteries. Recycle or dispose of used batteries properly

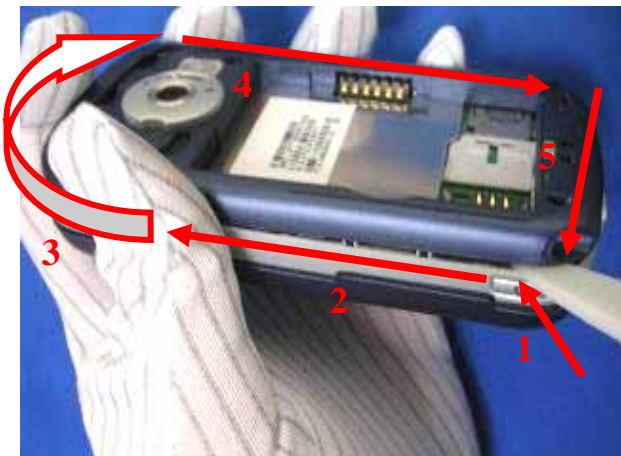


REMOVE FOUR SCREWS ON HOUSING AS WELL AS HINGER.

✓ SCREW: 72H01059-00M (Q'TY: 4).

WARRANTY SEAL: 77H00314-00M (Q'TY: 1)

[NOTE] PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 1.3+- 0.1KGF-CM

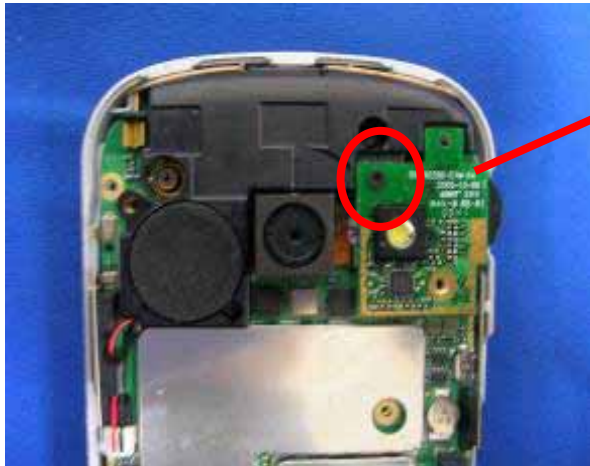


1. USE PLASTIC STICK INTO THE GAP BETWEEN HOUSING OF KEYBOARD AND BEZEL OF KEYBOARD FROM THE CORNER.
2. RELEASE THE HOOKS AROUND THE SIDES OF UNIT TO REMOVE THE HOUSING OF KEYBOARD.





REMOVE THE VIBRATOR.



RELEASE ONE SCREW TO DISCONNECT FLASH LIGHT MODULE.

✓ SCREW: 72H00724-00M (Q'TY: 1).

[NOTE]
PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 0.4+- 0.05KGF-CM



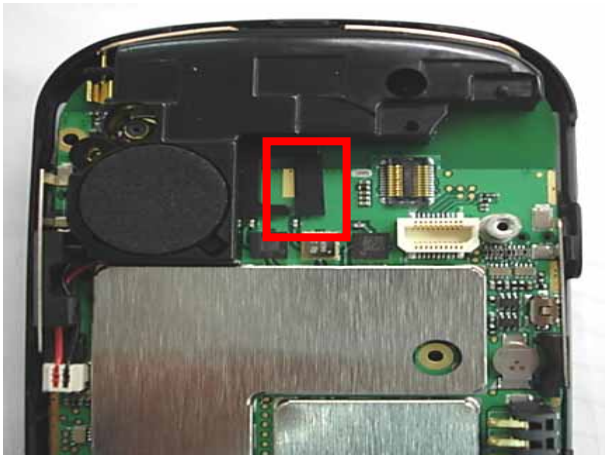
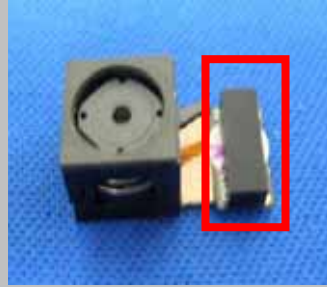
REMOVE RUBBER CAP FROM FLASH LIGHT MODULE.





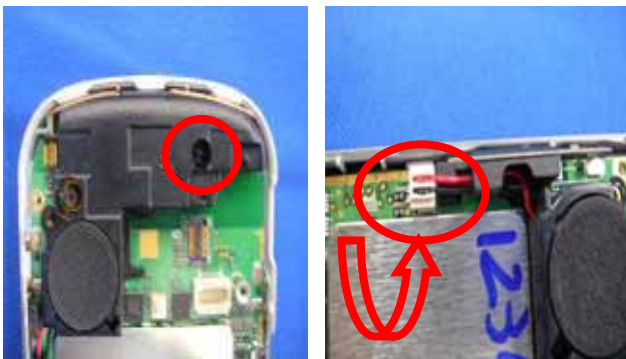
DISCONNECT MAIN CAMERA MODULE.

PLEASE STICK THE RUBBER ON CAMERA IF CAMERA REPLACEMENT IS NEEDED.



REMOVE CAMERA RUBBER SUPPORT.

✓ RUBBER: 76H01414-00M (Q' TY: 1)

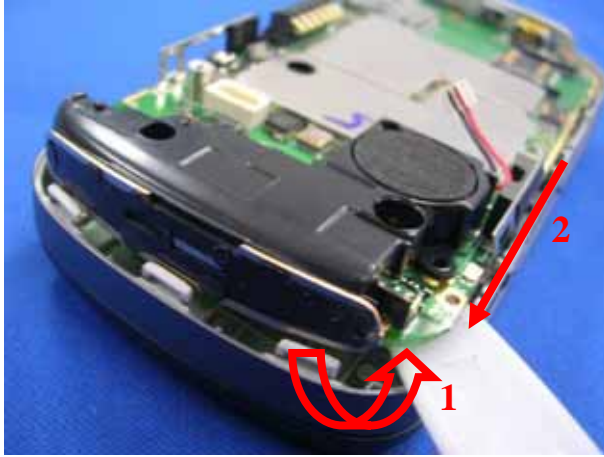


RELEASE ONE SCREW AND THEN DISCONNECT SPEAKER CONNECTOR FROM MAIN BOARD.

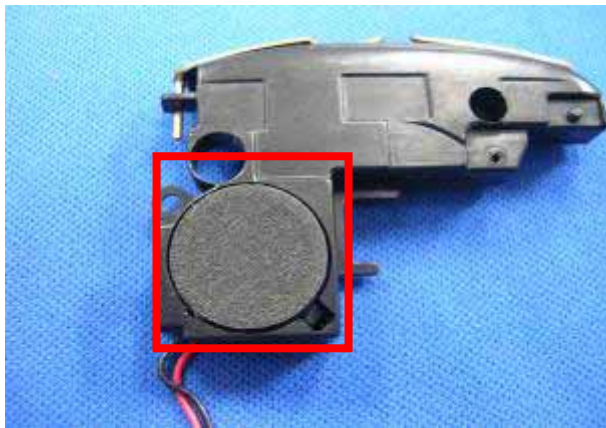
✓ SCREW: 72H01059-00M (Q' TY: 1)

[NOTE]
PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 1.1+- 0.05KGF-CM





1. USE PLASTIC STICK TO LIFT THE MAIN BOARD.
2. REMOVE ANTENNA FROM MAIN BOARD.



REMOVE SPEAKER FROM ANTENNA.



SLIDING THE FRAMES TO THE END.



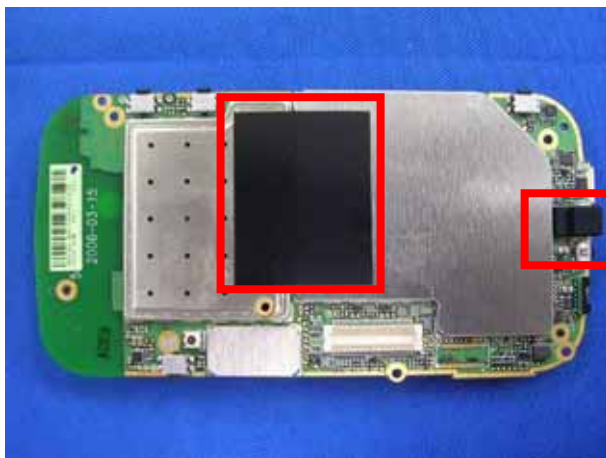


LIFT THE MAIN BOARD TO TAKE OUT THE MAIN BOARD FROM BOTTOM SIDE OF QWERTY KEYBOARD OF BEZEL.



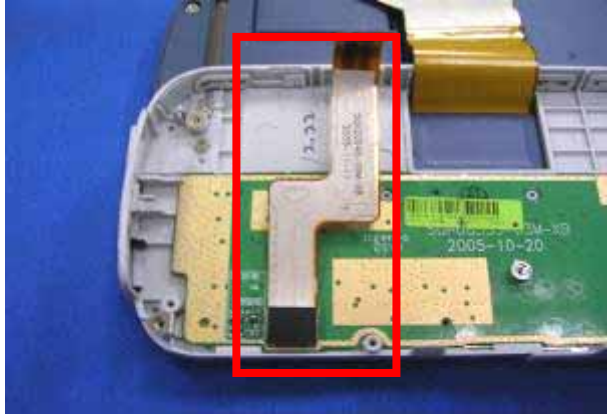
REMOVE CONDUCTOR SPACER AND THEN DISCONNECT LCM FPC FROM MAIN BOARD.
(PLEASE STICK A NEW CONDUCTOR SPACER WHEN IT IS REMOVED)

✓ CONDUCTOR SPACER: 76H01488-00M (QTY: 1)

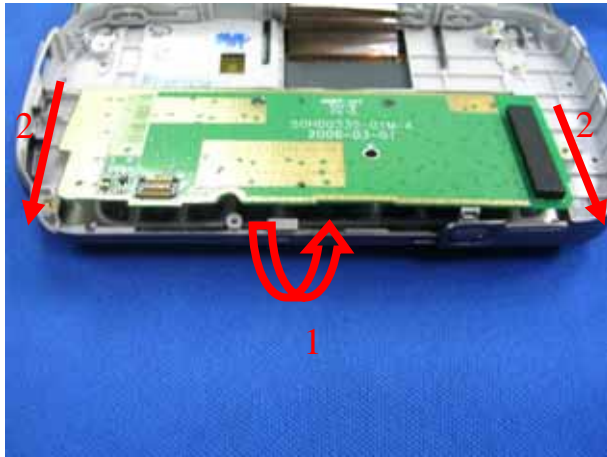


1. REMOVE RUBBER CAP OF MICROPHONE.
2. REMOVE MYLAR (PLEASE STICK A NEW MYLAR WHEN THE REPLACEMENT OF MAIN BOARD IS NEEDED)

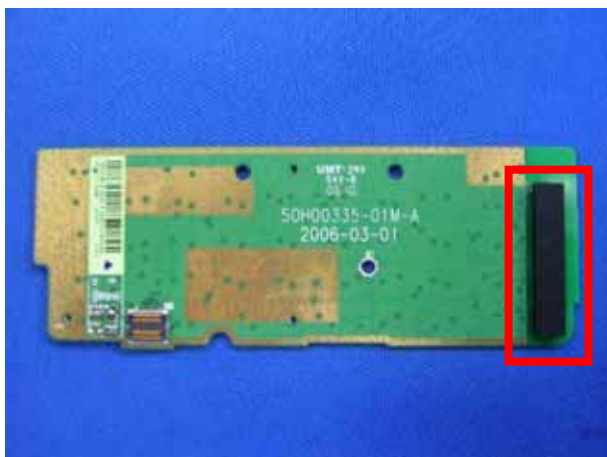




DISCONNECT THE FPC OF QWERTY KEYBOARD.

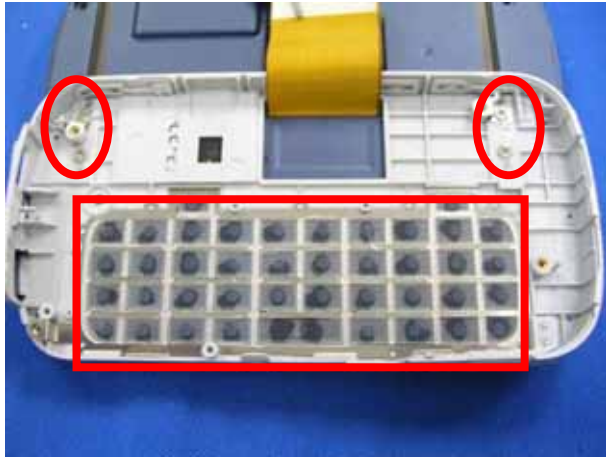


REMOVE THE PCBA OF QWERTY KEYBOARD.



PLEASE STICK A NEW RUBBER WHEN REPLACEMENT OF PCBA OF QWERTY KEYBOARD IS NEEDED.





1. REMOVE QWERTY KEYBOARD.
2. RELEASE FOUR SCREW TO REMOVE THE BEZEL OF QWERTY KEYBOARD.

✓ SCREW: 72H01058-00M (Q' TY: 4)

[NOTE]

PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 1.3+- 0.05KGF-CM



REMOVE FOUR SCREWS.

✓ SCREW: 72H01058-00M (Q' TY: 4)

[NOTE]

PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 1.1+- 0.05KGF-CM



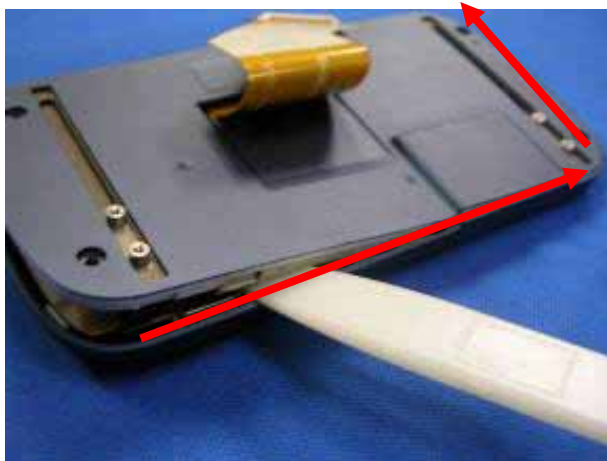
REMOVE MYLAR ON HOUSING OF LCM.

✓ MYLAR: 76H01414-00M (Q' TY: 1)

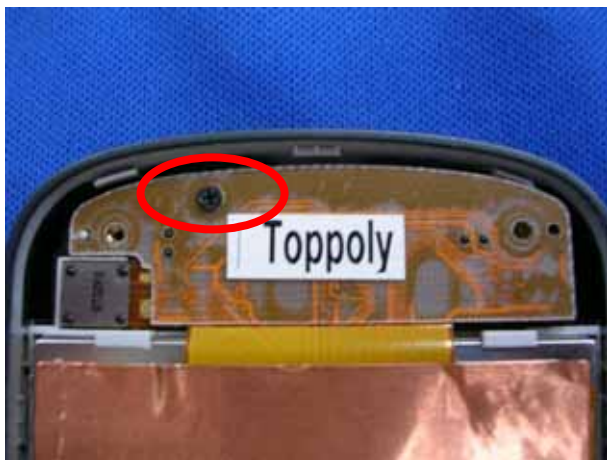




USE PLASTIC STICK INTO THE GAP FROM THE CORNER BETWEEN HOUSING OF LCM AND BEZEL OF LCM.



RELEASE ALL THE HOOKS TO REMOVE THE HOUSING OF LCM.

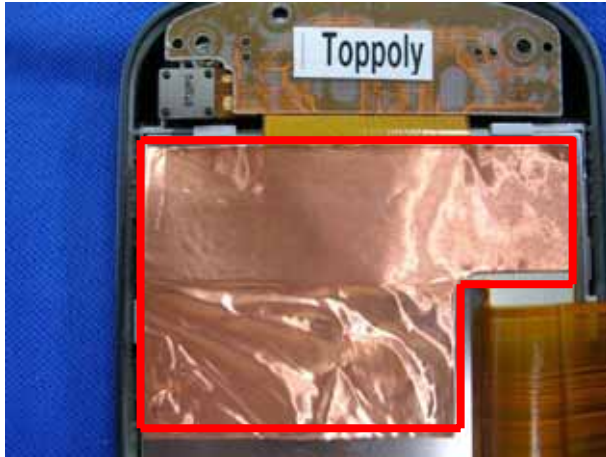


Remove one screw.

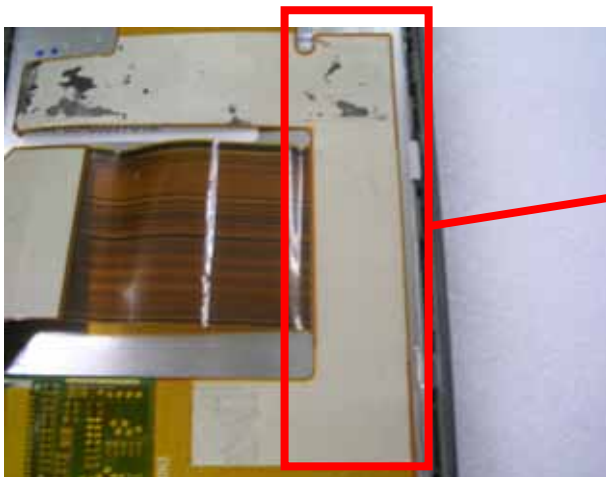
✓ SCREW: 72H00724-00M (Q' TY: 1)

[NOTE]
PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 0.3+- 0.05KGF-CM





REMOVE COPPER FOIL.
(PLEASE STICK A NEW ONE ONCE REMOVED)



AN TRANSPARENT ADHESIVE DOUBLE SIDE TAPE IS UNDER PRE-ASSEMBLY OF LCM.
(PLEASE STICK A NEW ONE ON PRE-ASSY OF LCM FPC ONCE REMOVED)

✓ ADHESIVE TAPE: 76H01487-00M (Q' TY: 1)



1. REMOVE ONE SCREW

✓ SCREW: 72H01058-00M (Q' TY: 1)

[NOTE]

PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 1.1+- 0.05KGF-CM

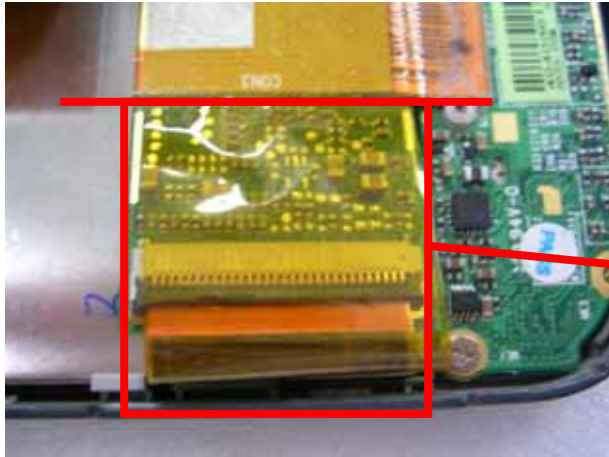
2. REMOVE TWO SCREWS TO DISCONNECT SWITCH BOARD FPC.

✓ SCREW: 72H01329-00M (Q' TY: 2)

[NOTE]

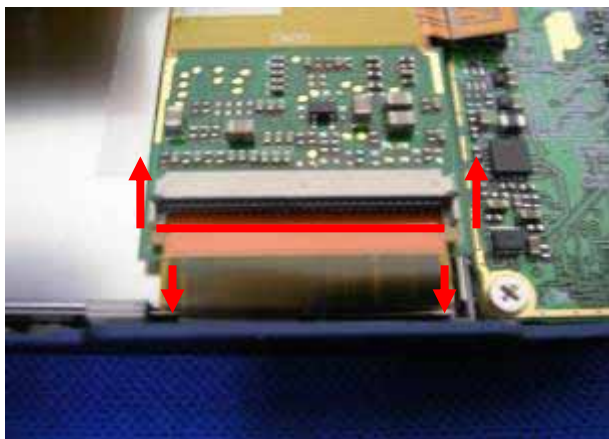
PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 0.2+- 0.05KGF-CM



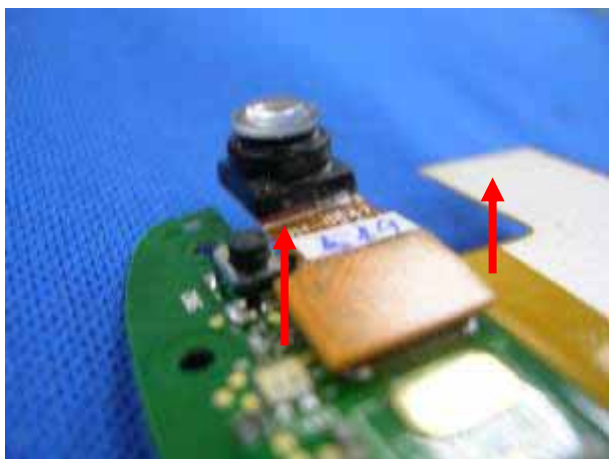


REMOVE ISOLATED TAPE
(PLEASE STICK A NEW ONE ONCE REMOVED)

✓ ISOLATED TAPE: 76H01483-00M (Q' TY: 1)



LIFT THE CAP OF CONNECTOR TO EXTRACT LCM FPC WITH TWEEZERS AND THEN REMOVE PRE-ASSY OF LCM FPC.

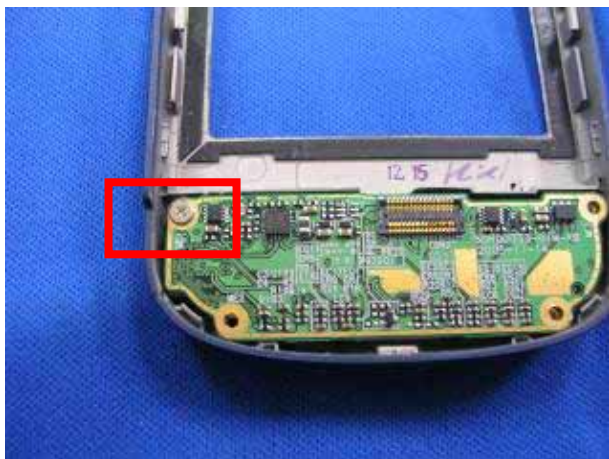


DISCONNECT WEB CAMERA FROM PRE-ASSY OF LCM FPC.





Release hooks to remove LCM.

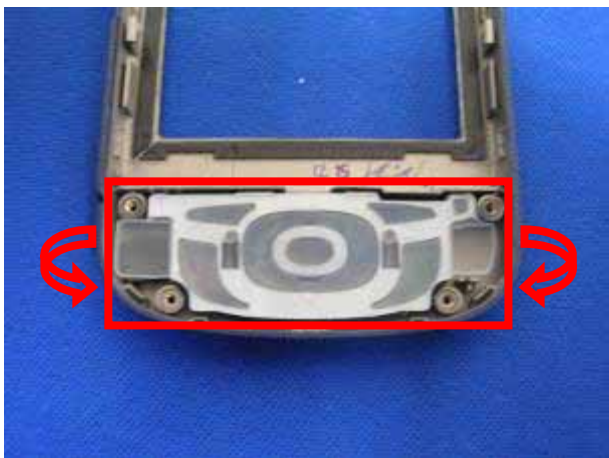


Release one screw and then remove switch board.

✓ SCREW: 72H01058-00M (Q' TY: 1)

[NOTE]

PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 1.1+- 0.05KGF-CM



REMOVE KEYPAD.





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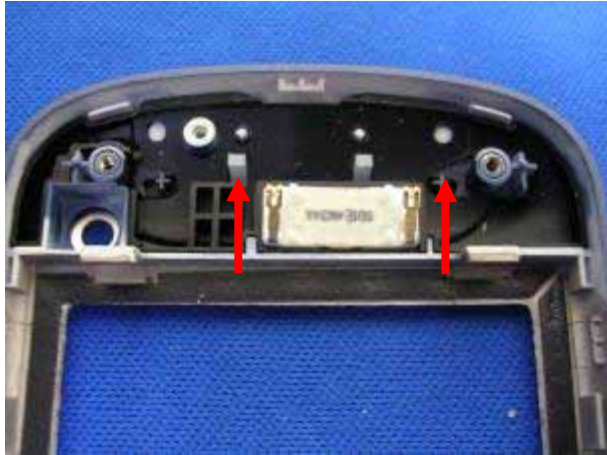


REMOVE RECEIVER.

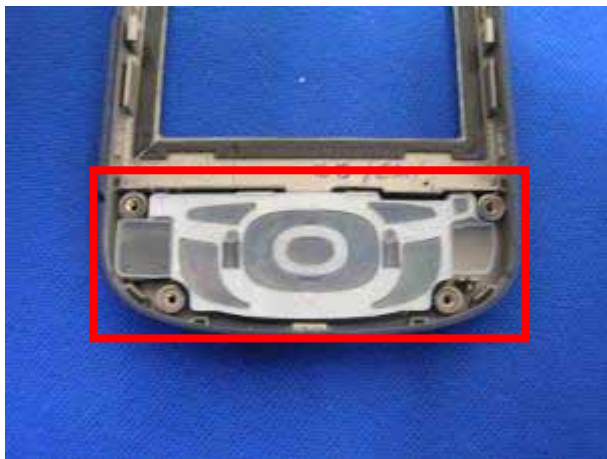
THE DISASSEMBLY PROCEDURE IS FINISHED.



1.3 Assembly procedure



ASSEMBLE THE RECEIVER INTO BEZEL OF LCM AND PLEASE BE ATTENTION ON PIN DIRECTION.



ASSEMBLE THE KEYPAD INTO BEZEL OF LCM.



PUT THE SWITCH BOARD BACK AND FASTEN ONE SCREW AT UPPER LEFT CORNER.

✓ SCREW: 72H01058-00M (Q' TY: 1)

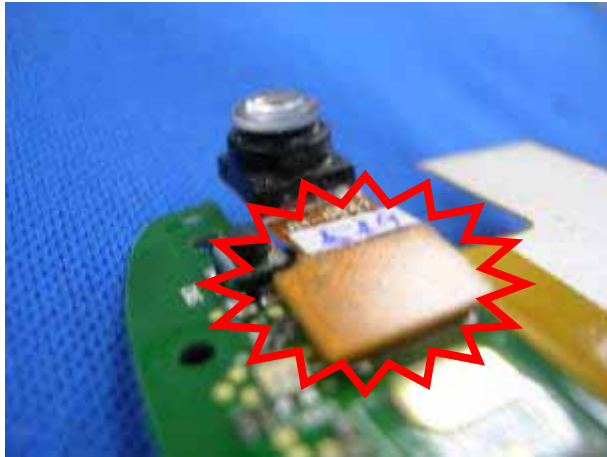
[NOTE]

PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 1.1+- 0.05KGF-CM

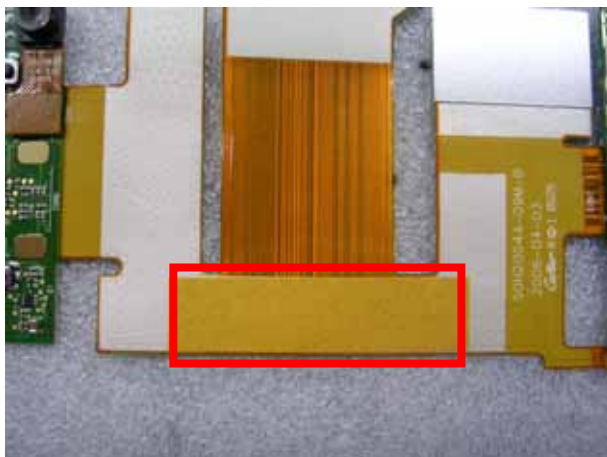




ASSEMBLE LCM INTO BEZEL OF LCM.



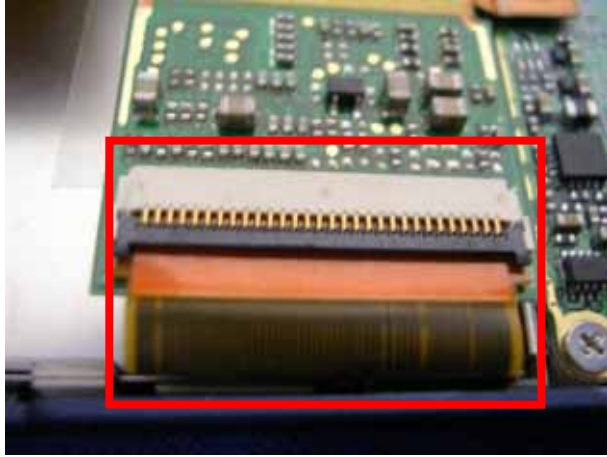
CONNECT WEB CAMERA TO PRE-ASSY OF LCM FPC.



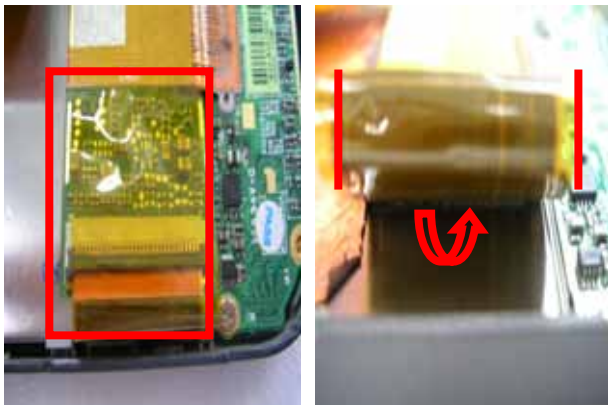
STICK AN ADHSIVE TAPE ON PRE-ASSY OF LCM FPC BEFORE ASSEMBLING WITH LCM FPC.

✓ **ADHESIVE TAPE: 76H01487-00M (Q' TY: 1)**



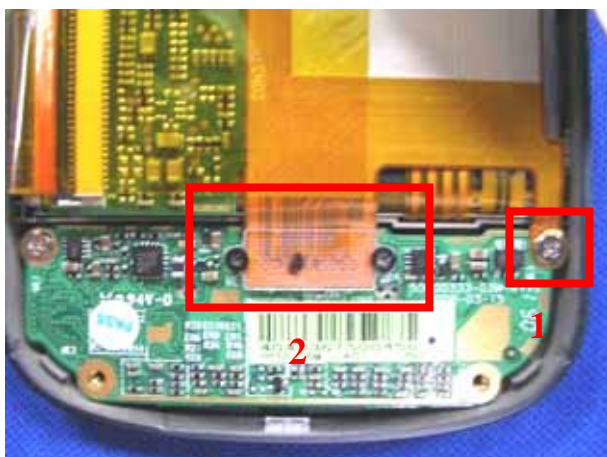


INSERT LCM FPC INTO CONECTOR OF PRE-ASSY OF LCM FPC.



STICK ISOLATED TAPE WHERE IS TOP JUSTIFIED TO PCBA OF PRE-ASSY OF LCM FPC.

✓ ISOLATED TAPE: 76H01483-00M (Q' TY: 1)



1. FASTEN ONE SCREW.

✓ SCREW: 72H01058-00M (Q' TY: 1)

[NOTE]

PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 1.1+- 0.05KGF-CM

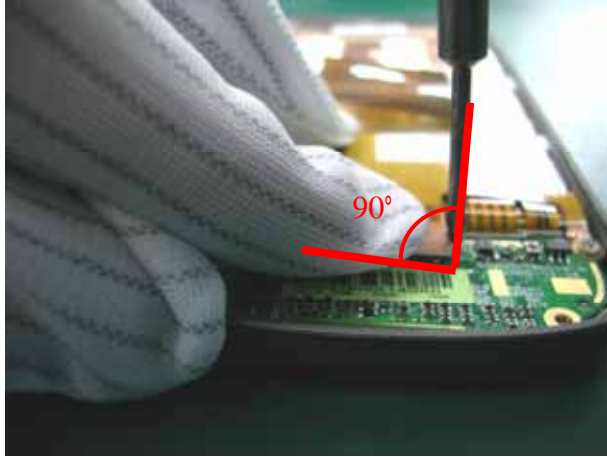
2. CONNECT THE FPC OF SWITCH BOARD TO SWITCH BOARD AND THEN FASTEN TWO SCREWS

✓ SCREW: 72H01329-00M (Q' TY: 2)

[NOTE]

PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 0.2+- 0.05KGF-CM



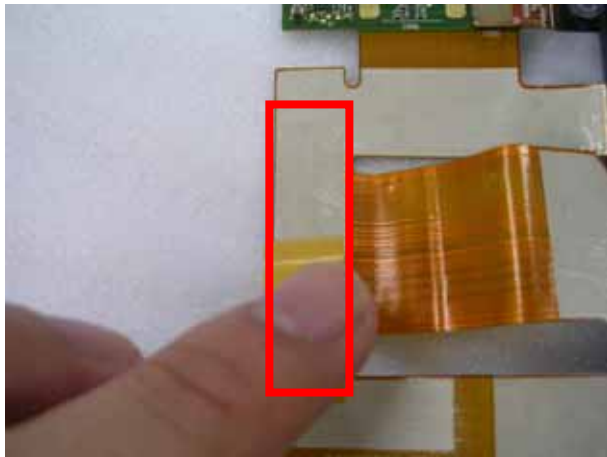


CAUTION: PLEASE FOLLOW INSTRUCTIONS TO FASTEN TWO SCREWS FOR P/N OF 72H01329-00M.

- 1. CONNECT LCM CONNECTOR TO SWITCH BOARD.**
- 2. FASTEN THE SCREW AT THE ANGLE OF 90 DEGREE BETWEEN SWITCH BOARD AND HAND/ELECTRICAL SCREW DRIVER.**

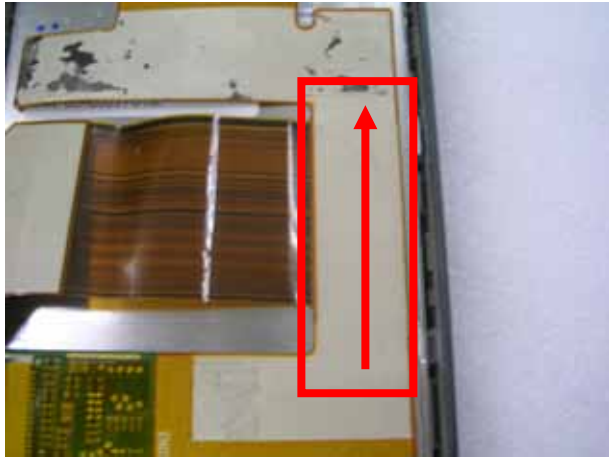


CHECK POINT: No Slant is allowed.



REMOVE PROTECTION OF THE OTHER SIDE OF ADHESIVE TAPE.





STICK IT ON THE BACK OF LCM AS PHOTO SHOWN.

NOTICE: FROM BOTTOM UP.



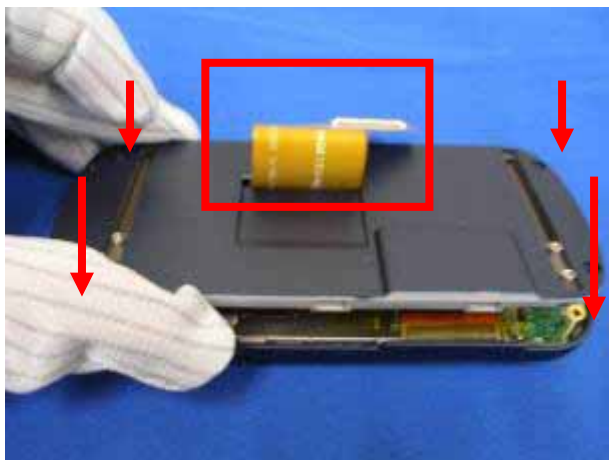
1. FASTEN ONE SCREW.

SCREW: 72H00724-00M (Q' TY: 1)

[NOTE]

PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 0.3+- 0.05KGF-CM

2. STICK COPPER FOIL.



INSERT THE FPC OF PRE-ASSY LCM INTO THE HOLE OF HOUSING OF LCM TO ASSEMBLE.





STICK A MYLAR ON HOUSING OF LCM AS PHOTO SHOWN.

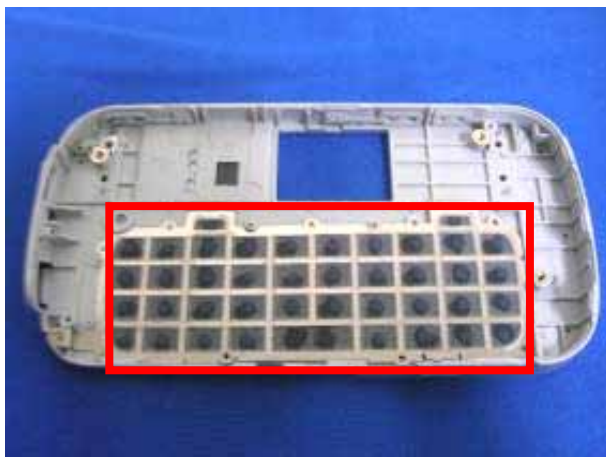
✓ MYLAR: 76H01512-00M (Q' TY: 1)



FASTEN FOUR SCREWS.

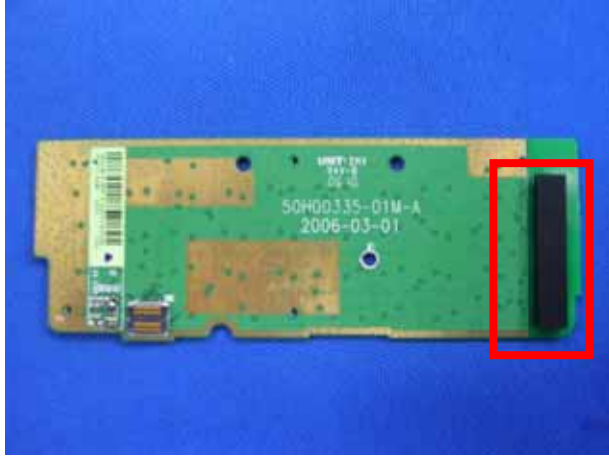
✓ SCREW: 72H01058-00M (Q' TY: 4)

[NOTE]
PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 1.1+- 0.05KGF-CM

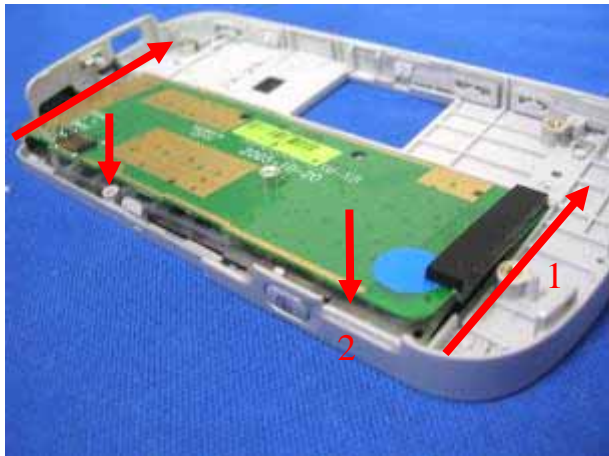


ASSEMBLE QWERTY KEYBOARD INTO BEZEL OF QWERTY KEYBOARD.

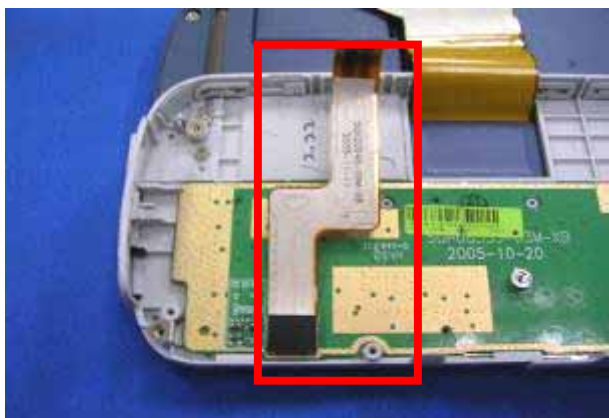




STICK QWERTY KEYBOARD RUBBER.

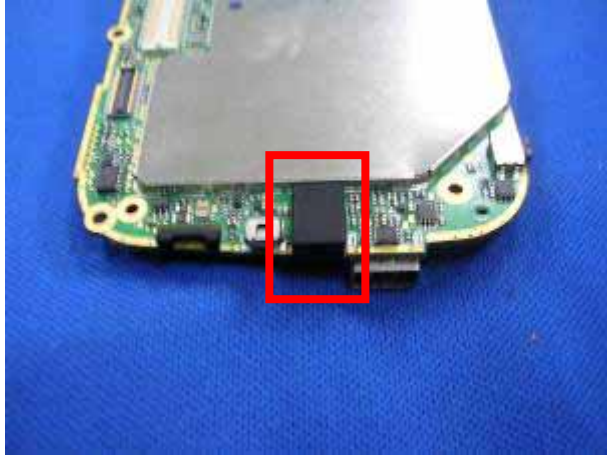


ASSEMBLE PCBA OF QWERTY KEYBOARD.



CONNECT KEYBOARD FPC TO PCBA OF QWERTY KEYBOARD.

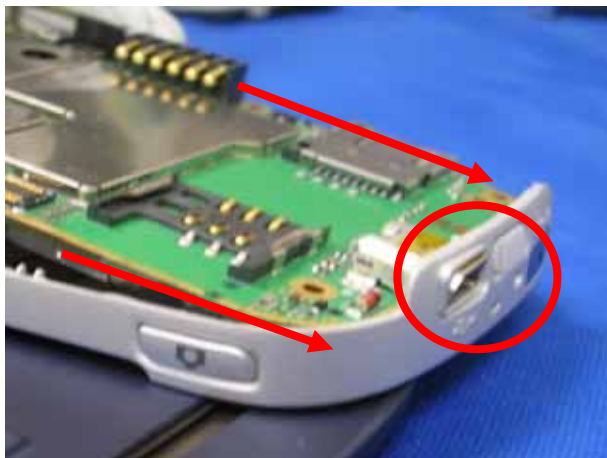




ASSEMBLE MICROPHONE RUBBER WITH MAIN BOARD.



1. CONNECT THE FPC OF PRE-ASSY LCM TO MAIN BOARD.
2. STICK CONDUCTOR SPACER WHERE IS TOP JUSTIFIED TO THE CONNECTOR OF FPC OF PRE-ASSY LCM.



ASSEMBLE THE MAIN BOARD FROM BOTTOM SIDE OF BEZEL OF QWERTY KEYBOARD.





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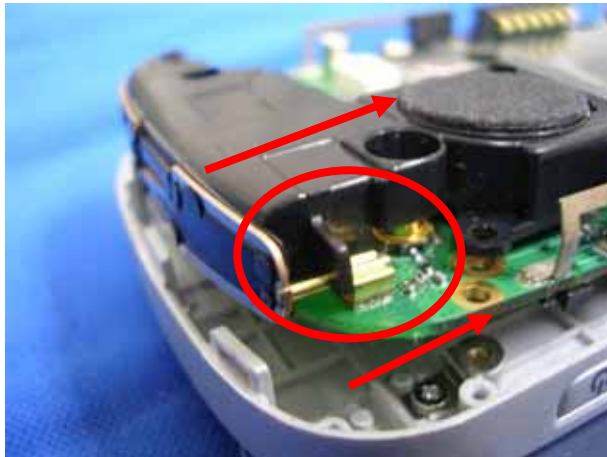
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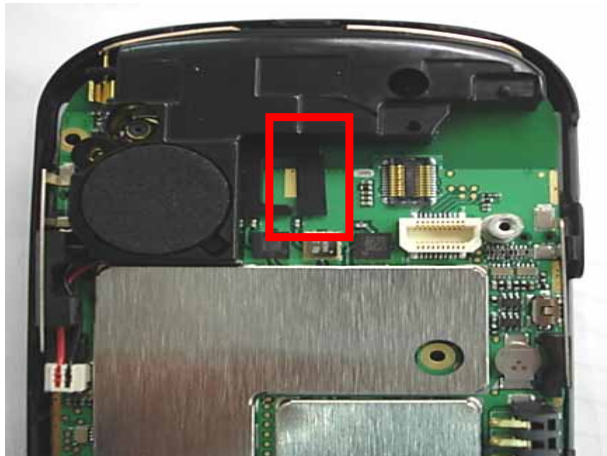
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ASSEMBLE SPEAKER WITH ANTENNA.



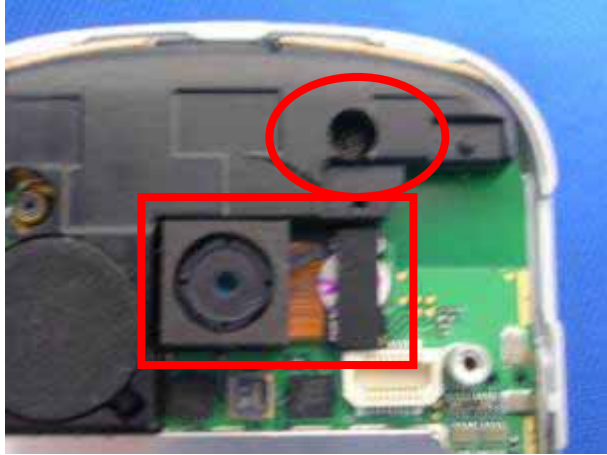
ASSEMBLE ANTENNA WITH MAIN BOARD.



ASSEMBLE CAMERA RUBBER SUPPORT WITH MAIN BOARD.

✓ RUBBER: 76H01414-00M (Q' TY: 1)





1. FASTEN ONE SCREW TO FIX ANTENNA WITH MAIN BOARD.

✓ SCREW: 72H01059-00M (Q' TY: 1)

[NOTE]
PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 1.1+ 0.05KGF-CM

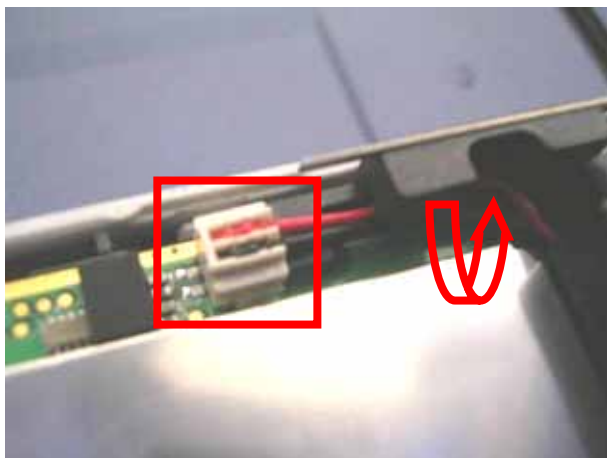
2. CONNECT CAMERA TO MAIN BOARD.



1. CONNECT FLASH LIGHT MODULE TO MAIN BOARD.
2. FASTEN ONE SCREW TO FIX FLASH LIGHT MODULE TO MAIN BOARD.

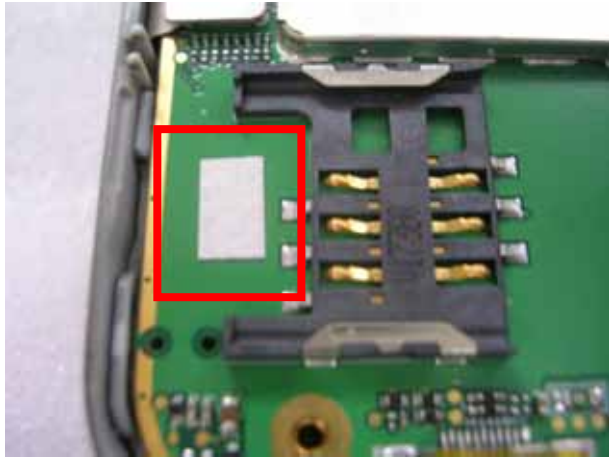
✓ SCREW: 72H00724-00M (Q' TY: 1).

[NOTE]
PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 0.4+ 0.05KGF-CM



CONNECT SPEAKER ON MAIN BOARD.



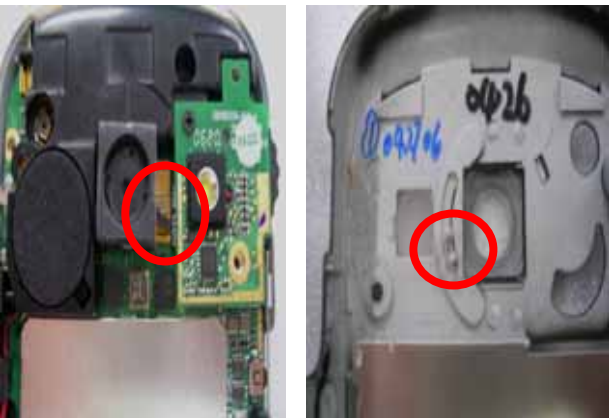


STICK WATER INDICATOR ON MAIN BOARD CLOSE TO USIM CONNECTOR.

✓ WATER INDICATOR: 77H00203-00M (Q' TY: 1).



ASSEMBLE VIBRATOR WITH HOUSING OF QWERTY KEYBOARD.



SET THE ADJUSTER OF CAMERA AND HOUSING TO BOTTOM BEFORE ASSEMBLY.





WARRANTY SEAL

1. ASSEMBLE HOUSING OF QWERTY KEYBOARD.
2. ASSEMBLE HANGER.
3. FASTEN FOUR SCREWS.
4. STICK WARRANTY SEAL.

- ✓ SCREW: 72H01059-00M (Q'TY: 4).
- ✓ WARRANTY SEAL: 77H00314-00M (Q'TY: 1)

[NOTE]

PLEASE SET UP THE TORQUE OF ELECTRICAL SCREW DRIVER TO 1.3+- 0.1KGF-CM



ASSEMBLE BATTERY.



INSERT STYLUS.





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ASSEMBLE ANTENNA RUBBER.

**THE ASSEMBLY PROCEDURE IS
FINISHED.**





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DIAGNOSTICS PROGRAM AND WINCE TEST ITEM (NOT FINAL VERSION)

1.4 Test Plan

Mode	No	Item	Description	Remark
Diagnostic	Function Test			
	1	Auto Test	Full functional test automatically	
	2	ROM Checksum Test	CE/Radio/Extended ROM checksum	
	3	Qwerty Test	Qwerty keyboard test	
	4	Button Test	Device button test	
	5	Slide Test	Sliding keyboard test with LED indicator	
	6	LED Test	LED indicator test.	
	7	SDRAM Test	SDRAM read test	
	8	Display Test	Multi-color pattern test for LCM	
	9	Touch Panel Test	Alignment test	
	10	Back Light Test	LCM back light test (On/Off)	
	11	Vibrator Test	Vibrator on test	
	12	Timer Test	System clock test	
	13	Flash Light	Camera and flash light test	
	14	Micro SD Card Test	Micro SD card detection test	
	15	Speaker Test	Play sound from speaker	
	16	Receiver Test	Play sound from receiver	
	17	Headset Test	Play sound from headset	
	18	Internal Record Test	Internal MIC record and play to speaker	
	19	External Record Test	External MIC record and play to headset	
Run-in Test				
1	1/2/4/8/12/24 Hour	Run-in Test		TBD
Device Information Check				
Caution: Format FAT (Clear personal information data) for Unit Refurbishment				
Caution: Clear Talk Time for Unit Refurbishment				
LCM Test (Pattern/Alignment/Back light Test)				
Mode	No	Item	Description	Remark
WinCE	1	USB Test	USB link with Microsoft ActiveSync synchronization	
	2	Camera Test	Capture and clip test for camera under Windows Mobile OS mode	
	3	Bluetooth Test	Bluetooth test under Windows Mobile OS mode	
	4	Wi-Fi Test	Wi-Fi test under Windows Mobile OS mode	









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1.5 Test Procedure

- Power OFF.
- Insert Diagnostic Micro SD card (provided by HTC) to device.
- Press "Power + OK" button, release the buttons after hold for 2 seconds, and then the device will enter boot-loader mode.
- On test menu, use Navigation button to select the item then press Action key to perform test
- Remove the battery directly or perform soft reset to exit the Diagnostic program when finish the testing.
- If the system fails while testing, please also remove the battery directly to turn off power.

<p>A. Hermes Diagnostic test menu.</p> <p>B. Select Function Test and then press action button to enter main menu to perform test.</p>	 
<p>C. ROM checksum item</p> <p>D. Press action button to exit.</p>	 



- E. Qwerty keyboard test
- F. Follow on-screen message to test each button on Qwerty keyboard.



- G. Button test
- H. Follow on-screen message to test each button.



- I. Slide test with keyboard LED
- J. Follow on-screen message to slide Qwerty keyboard.



K. LED indicator test and press action button for next.

- Red LED



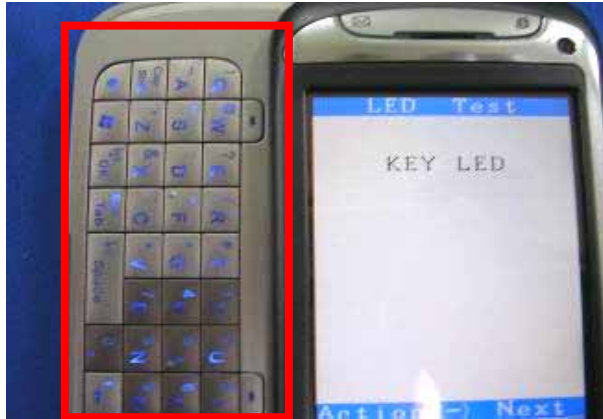
- Green LED
- BT LED



- WLAN LED
- Ring LED



- Qwerty keyboard LED
- Press action to return main menu.



L. SDRAM test.



M. Display test.

- Red pattern
- Green pattern



- Blue pattern
- Black pattern





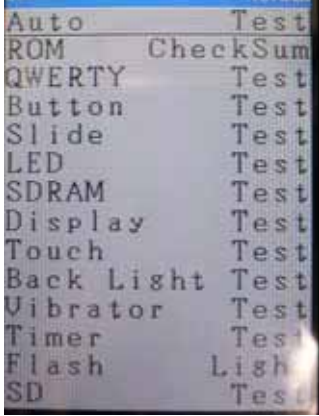



- White pattern
- Color bar pattern



- N. Touch Panel Test
To align the touch panel with Stylus.



<p>O. Back Light Test Back light On/Off test.</p>	 
<p>P. Vibrator test. You can feel device is vibrating if this function is OK.</p>	 
<p>Q. Timer test. Test real-time clock.</p>	 



- R. Camera and Flash light test
➤ Press capture button to camera function.

```

Auto          Test
ROM           CheckSum
QWERTY        Test
Button        Test
Slide         Test
LED           Test
SDRAM         Test
Display       Test
Touch         Test
Back Light    Test
Vibrator      Test
Timer         Test
Flash         Light
SD            Test
    
```



- Press camera button to test flash light function.



- S. Micro SD card test.
Insert micro SD card to test read function.

```

Auto          Test
ROM           CheckSum
QWERTY        Test
Button        Test
Slide         Test
LED           Test
SDRAM         Test
Display       Test
Touch         Test
Back Light    Test
Vibrator      Test
Timer         Test
Flash         Light
SD            Test
    
```



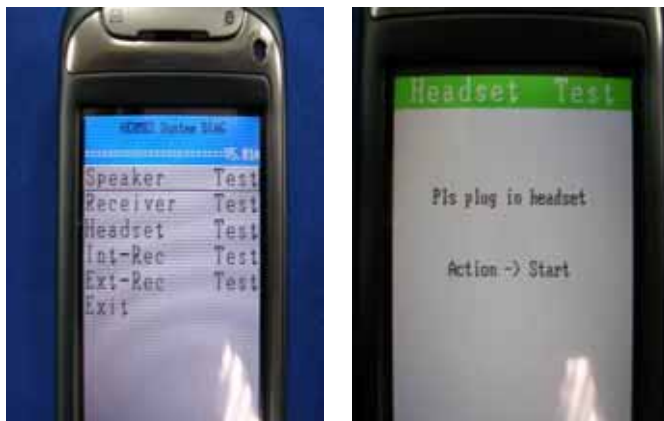
- T. Press action to right to next test page for audio test.
- U. Play sound from speaker.



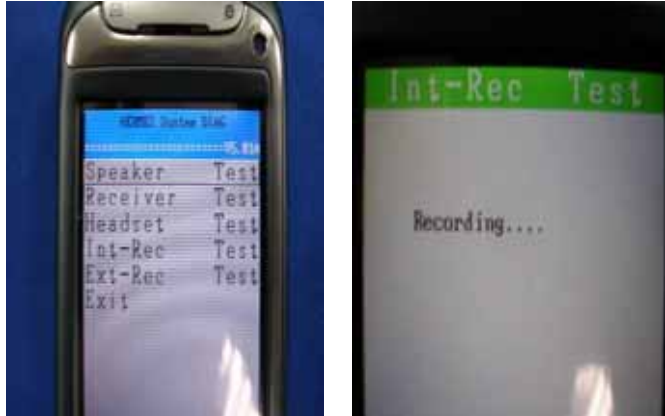
- V. Receiver Test
- W. Play sound from receiver.



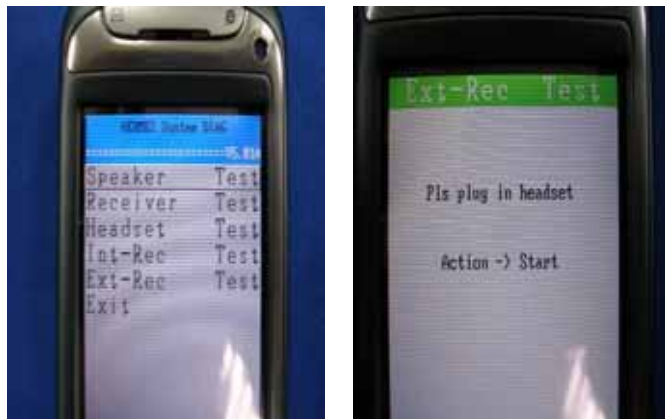
- X. Headset Test
- Follow on-screen message to Plug in headset and then press action button to start test.
- Play sound from headset.



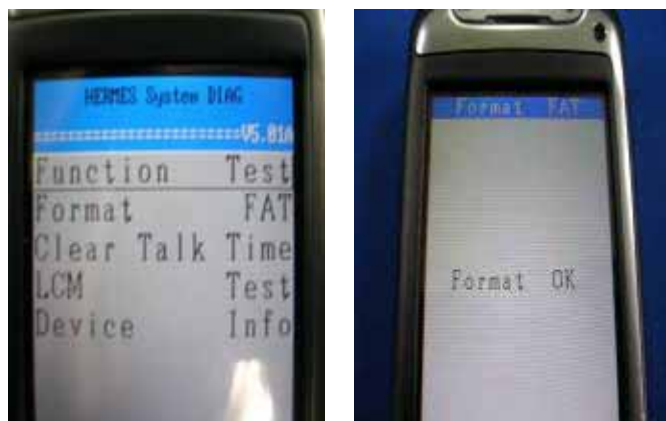
Y. Internal Record Test
Recording the sound from Mic and play sound from speaker.



Z. External Record Test
Plug in headset to record the sound from Mic of headset and play sound from headset.



AA. Format FAT function.
Clear device storage.





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BB. Device Info. function.
Show device information.

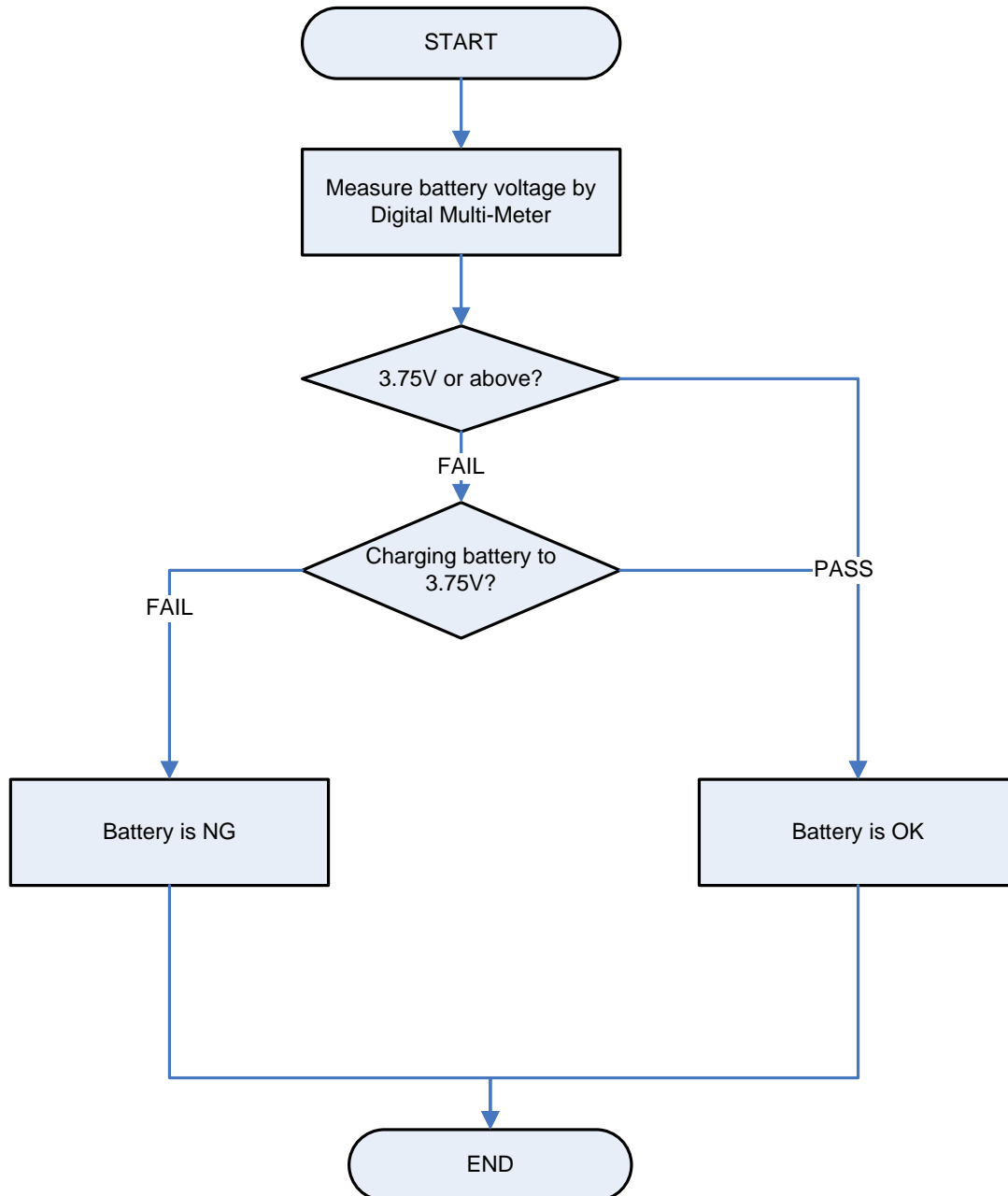


CC. Clear Talk Time function.
Clear talk time in OS mode.



MAIN BATTERY RE-CERTIFY PROCEDURE

1.6 Re-certify Flow Chart



1.7 Test Procedure



EQUIPMENT NEEDED:
A. DETECTION CABLE
B. MULTI-METER



SET THE MULTI-METER TO DC.



CONTACT POSITIVE AND NEGATIVE PAD ON BATTERY WITH DETECTION CABLE.





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CONCLUSION:

1. IF MEASURED VOLTAGE IS ABOVE 3.75V, THE BATTERY IS GOOD.
2. IF MEASURED VOLTAGE IS UNDER 3.75V, THE BATTERY IS DEECTED. PLEASE REPALCE BATTERY FOR REPAIR.



LEAKAGE CURRENT MEASUREMENT

This is a quick method to measure if any abnormal leakage current on main board which caused high power consumption compare to GOOD main board.

(1) Requirement :

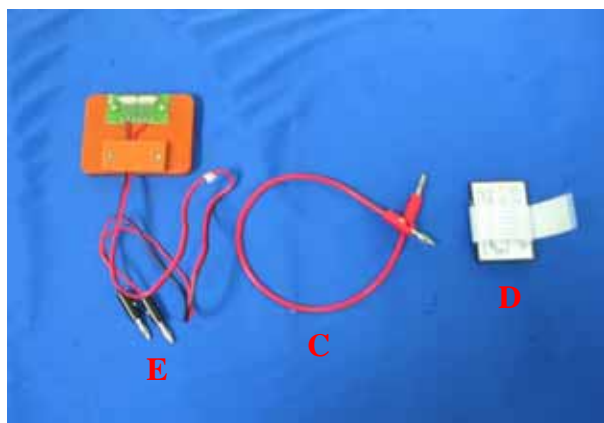
- Power supply
- Micro-current digital meter
- Current series Jig
- Cable
- Battery Jig



EQUIPMENT NEEDED:

A. POWER SUPPLY (SET AT 4 V /1A)

B. MICRO-CURRENT METER (SUPPORT 0.5MA ~ 1A)



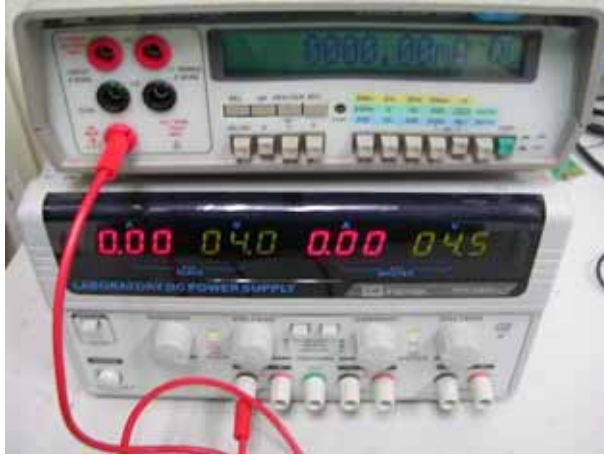
FIXTURE NEEDED

C. CABLE

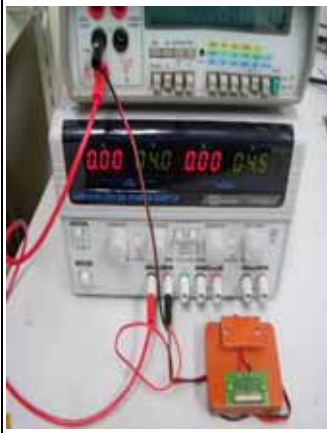
D. BATTERY WITH EXTENSION CABLE

E. CURRENT SERIES JIG. (WITH BLACK AND RED CABLE)





CONNECT CABLE (C) TO POSITIVE POLARITY OF POWER SUPPLY (A) AND CURRENT METER (B)

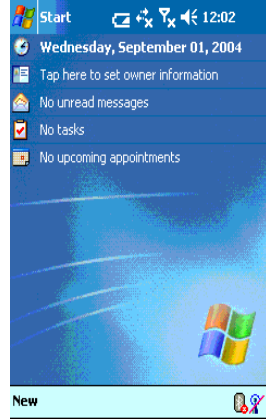
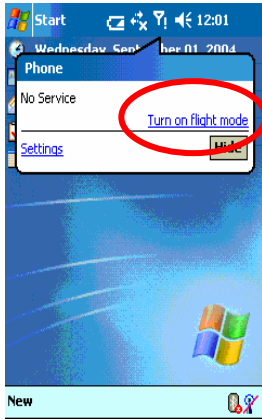


CONNECT CABLE OF FIXTURE(E) TO NEGATIVE POLARITY OF POWER SUPPLY (A) AND CURRENT METER (B)



SETTING IS READY NOW FOR TESTING
(DON'T TURN THE POWER ON AT THIS MOMENT)





TURN ON POWER SUPPLY (4V) AND CURRENT METER (2A)
SET THE UNIT TO:
* FLIGHT MODE
* TURN OFF BLUETOOTH



MEASURE FLIGHT MODE CURRENT

1. CHOICE SETTING/SYSTEM/BACKLIGHT/BRIGHTNESS
2. ADJUST BRIGHTNESS LEVEL TO POWER SAVE.

CURRENT VALUE MUST BE UNDER **42 MILI-AMP**, IF OVER, IT MEANS M/B FAILED, PLEASE REPLACE M/B FOR REPAIR.



1. SWITCH OFF THE UNIT.
UNIT IS TURN OFF AND NO DISPLAY.

2. MEASURE POWER OFF CURRENT
CHECK CURRENT VALUE ON THE CURRENT METER,
CURRENT VALUE MUST BE UNDER **6 MILI-AMP**, IF OVER, IT MEANS M/B FAILED, PLEASE REPLACE M/B FOR REPAIR.





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CONCLUSION:

IF CURRENT CONSUMPTION PASSES AT BOTH OF FLIGHT AND POWER OFF MODE, IT MEANS M/B IS GOOD.

IF THERE IS ANY ITEM FAILED AT FLIGHT OR POWER OFF MODE, IT MEANS M/B IS FAILED, PLEASE REPLACE M/B FOR REPAIR.



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COSMETIC INSPECTION CRITERIA

1.8 Definition of Cosmetic Standard

- Standard is for refurbishment inspection.

1.9 Visual Inspection Requirements

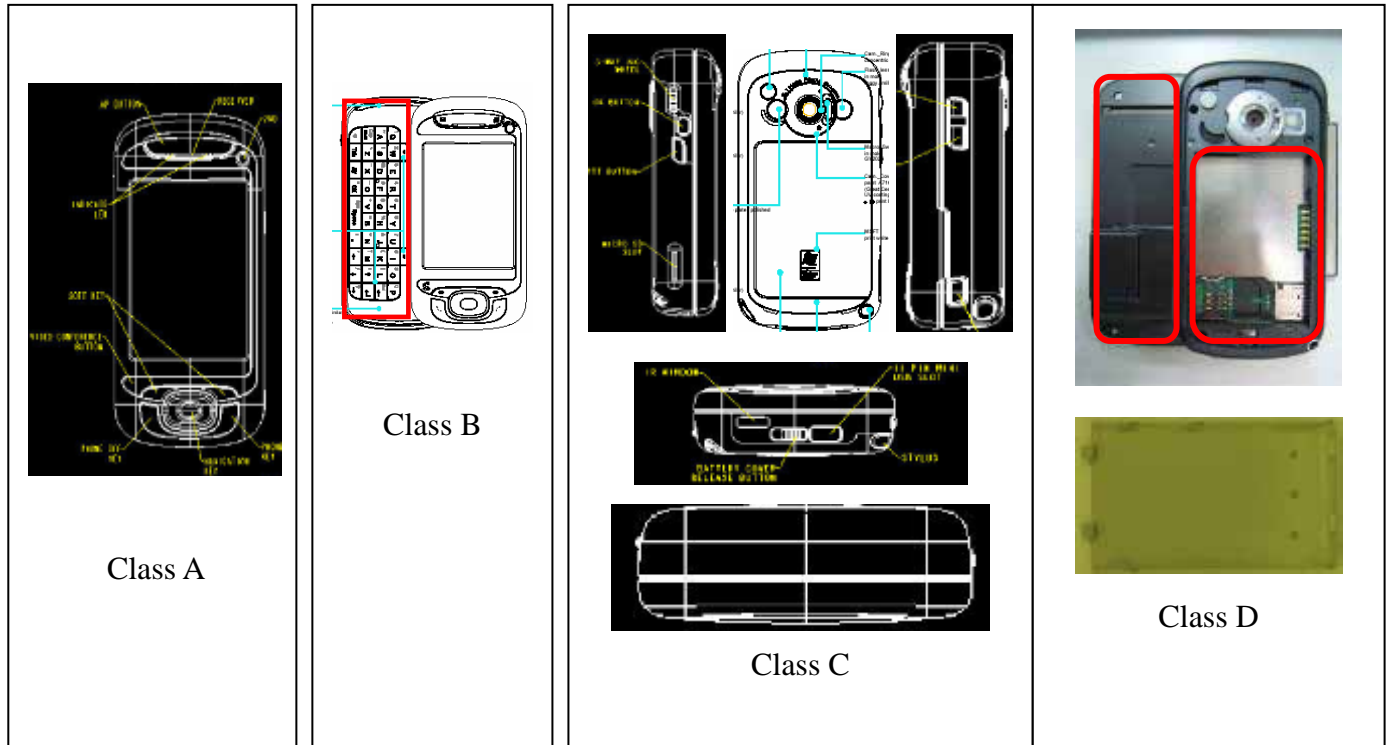
- Examination of the device shall be made with workbench light turned on.
- Ambient illumination is to be 500-1000 Lux.
- The inspector shall examine the device at a distance of 30cm ±45degrees.
- Inspection time: 2 seconds per surface.

1.10 Definitions of Inspection Defects and Areas

- Scratch : A linear cut that penetrated beyond the surface of the material/ A scratch can be felt by running your finger over it.
- Dot / Dent : A recessed spot or void in the surface of the material.
- Lint : A linear foreign object beyond the surface of the LCD.
- D: Diameter/ L: Length/ W: Width/ Number: Number of defects/ S: Distance of dot to dot.
- Class A area: The front side of main unit involves all buttons and LED lens except LCD.
- Class B area: The view of Qwerty keyboard after sliding out from main unit including stylus.
- Class C area: Four sides and back views of main unit.
- Class D area: Socket of battery, inner side of battery cover and back side of upper sliding part.



Figure 1: Photo of inspection areas



1.11 Cosmetic Criteria Table

➤ Main unit inspection:

Description	Accept criteria
Class A	Exposure of substratum is not acceptable Scratch : L 3mm ,W 0.2mm ,N 2
Class B & C	Exposure of substratum is not acceptable Scratch : L 7mm ,W 0.25mm ,N 3 Unconscious scratch on IR window is ignorable. IR window conscious scratch: L 3mm,W 0.2mm,N 3 Bright mark area should be less than 1 mm x 10 mm
Class D	Label area could be ignorable. Exposure of substratum is not acceptable. Scratch : L 10mm ,W 0.4mm ,N 5





- LCM inspection:
 - Electrical characteristic inspection standard

Symptom		Standard	Distance between defect dots
Bright Dots	Single	Red+ Green+ Blue 3	S 5 mm
	2 adjacent	N=0	
	3 or more adjacent	N=0	
Dark Dots	Single	Total Number 2	S 5 mm
	2 adjacent	N=0	
Dark or Bright lines		N=0	
All Allowable Dots Defects		Total Number 3	S 5 mm

* The total of LCM defect number must be less than 4 counts.

- Cosmetic/ Visual defect inspection standard

Definition of Dent, bubble and Spot		Definition of Scratch, Lint and Hair	
Symptom	Standard	Accept N	Check pattern
(Dark/ White Spot)	D 0.1mm	Ignore	Backlight turned on
	0.1mm< D 0.25mm	N 2	
Bright/Dark Line (Lint/Hair)	W1 0.1mm W2 0.03mm and L 1.0mm	N 2	Backlight turned on
Cosmetic spot	0.1mm< D 0.2mm	N 3	Power turned off.
	0.2mm< D 0.3mm	N 3	
	Total Number 5		
Lint/ Scratch	0.02mm<W2 0.03mm and L 3mm	N 3	Power turned off.
	0.03mm<W2 0.05mm and L 2mm	N 3	
Dents	D 0.15mm	N 5	Power turned off.
Bubble	0.1mm< D 0.15mm	N 3	Power turned off.
Breakage on film surface	Not acceptable	N=0	
LCM light leakage	Not acceptable	N=0	



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- Gap inspection standard

Description		Accept Criteria
1	Gap between each key and mechanical parts	Can't stuck up or no click feeling
2	Gap between all generic mechanical parts	Gap between all generic ME parts < 0.4 mm
3	Stylus	Stylus assembly protruding, loose, missing, falling and deformed is not allowed





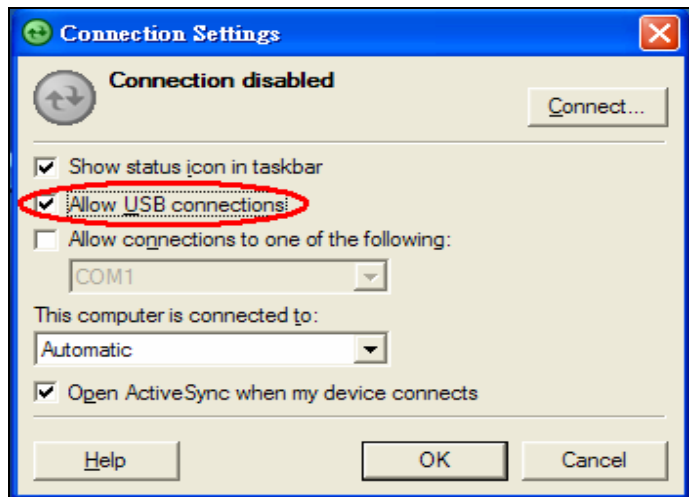
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OS, GSM ROM IMAGE RE-FLASH PROCEDURE

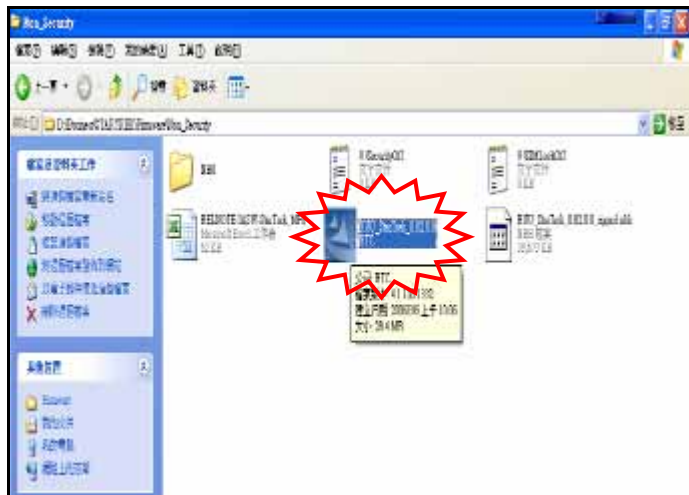
1.12 OS upgrade thru RUU

- Requirement:
 - Windows 2000/XP.
 - Microsoft ActiveSync 4.1 or above.
 - Mini-USB Cable.
 - Firmware. (download and log on RMAIII SDO system: <http://htcscm10.htc.com.tw/SDO>)
- Procedure:

DD. Boot up the device and enter WinCE mode.
 EE. Enable USB connections in Microsoft ActiveSync.
 FF. Connect your device and desktop or laptop via USB cable.
 GG. Check the pop-up message from Microsoft ActiveSync when device is synchronized with PC.

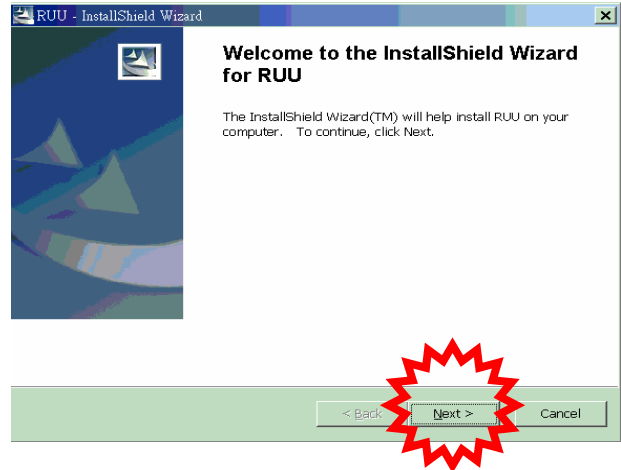


HH. Execute RUU file in your desktop or laptop.

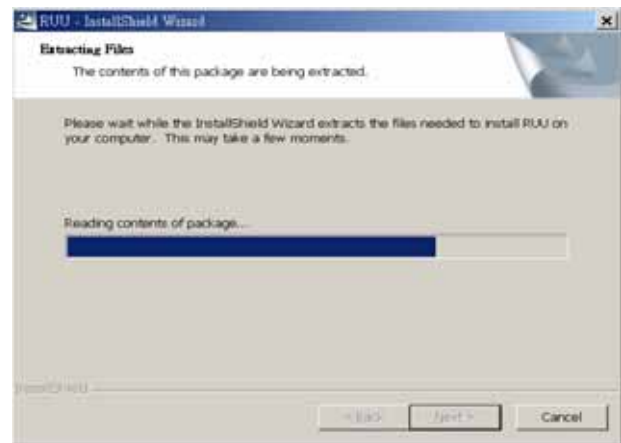




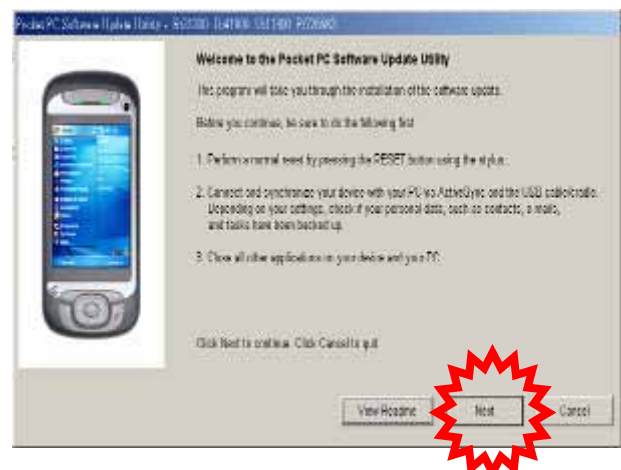
- II. Show message of "Welcome".
- JJ. Click "Next" to proceed.



- KK. Extracting files.



- LL. Show message of installation notice.
- MM. Click "Next" to proceed.





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NN. Checking the information on your device.

Checking the information on your device ... Please wait ...

Please don't disconnect your device from your PC until the update is completed.

OO. Show the current version on your device and which version to be upgraded.
PP. Click "Update" to proceed.



QQ. 1st stage for radio upgrading.





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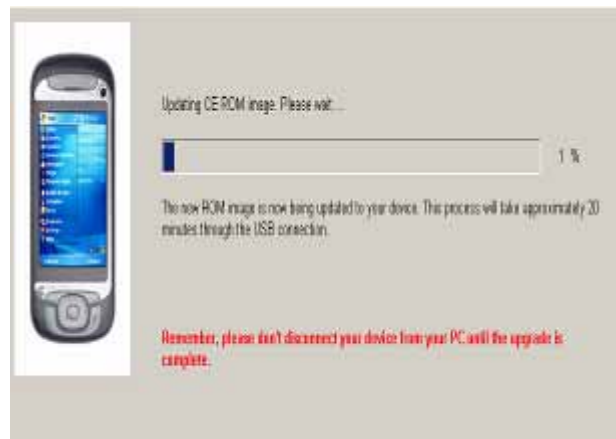
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RR. 2nd stage for extended ROM upgrading.



SS. 3rd stage for CE ROM upgrading.



TT. Show message of “Congratulations” once successfully upgrading.

UU. Click “Finish” to exit this program.






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1.13 OS upgrade thru SD card

<p>A. Prepare a micro SD card (128MB or above) and format to FAT32 by your PC.</p> <p>B. Copy image file XXX.nbh to the micro SD card and rename to herming.nbh.</p>	
<p>C. Put this micro SD card into you Hermes device and enter Boot-Loader.</p> <p>D. Press "Power + OK" button, release the buttons after hold for 2 seconds, and then the device will enter boot-loader mode.</p> <p>E. When you see the download message, press Action button to start the download process.</p>	



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TROUBLESHOOTING FOR REPAIR

Before repairing, please try to duplicate if the symptom exist or Customer mishandling

- 1 - A . Main Unit Does Not Respond to Power Button**
- 2 - B . Main Unit Does Not Respond to Battery Switch**
- 3 - C . Charge light is red when plug in AC adapter**

- (1) Make sure the Battery is installed properly to activate the battery pack.
- (2) Connect the AC Adapter, maybe the battery pack is exhaust.
- (3) Check the Battery cover is close properly.
- (4) Try with another battery pack.
- (5) Replace battery pack if necessary.
- (6) Try to enter boot loader mode, Perform Re-flash OS if successfully.
- (7) CMOS Camera is not assembled properly.
- (8) Check all connections including LCD FPC to Main Board. Try with another Main Board.
- (9) Fuse blown .
- (10) Customer abuse caused the power button fallen off
- (11) Both item 9 & 10, MB replacement is necessary unless you are authorized to do board level repair.
- (12) If Charge light is red when plug in AC adapter, it means the main battery is not charge enough and can't power on, You just need to continue charge unit the light become Amber.
- (13) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.

2 - A . Touch Panel Does Not Respond to Screen Tap

- (1) Dismantle the unit, check the perimeter of Display between display Bezel and Touch Panel surface for unusual foreign objects. Clean it, reassemble the unit and check the panel's function again.
- (2) Check the connection of LCM FPC whether is properly connected.
- (3) Try with another LCM.
- (4) Try with another Rigid-Flex board.
- (5) Try with another Main Board.
- (6) Replace LCM if necessary
- (7) Replace Main Board if necessary.



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- (8) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.

2 - B . Buttons Do Not Respond

- (1) Dismantle the unit, check the status of switches on the Main Board and the plastic parts of button of the Button not responding.
- (2) Try with another Main Board, rigid-Flex or keypad.
- (3) Replace Main Board, rigid-Flex or keypad if necessary.
- (4) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.
- (5) Hard Reset The unit.

3 - A . Unusual Vertical / Horizontal lines or partial display

- (1) Check the connection of LCM FPC whether is properly connected.
- (2) Try with another LCM.
- (3) Try with another Rigid-Flex board
- (4) Try with another Main Board.
- (5) Replace LCM if necessary
- (6) Replace rigid-Flex board if necessary
- (7) Replace Main Board if necessary.
- (8) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.

3 - B . Back Light Does Not Turn ON/OFF

- (1) Check the connection of FPC whether is properly connected.
- (2) Try with another LCM.
- (3) Try with another Rigid-Flex board
- (4) Try with another Main Board.
- (5) Replace LCM if necessary
- (6) Replace rigid-Flex board if necessary
- (7) Replace Main Board if necessary.
- (8) Once the defective part has been identified, verify it again with the defective part whether the



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symptom could be duplicated.

4 - A . Micro-SD Card cannot be used

- (1) Check whether micro-SD Card is fully inserted to the slot until you hear a click.
- (2) Try with another micro-SD card and Check whether it is Write Protected.
- (3) Try with another Main Board.
- (4) Replace Main Board if necessary.
- (5) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.

5 - A . PC Connection (USB) not possible

- (1) Check whether "Connection Settings" in the MS ActiveSync is properly set.
- (2) Check whether it connects with other cables or cradle, customer's cable might be damaged.
- (3) Check the external appearance of the connector on the unit whether it is physically damaged.
- (4) Replace Main Board if necessary.
- (5) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.

5 - B . Wireless Connection (GSM/ UMTS / GPRS / BT / WLAN) not possible

- (1) Make sure the user has been contacting the Carrier for SIM Card validation and activation.
- (2) Make sure the Wireless Connection Settings has been properly set.
- (3) Make sure the SIM Card is properly inserted to the SIM compartment. Make a life call or test it with the RF Test Station (Antenna Test).
- (4) Dismantle the Main Unit and check whether the Antenna cover is properly installed.
- (5) Try with another Antenna cover.
- (6) Try with another Main Board if necessary.
- (7) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.

5 - C . IrDA Connection not possible

- (1) Make sure the IrDA port settings on the Notebook or PC are properly set.
- (2) Make sure the IrDA function is properly activated on the Pocket PC and on the other device.
- (3) Make sure there's no obstruction between the two devices in connection and within the distance.



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- (4) Check the IrDA window whether it is broken or cracked. Replace Front Bezel if necessary.
- (5) Replace Main Board if necessary.
- (6) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.

6 - A . Main Battery does not start

- (1) Make sure the Battery cover is closed properly.
- (2) Connect to the AC Adapter and see if it takes charge. Also check AC Adapter condition.
- (3) Check whether AC Adapter is functioning properly.
- (4) Check whether the condition of Battery Charging status is correct.
- (5) Dismantle the unit and check the appearance of Battery cover.
- (6) Try with another Main Board or Replace Main Board if necessary.
- (7) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.

6 - B . Battery discharges quickly even after fully charged

- (1) Make sure the Battery Pack takes fully charge with AC Adapter.
- (2) Check whether the condition of Battery Charging status is correct.
- (3) Dismantle the unit and check the appearance of Battery cover.
- (4) Try with another Battery or Replace Battery if necessary
- (5) Try with another Main Board or Replace Main Board if necessary.
- (6) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.

7 - C . Main Battery does not recharge

- (1) Make sure the Battery takes fully charge with AC Adapter.
- (2) Check whether the condition of Battery Charging status is correct. Charge should be done in no more than 3 hours.
- (3) Dismantle the unit and check the appearance of Battery cover.
- (4) Try with another Battery or Replace Battery if necessary
- (5) Try with another Main Board or Replace Main Board if necessary.



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- (6) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.

8 - A . No Sound from Speaker or Distorted sound

- (1) Check "Sound & Notifications" Settings in the unit for Sound Enabling.
- (2) Make sure it's not MUTED.
- (3) Dismantle and Check whether the Speaker is properly installed (Orientation)
- (4) Make sure the connection point between MB and Speaker is free from contamination or dust.
- (5) Replace Speaker if necessary.
- (6) Replace Main Board if necessary.
- (7) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.
- (8) Replace Camera if camera function was defect at the same time.

9 - A . No Recorded Sound or Distorted sound

- (1) Check "Sound & Notifications" Settings in the unit for Sound Enabling.
- (2) Make sure it's not MUTED.
- (3) Dismantle and Check whether the Microphone is properly installed (check or missing rubber)
- (4) Replace Microphone if necessary.
- (5) Replace Main Board if necessary.
- (6) Once the defective part has been identified, verify it again with the defective part whether the symptom could be duplicated.

10 - A . Bezel, Housing Cosmetic damage

- (1) Unless it is for Refurbishment, all Bezel, housing replacement due to cosmetic damage shall treat as out of warranty



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GENERIC SPARE PART LIST AND PHOTOS (FOR REFERENCE ONLY)

Item	Number	Description	Qty	Substitute
Generic Kernel P/N				
1	35H00060-00M	BATTERY_LI-ION,1350mAh,3.7V,US503759A8H,Apache	1	35H00074-00M, 35H00060-04M
2	36H00226-00M	Receiver,EASG1D501E2,NAIS	1	
3	36H00344-00M	Antenna,GAN40030,AMPHENOL	1	
4	36H00366-00M	Vibrator,A4A-05-WTB-8,C.I.KASEI	1	
5	36H00392-00M	Speaker,SBS001541P-CC01-K,SAMBU	1	
6	36H00399-00M	Earphone,EMC220-001-01,MERRY	1	
7	51H00314-00M	PCBA-MAIN BOARD,Hermes	1	
8	51H00333-00M	PCBA-SWITCH BOARD,Hermes	1	
9	51H00335-00M	PCBA-Qwerty Keyboard,Hermes	1	
10	51H00350-00M	PCBA,Daughter Board,SEMTECH,Hermes	1	
11	54H00157-00P	Module Assy,Camera,05P019,LITEON	1	
12	54H00160-00M	Module Assy,Camera,CMHT-21400T,PREMIER	1	54H00158-00P
13	60H00037-01M	LCD Module,TD028STEB1,new sunplus,TOPPOLY,Hermes	1	
14	70H00100-00M	Pouch,NEWTECH,HTC-229,belt clip type,Hermes	1	
15	71H01361-00M	Keypad,Qwerty Keyboard,gray,Hermes	1	
16	71H01364-00M	Keypad,PHONE,HERMES	1	
17	71H01455-00M	Dummy card,Micro-SD,Hermes	1	
18	72H00724-00M	Screw,PH,FD,T1.4*2.9,Nickel,Black,AISI 1018	2	
19	72H01058-00M	Screw,PH,FD,M1.6*3.4,NICKEL+NYLOK	10	
20	72H01059-00M	Screw,POINT Mechanical,P,1.6*4.5,BZ+NYLOK	5	
21	72H01144-00M	Holder,HANGER,HERMES	1	
22	72H01257-00M	Copper Foil,55*35*0.06mm,Hermes	1	
23	72H01329-00M	Screw,M1*L1.2,PH-FLAT	2	
24	73H00241-00M	Cable,CBAUB-018-8,USB Cable,shielding grounded,ACON,Hermes	1	
25	73H20044-09M	FPC Pre-Assy,Bezel FPC,for Toppoly,CAREER,Hermes	1	
26	73H20045-09M	FPC Pre-Assy,Qwerty Keyboard,CAREER,Hermes	1	
27	74H00560-00M	Bezel Pre-Assy,Keyboard,Hermes	1	
28	74H00573-00M	Bezel Pre-Assy,LCM,Hermes	1	
29	74H00574-00M	Housing Pre-Assy,LCM,Hermes	1	
30	74H00577-00M	Stylus Pre-Assy,HERMES	1	
31	74H00577-02M	Stylus Pre-Assy,Stylus with PE bag,Hermes	1	
32	74H00578-00M	Housing Pre-Assy,KEYBOARD,HERMES	1	
33	74H00579-00M	Cover Pre-Assy,BATTERY,Hermes	1	
34	76H01042-00M	Gasket,Keypad,Apache	1	
35	76H01151-00M	Rubber,Microphone,Silicon,DY32 7069,Hermes	1	
36	76H01167-00M	Rubber,ANTENNA,SILICON,HERMES	1	
37	76H01167-00M	Rubber,ANTENNA,SILICON,HERMES	1	
38	76H01168-00M	Rubber,Keyboard support,DY32-7069,Hermes	1	
39	76H01211-00M	Rubber,LENS FLASH,SILICON,HERMES	1	
40	76H01221-00M	Rubber,CAMERA SPACER,SILICON,HERMES	1	
41	76H01036-00M	Tape,anti-short,Rigid-Flex board,Kapton tape film,Wizard		
42	76H01315-00M	Mylar,RF-Shielding,Hermes		
43	76H01414-00M	Support,CAM,RUBBER,HERMES		
44	76H01487-00M	Adhesive-Double Tape,BEZEL-FPC,TESA-4972,40*10*0.05mm,HERMES	1	
45	76H01488-00M	ME Gasket,gasket with conductive glue,keypad,50*23*0.12mm,Hermes	1	
46	77H00203-00M	Water Sensitive Label,4*2.5mm,Ming Jye,BlueAngels	1	
47	77H00314-00M	Warranty Label,LABLE,SECURITY,HERMES	1	
48	77H00342-00M	Regulation Label,Main Unit,Generic,Hermes	1	





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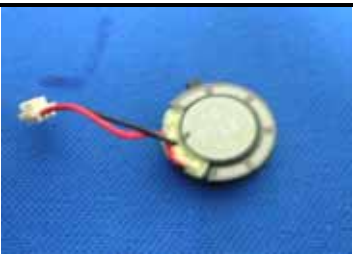
PHOTOS OF SPARE PARTS (FOR REFERENCE ONLY)


Picture for SPL 80H Kernel and Accessories

(Part no on picture is for Reference only, please check SPL for detail per customer)

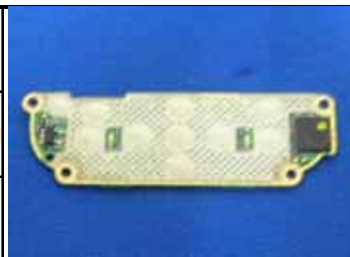
Part No.	35H00060-00M	
Description	Battery LHON	
Q'ty	1	


Part No.	36H00344-00M	
Description	Antenna	
Q'ty	1	

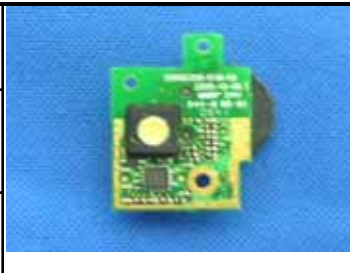
Part No.	36H00392-00M	
Description	Speaker	
Q'ty	1	


Part No.	36H00366-00M	
Description	Vibrator	
Q'ty	1	


Part No.	36H00226-00M	
Description	Receiver	
Q'ty	1	

Part No.	51H00333-00M	
Description	PCBA-Switch Board	
Q'ty	1	

Part No.	51H00335-00M	
Description	PCBA-Qwerty Keyboard	
Q'ty	1	

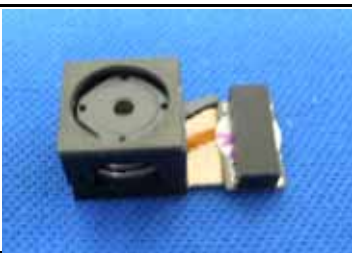
Part No.	51H00350-00M	
Description	PCBA-Daughter Board Flash light module	
Q'ty	1	


Part No.	51H00314-XXM (Different P/N by customer)	
Description	PCBA-Main Board	
Q'ty	1	

Part No.	54H00157-00P	
Description	Camera Module-Liteon	
Q'ty	1	






Part No.	54H00160-00M	
Description	Camera Module-Premier	
Q'ty	1	


Part No.	72H01058-00M	
Description	Screw, PH,FD,M1 6*3.4	
Q'ty	10	

Part No.	60H00037-01M	
Description	LCD Module	
Q'ty	1	

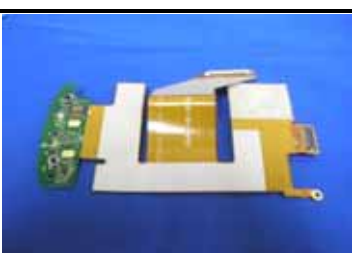
Part No.	72H01059-00M	
Description	Screw, Point Mechanical 6*4.5	
Q'ty	5	


Part No.	72H01329-00M	
Description	Screw, M1*L1.2 PH-Flat	
Q'ty	2	


Part No.	72H01144-00M	
Description	Holder,Hanger	
Q'ty	1	


Part No.	72H00724-00M	
Description	Screw, PH,FD,T1.4*2.9 PH-Flat	
Q'ty	2	

Part No.	73H20045-09M	
Description	Qwerty Keyboard, FPC, Pre-Assy.	
Q'ty	1	

Part No.	73H20044-09M	
Description	LCM, FPC, Pre-Assy.	
Q'ty	1	

Part No.	74H00560-XXM (Different P/N by customer)	
Description	Bezel,Pre-Assy, Keyboard	
Q'ty	1	

Part No.	74H00573-XXM (Different P/N by customer)	
Description	Bezel,Pre-Assy, LCM	
Q'ty	1	

Part No.	74H00574-XXM (Different P/N by customer)	
Description	Housing,Pre-Assy, LCM	
Q'ty	1	





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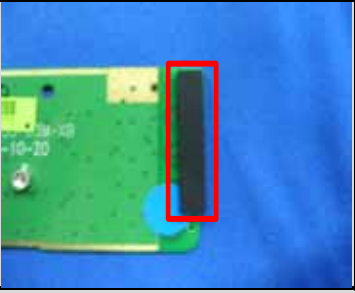

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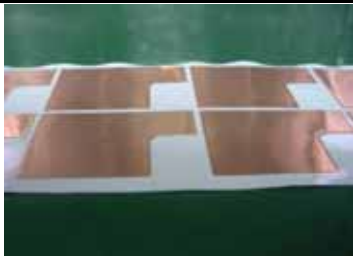
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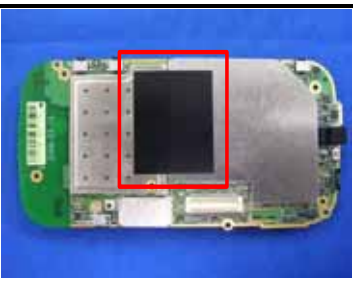
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Description	Housing, Pre-Assy, Keyboard		Description	Qwerty Keyboard	
Qty	1		Qty	1	
Part No.	71H01364-XXM (Different P/N by customer)		Part No.	74H00577-00M	
Description	Keypad		Description	Stylus	
Qty	1		Qty	1	
Part No.	74H00579-XXM (Different P/N by customer)		Part No.	76H001151-00M	
Description	Cover, Pre-Assy, Battery		Description	Microphone, Rubber	
Qty	1		Qty	1	
Part No.	76H001168-00M		Part No.	76H001167-00M	
Description	Keyboard, Rubber		Description	Antenna, Rubber	
Qty	1		Qty	1	
Part No.	76H01211-00M		Part No.	76H01221-00M	
Description	Flash Light, Rubber		Description	Camera, Rubber	
Qty	1		Qty	1	




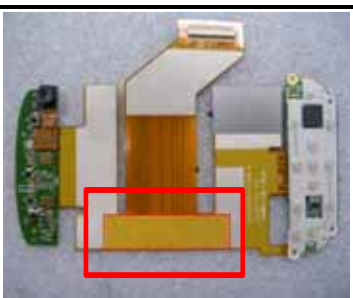


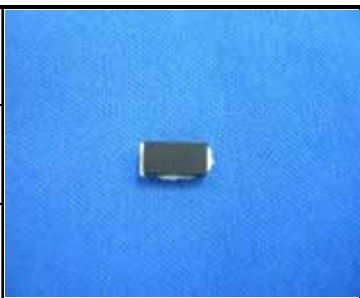
Part No	72H01257-00M	
Description	Copper Foil	
Qty	1	

Part No	76H01483-00M	
Description	Insulator tape	
Qty	1	

Part No	76H01315-00M	
Description	Mylar	
Qty	1	

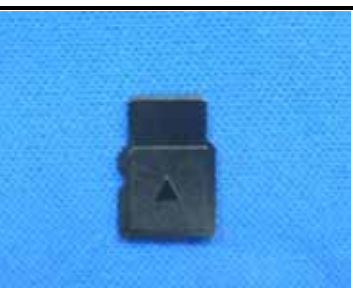
Part No	76H01488-00M	
Description	Gasket	
Qty	1	


Part No	76H01487-00M	
Description	Adhesive Double Tape	
Qty	1	

Part No	76H01414-00M	
Description	Rubber, Support, Camera (On main board)	
Qty	1	

Part No	36H00399-00M	
Description	Earphone	
Qty	1	

Part No	70H00100-00M	
Description	Pouch	
Qty	1	

Part No	71H01455-00M	
Description	Dummy Micro SD Card	
Qty	1	

Part No	73H00241-00M	
Description	USB Cable	
Qty	1	




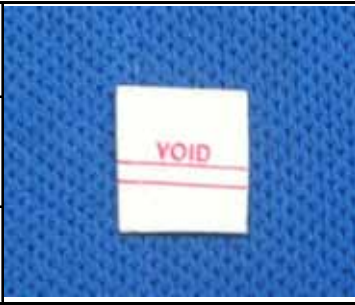


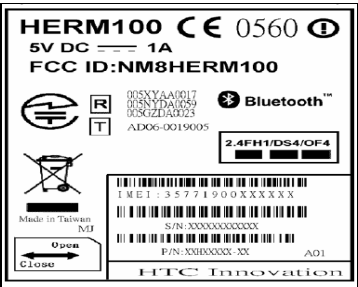
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Part No	77H00116-XXM (Different P/N by customer)	
Description	LCD Film	
Qty	1	

Part No	77H00314-00M	
Description	Warranty Label	
Qty	1	

Part No	77H00371-XXM (Different P/N by customer)	
Description	Regulation Label	
Qty	1	

Part No	77H00203-00M	
Description	Water Sensitive Label	
Qty	1	

Part No	79H00057-XXM (Different P/N by region)	
Description	AC Adaptor	
Qty	1	





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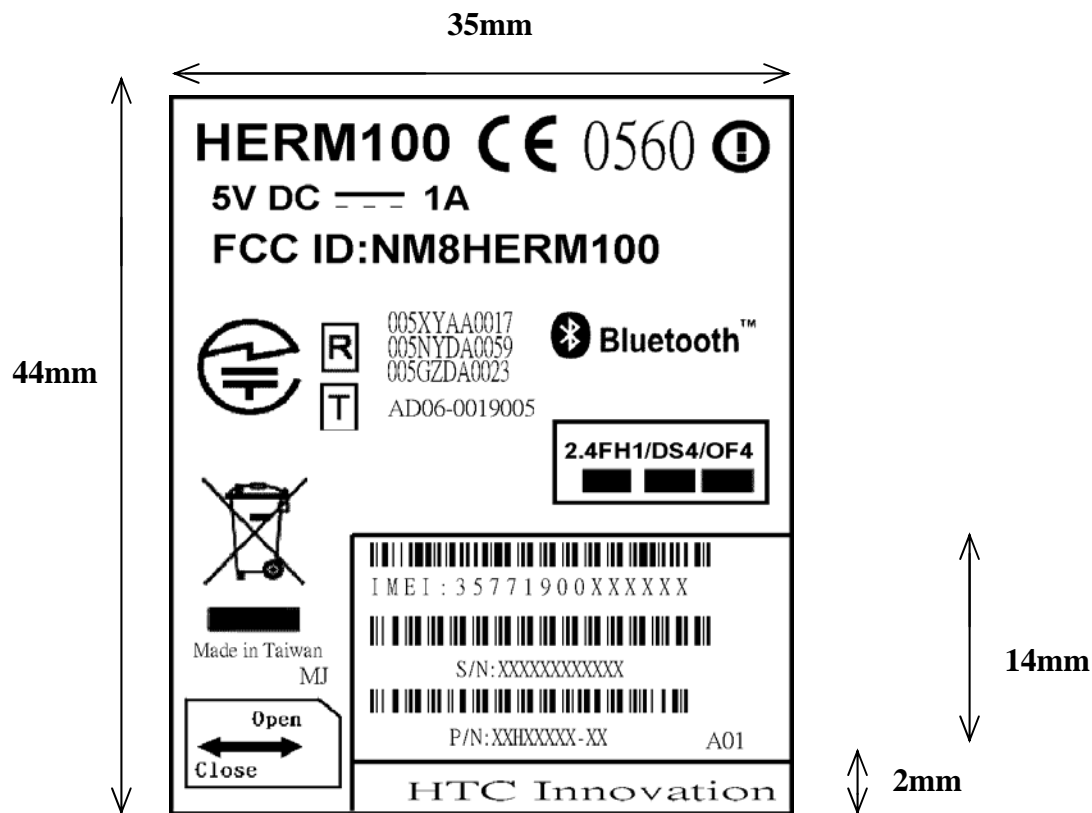
APPENDIX

GENERIC LABELING PLAN

1 Regulatory label

1.1 Agency label

- HTC P/N: 77H00342-00M
- Size: 44 X 35 mm



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1.2 Definition of Serial Number

- SSYWWPPZZZZZ
 - SS: Site Code -> HT
 - Y: Year, last digital of the Year.
 - WW: Week Code -> 01 ~ 54
 - PP: Product Code -> F2
 - ZZZZZ:
- Model ID: HERM100
- Label Characteristic
 - Material: polyester
 - Color: pantone 422c
 - Ink: pantone 425c





宏達國際電子股份有限公司
High Tech Computer, Corp.

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RF ANTENNA TEST SPECIFICATION

GSM Antenna Test Specification					
Items	Test Name	Tx Level	TCH	1st Downlink Cell Power	Note
1	Camp @ DCS Band	0	512	-75	BCCH=600
2	BS Originate Call	0	512	-75	
E-GSM 900 Receiver Test					
3	Fast Bit Error Rate	5	975	-104	$\leq 2\%$
4	Fast Bit Error Rate	5	37	-104	
5	Fast Bit Error Rate	5	124	-104	
E-GSM 900 Transmitter Test					
5	Check TX Power	5	975	-75	≥ 29 dBm
6	Check TX Power	5	37	-75	
7	Check TX Power	5	124	-75	
DCS 1800 Receiver Test					
8	Fast Bit Error Rate	0	512	-104	$\leq 2\%$
9	Fast Bit Error Rate	0	698	-104	
10	Fast Bit Error Rate	0	885	-104	
DCS 1800 Transmitter Test					
11	Check TX Power	0	512	-75	≥ 26 dBm
12	Check TX Power	0	698	-75	
13	Check TX Power	0	885	-75	
PCS 1900 Receiver Test					
14	Fast Bit Error Rate	0	512	-104	$\leq 2\%$
15	Fast Bit Error Rate	0	662	-104	
16	Fast Bit Error Rate	0	810	-104	
PCS 1900 Transmitter Test					
17	Check TX Power	0	512	-75	≥ 26 dBm
18	Check TX Power	0	662	-75	
19	Check TX Power	0	810	-75	
GSM 850 Receiver Test					
20	Fast Bit Error Rate	5	128	-104	$\leq 2\%$
21	Fast Bit Error Rate	5	189	-104	
22	Fast Bit Error Rate	5	251	-104	
GSM 850 Transmitter Test					
23	Check TX Power	5	128	-75	≥ 29 dBm
24	Check TX Power	5	189	-75	
25	Check TX Power	5	251	-75	






WCDMA Antenna Test Specification

Items	Test Name	Power Level	Uplink/Downlink UARFCN	1st Downlink Cell Power	Note
1	Camp @ W-CDMA Band I (2100)	3	9613/10563	-60	
2	BS Originate Call	3	9613/10563	-60	
Receiver Test					
3	Bit Error Rate	3	9613/10563	-104	<= 0.1 %
4	Bit Error Rate	3	9750/10700	-104	
5	Bit Error Rate	3	9887/10837	-104	
Transmitter Test					
6	Check TX_Max Power	3	9613/10563	-60	>= 18 dBm
7	Check TX_Max Power	3	9750/10700	-60	
8	Check TX_Max Power	3	9887/10837	-60	
Items	Test Name	Power Level	Uplink/Downlink UARFCN	1st Downlink Cell Power	Note
1	Camp @ W-CDMA Band II (1900)	3	9263/9663	-60	
2	BS Originate Call	3	9263/9663	-60	
Receiver Test					
3	Bit Error Rate	3	9263/9663	-104	<= 0.1 %
4	Bit Error Rate	3	9400/9800	-104	
5	Bit Error Rate	3	9537/9937	-104	
Transmitter Test					
6	Check TX_Max Power	3	9263/9663	-60	>= 18 dBm
7	Check TX_Max Power	3	9400/9800	-60	
8	Check TX_Max Power	3	9537/9937	-60	
Items	Test Name	Power Level	Uplink/Downlink UARFCN	1st Downlink Cell Power	Note
1	Camp @ W-CDMA Band VI (850)	3	4133/4358	-60	
2	BS Originate Call	3	4133/4358	-60	
Receiver Test					
3	Bit Error Rate	3	4133/4358	-104	<= 0.1 %
4	Bit Error Rate	3	4175/4400	-104	
5	Bit Error Rate	3	4232/4457	-104	
Transmitter Test					
6	Check TX_Max Power	3	4133/4358	-60	>= 18 dBm
7	Check TX_Max Power	3	4175/4400	-60	
8	Check TX_Max Power	3	4232/4457	-60	



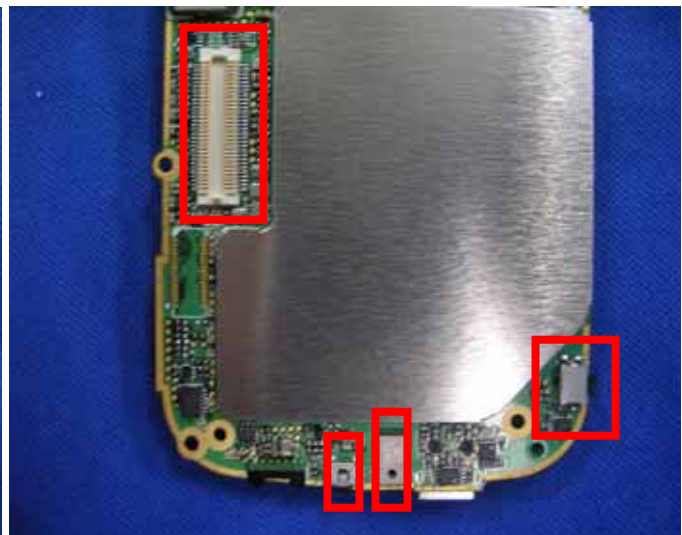
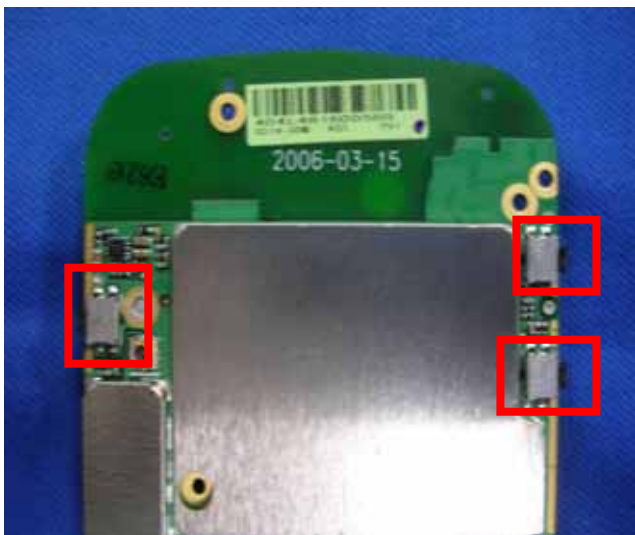
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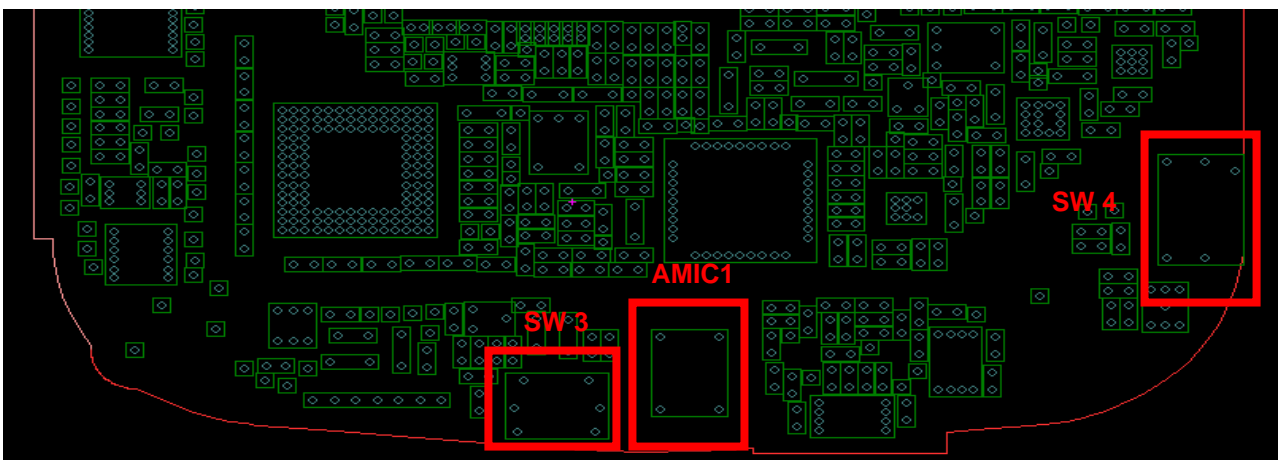
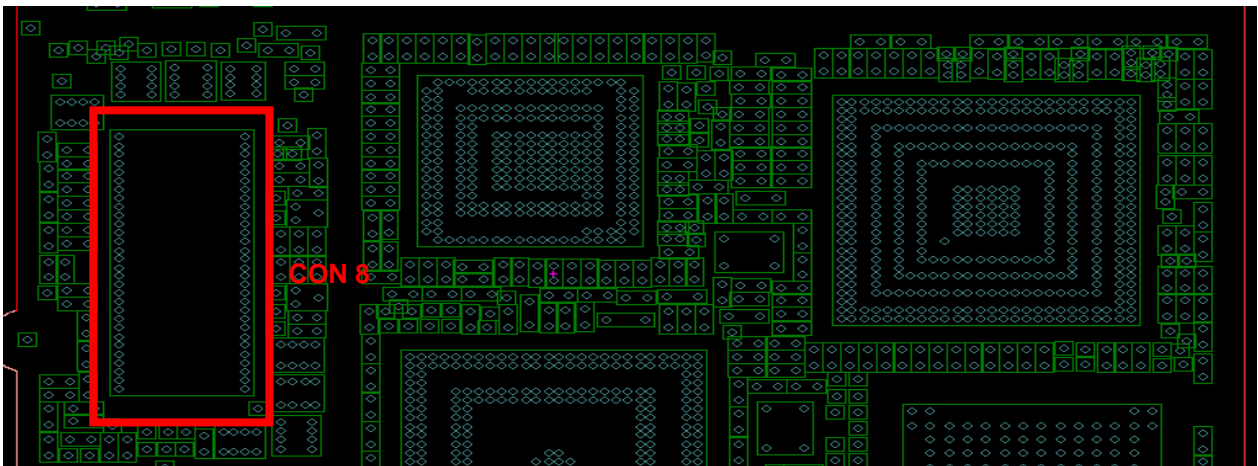
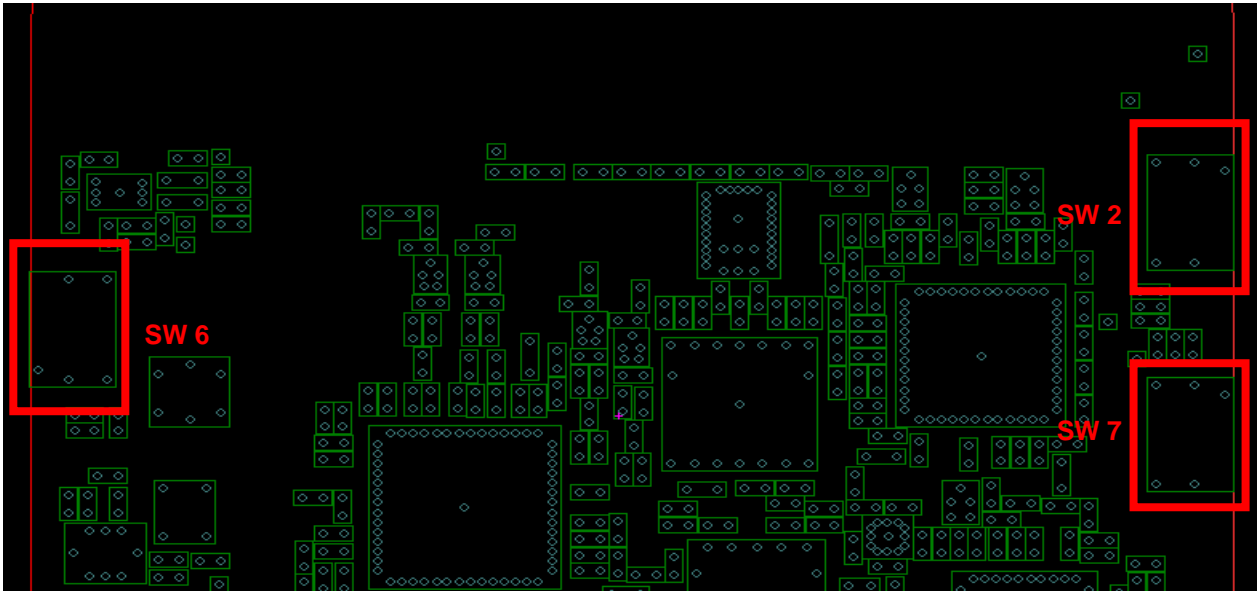
BOARD LEVEL 2.5 REPAIRS INTRODUCTION

➤ Main board (obverse side)

Location	P/N	Description	Substitute
SW2, SW4 SW6, SW7	36H00129-00M	SWITCH BUTTON,PTS-106,HCH,4.7*4.5*1.65,70/-20degC	36H00413-00M
CON 8	75H00524-00M	Connector B to B,60P,0.5Pitch,AXK5F60347YG,MATSUSHITA	
SW 3	36H00230-00M	SWITCH,SOH-213HST,MITSUMI,70/-20degC	
AMIC1	36H00208-00M	MIC,SP0103NB3-SB-3,EMKAY,Pb-FREE,100/-40degC,6.15*3.76*1.45 mm	

➤ Obverse Photo and Component Location

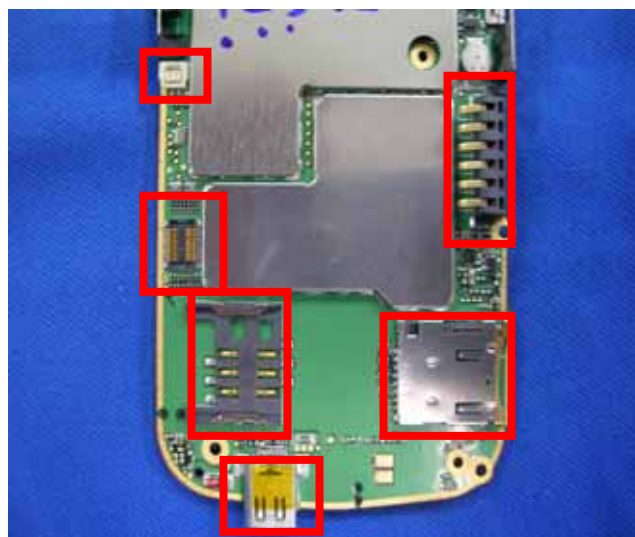




➤ Main board (Reverse side)

Location	P/N	Description	Substitute
CON4, CON9	75H00420-00M	Connector B to B, Female, 22P, 0.4Pitch, AXK7L22227, MATSUSHITA, 6.8*5.0*0.87mm	
CON 11	75H00116-00M	CONNECTOR-F, B-TO-B, SMT, AXK5S20035, NAIS, Pb FREE	
SW 9	36H00308-00M	Switch, Reset switch, SOH-213HNT, MITSUMI	
ACON 4	75H00124-00M	Connector Device, BM02B-ASRS-TF_LF_SN, 2pin, Pitch=1mm, JST	
CON 12	75H00395-00M	Connector SIM Card, 50mohm, ICC-429, hamburg	
CON 7	75H00467-10M	Connector, Micro SD, 10P, 1.1Pitch, 100053FB010S401ZL, SUYIN, 100mohm, 0.5A, 5V	
CON 13	75H00465-10M	Connector I/O, Reverse, 11P, 0.4pitch, 302-11101-01, ACT, Vera	
PCON 101	75H00451-00M	Connector Device, 6P, 2.5Pitch, 250042MB006G310ZR, SUYIN, 2A, 12V	

➤ Reverse Photo and Component Location





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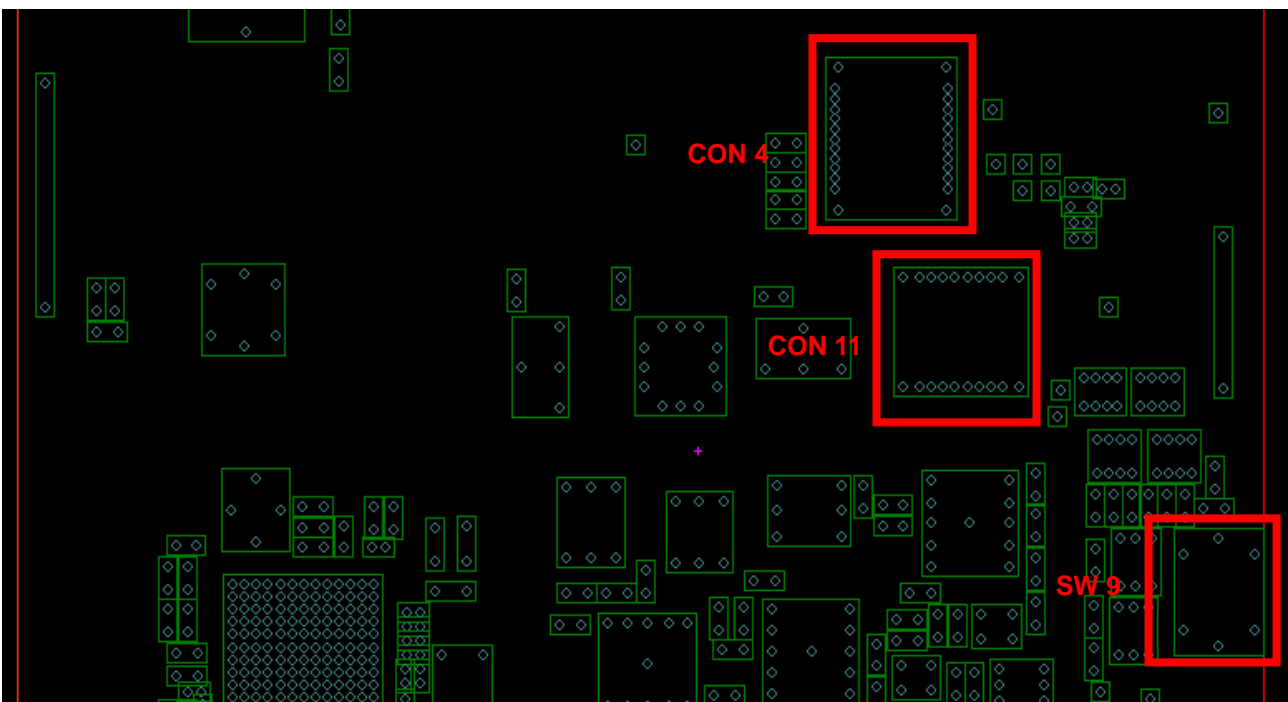
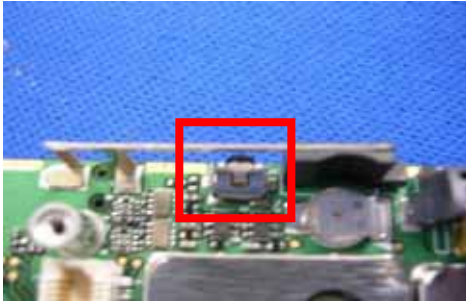
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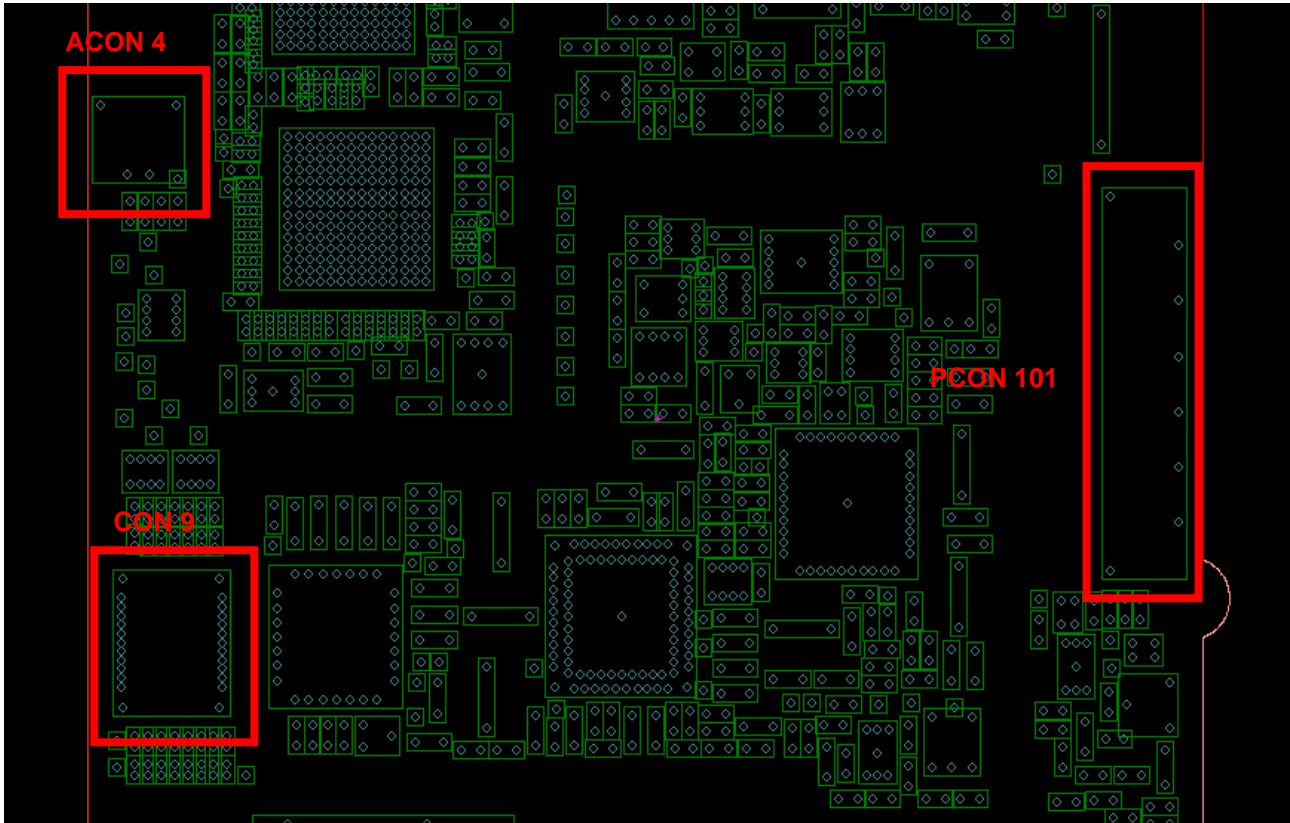
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