

TCTMobile

Service manual

B92Plus/OT-600(A)

Entry camera bars with slim
size for Basics and care takers

- 1 Products presentation
- 2 Maintenance guide



Note: this manual is non-contractual and TCT Mobile phones can modify without prior notice the characteristics of described equipments.

| | | | |
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| HISTORY | | | |
|------------|---------|-----------|--|
| Date | Version | Author | Comments |
| 7/12/2008 | 0.1 | Sherry Gu | Creation of the draft |
| 28/12/2008 | 0.2 | Sherry Gu | Exploded view added B92 pictures with 3 colors added Industrial label spec added Product general presentation |
| 16/01/2009 | 0.3 | Sherry Gu | L1 maintenance operations modified Add phone features |
| 27/02/2009 | 1.0 | Sherry Gu | Add Clone tool 2.1.2 |

| | Function | Name | Date | Signature |
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| | | | | |
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Chapter 1

Products presentation

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CHAPTER 1

PRODUCTS PRESENTATION

1.1 - GENERAL

OT-600(A) cellphone, MTK 6225 platform, with 1.3MP camera, 2G micro-SD card and blue tooth 2.0. It supports USB full speed 2.0, mp3 and H263 video codec. OT-600(A) works with the GSM Dual Band (900/1800 MHz for EU version) and (850/1900MHz for US version).

Key drivers:

| | |
|--|---|
| | B92P |
| Network | 2G-GPRS |
| GPRS Class | 10 |
| FM or DAB radio | No |
| Navigation | 5 ways navigation(4+ centre click) |
| Form-Factor | Bar |
| Dimensions XxYxZ (mm) | 105*44.9*11.95 |
| Main Display Resolution | 128x160 |
| Main Display Technology | CSTN |
| Main Display colors | 65k |
| Main Display Orientation | Portrait |
| Music (codec support) | MP3 & Midi |
| Video playback max resolution | 128x160 |
| Video playback max rate(fps) | 15 |
| Video codec | H263 |
| Main Camera | 1.3MP |
| Camera features | Digital zoom |
| USB | USB2.0 full speed +power charging |
| SMS | SMS+MMS+HTTPS |
| MMS support | MMS 1.2+postcard |
| Total internal user available memory size (MB) | 2MB |
| Ability to support SD card up to | >2GB |
| Phone book entries | 800pcs |
| Phone book support terms | Mobile phone number Office number Home number Email Fax Birthday |
| Hands free(loudspeaker) | Yes |
| WAP | 2.0 |

1.2 - PORTABLE STICKERS

Labels are located on the back of the cellphone.

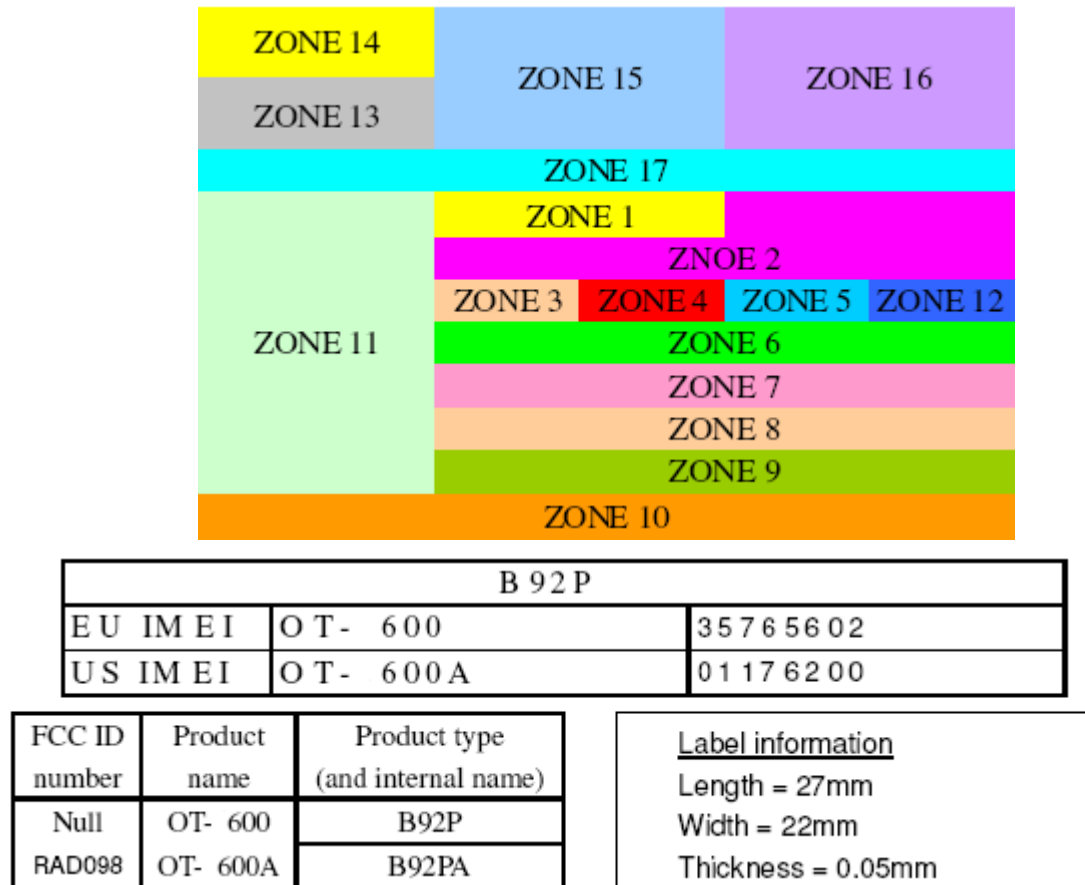


Figure 1.1 - PORTABLE STICKERS

The formation on the identification sticker is:

| Zone | Variable | Signification |
|------|--------------------------------|---|
| 1 | - | Product name: XXXX |
| 2 | - | Distributor: For WW: TCT Mobile Limited For CN: 苏州 TCL 天一移动通信有限公司 GSM 双频 GPRS 功能数字移动电话机 |
| 3 | DATA3 | PTS='soft' techn. Release xxx |
| 4 | DATA10 or DATA 12 | Short code XXXX |
| 5 | DATA2 | PTM |
| 6 | - | Made In (by) ... according to made in file |
| 7 | - | China version—CMII:0000000000 / PCS version—FCC ID:RAD098 |
| 8 | DATA7 | Commercial Ref |
| 9 | DATA5 | Full IMEI |
| 10 | DATA5 | Bar code IMEI |
| 11 | DATA5/DATA11/DATA2/DATA3/DATA7 | DATAMATRIX Code IMEI No. / INDUS. REF. / PTH(PTM) / PTS / COM. REF. |
| 12 | DATA4 | Date Code XXX |
| 13 | - | Special Logo |
| 14 | - | |
| 15 | - | |
| 16 | - | |
| 17 | | Remarker (Bluetooth QD ID B014013) |
| NO | DATA11 | 3DS (INDUS REF) |

1.3 - EXPLODED VIEW

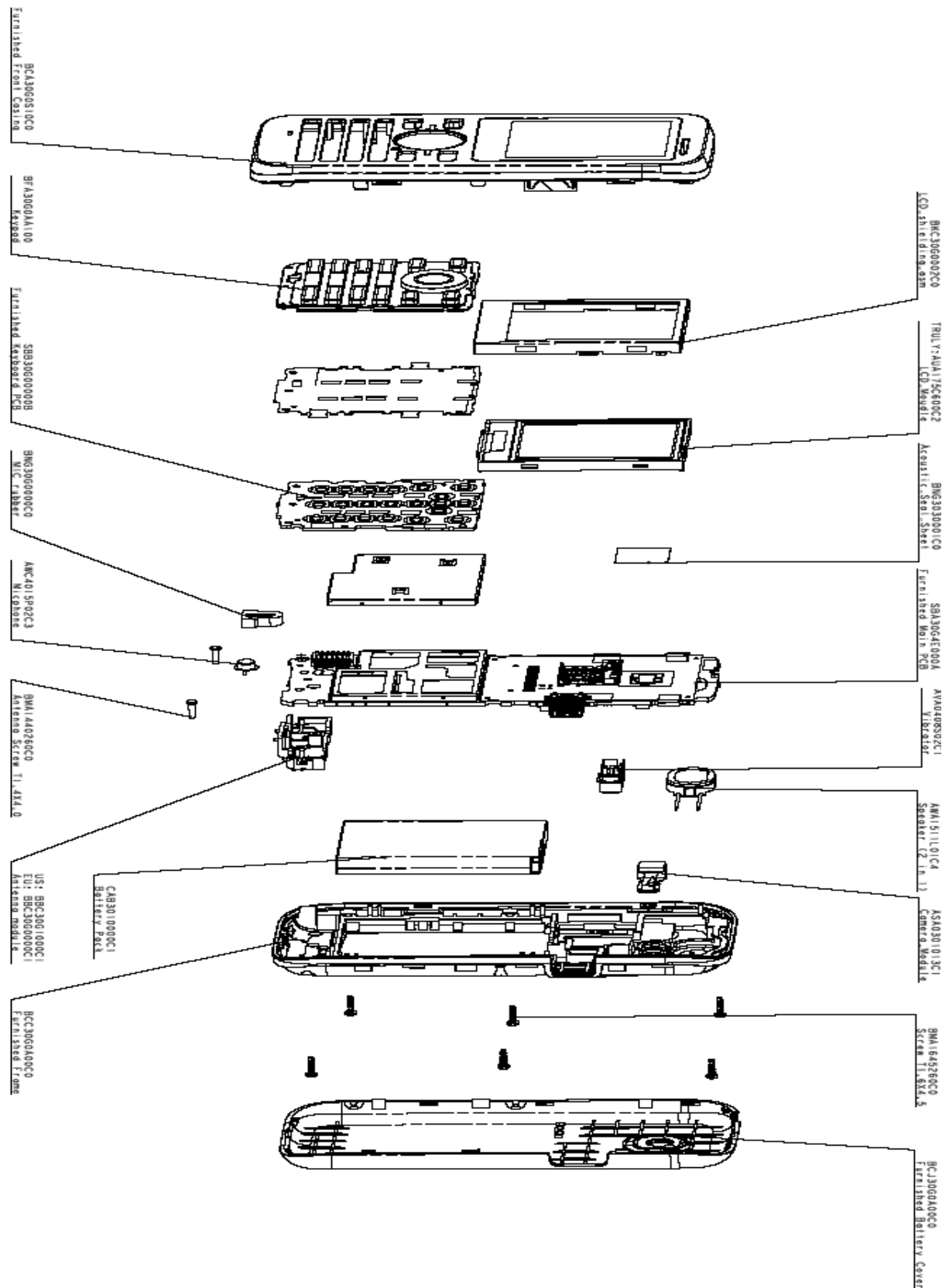


Figure 1.2 - EXPLODED VIEW OT-600 (A)

| | | | |
|-------------------|-----|--------------------------|--------|
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1.4 – RADIO SPECIFICATIONS& LANGUAGE SPECIFICATION

1.4.1 –OT-600 RADIO SPECIFICATION

| | EGSM channel | DCS channel |
|---|--|---------------------------|
| Transmission frequency band | 880-915 MHz | 1710-1785 MHz |
| Reception frequency band | 925-960 MHz | 1805-1880 MHz |
| Duplex spacing | 45 MHz | 95 MHz |
| Channels spacing | 200 kHz | 200 Khz |
| Number of channels | 174 | 374 |
| Type of operation | Temporal multiplexage AMRT. Each radio channel is time shared by Frame of 8 period of time. | |
| Time slot duration | 577 μ s | 577 μ s |
| Type of modulation | GMSK | GMSK |
| Reception specifications | | |
| Sensibility treshold | -102 dBm sur 50 \square | -102 dBm sur 50 \square |
| Maximum useful signal power applicable to the antenna | -10 dBm | - 10 dBm |
| Transmission specifications | | |
| Class | IV GSM | I DCS |
| Maximum power on 50 ohms | 2 W (+ 33 dBm \pm 2) | 1W (+ 30 dBm \pm 2) |
| Number of power levels | 15 | 16 |
| Pitch between two levels | 2 dB | 2 dB |

1.4.2 –OT-600A RADIO SPECIFICATION

| | PCS channel | 850MHz channel |
|---|--|---------------------------|
| Transmission frequency band | 1850-1910 MHz | 825-849 MHz |
| Reception frequency band | 1930-1990 MHz | 870-894 MHz |
| Duplex spacing | 80 MHz | 45 MHz |
| Channels spacing | 200 kHz | 200 KHz |
| Number of channels | 299 | 124 |
| Type of operation | Temporal multiplexage AMRT. Each radio channel is time shared by Frame of 8 period of time. | |
| Time slot duration | 577 μ s | 577 μ s |
| Type of modulation | GMSK | GMSK |
| Reception specifications | | |
| Sensibility treshold | -102 dBm sur 50 \square | -102 dBm sur 50 \square |
| Maximum useful signal power applicable to the antenna | -10 dBm | - 10 dBm |
| Transmission specifications | | |
| Class | I PCS | IV GSM |
| Maximum power on 50 ohms | 1 W (+ 30 dBm \pm 2) | 1W (+ 30 dBm \pm 2) |
| Number of power levels | 16 | 16 |
| Pitch between two levels | 2 dB | 2 dB |

1.4.3 – LANGUAGE SPECIFICATION

OT-600(A) cell phones are customized in the language (if available) of the country of destination.

It comprises one resident language (English) plus, possibly, one of the following groups of extra languages (from 1 to 4 languages) depending on the country of destination:

| Group | | Content | Comment | |
|-------|-------|---|---|-------|
| G00 | | English | Present in all Group | |
| No | Group | Language Content | Associated Country | Phase |
| 1 | G01 | German, Italian, French, Spanish | UK, France, Italy, New Zealand, FIJI, Morocco | |
| 2 | G02 | German, Portuguese, Spanish, French | Portugal, African countries * | |
| 3 | G03 | Dutch, German, Turkish, French | Germany, Austria | |
| 4 | G04 | Galician, Spanish, Basque, Catalan | Spain | |
| 5 | G05 | Romanian, Italian, German, Hungarian | Romania, Hungary | |
| 6 | G06 | Albanian, Bulgarian, Serbian, Turkish | Bulgaria | |
| 7 | G07 | Spanish, Brazilian Portuguese, Italian, French | Brazil, Mexico, Argentina, Columbia, Chile, Peru, Panama, Nicaragua, Comcel, Guatemala, El Salvador, Honduras | |
| 7-1 | G07 T | Telefonica Spanish, Brazilian Portuguese, Italian, French | Brazil, Mexico, Argentina, Columbia, Chile, Peru, Panama, Nicaragua, Comcel, Guatemala, El Salvador, Honduras | |
| 8 | G08 | German, Polish, Czech, Slovakian | Poland, Slovakia | |

| | | | | |
|----|-----|--|--|--|
| 9 | G09 | Danish, Norwegian, Swedish | Denmark, Norway, Sweden | |
| 10 | G0B | German, Croatian, Slovenian, Latin Serbian | Croatia, Slovenia, Serbia, Montenegro | |
| 11 | G0J | American English, Spanish, Italian, French | USA, Canada | |
| 12 | G11 | Simplified Chinese, Traditional Chinese | China, Hong Kong | |
| 13 | G12 | Arabic, French, Turkish | North Africa *, Middle East *, Afghanistan | |
| 14 | G13 | German, Russian, Ukrainian, English | Russia, Ukraine, Kazakhstan, Azerbaijan, Byelorussia | |
| 15 | G15 | Malaysian, Bahasa Indonesian, Simplified Chinese | Malaysia, Indonesia | |
| 16 | G16 | Estonian, Latvian, Lithuanian, Russian | Estonia, Latvia, Lithuania | |
| 17 | G17 | Thai, Simplified Chinese | Thailand | |
| 18 | G18 | Macedonian, Albanian, Serbian; Bulgarian | Macedonia | |
| 19 | G19 | Simplified Chinese, Vietnamese | Vietnam | |
| 20 | G20 | French, Romanian, Polish, Simplified Chinese | Ireland Vodafone | |
| 21 | G21 | Russian, Albanian, Greek, Bulgarian | Albania, Greece, Cyprus | |
| 22 | G22 | Polish, Russian, Romanian | Poland (Avon) | |
| 23 | G23 | French, Italian, Portuguese, Spanish | African countries (Orange Export) | |
| 24 | G24 | Hungarian, Slovakian, Czech, Romanian, English | Czech/Slovakia/Hungary specific customers | |
| 25 | G25 | Hindi, English | India | |
| 26 | G26 | Hebrew, Arabic, Russia, | Israel | |
| 27 | G27 | Romanian, Russian, Italian, French | Moldavia | |

| | | | | |
|----|-----|--|---------------------------------------|--|
| 28 | G28 | Slovenian, Croatian, Albanian and German | Slovenia, Croatia, Albania and Kosovo | |
| 29 | G29 | Traditional Chinese with Bopomofo and Stroke input methods | Taiwan | |
| 30 | G30 | Farsi, French, Turkish | Iran | |
| 31 | G31 | FR/Malgache/Spanish /Portuguese | Madagascar | |
| 32 | G32 | Polish, Czech, German and Russian | Poland, Czech Republic | |

Remarks:

Arabic: mandatory to support auto sequencing by letter when searching in contact information.

China: input Pinyin (default) + Stroke/ Simplified Chinese by default

Hong Kong: input Stroke (default) + Pinyin / traditional Chinese by default

Taiwan: input Bopomofo (default) + Stroke / traditional Chinese

Malaysia: switch on English, input Latin (default) + Pinyin only

Basque, Catalan, Galician, since T9 doesn't support such languages. We use Spanish for Basque and Galician, (Macedonian T9 support will be released end of June 2006)

1.5 - ACCESSORIES

1.5.1 - BATTERY



Figure 1.3 - PRESENTATION OF THE BATTERY (Lithium 750 mAh)

The battery has the following features:

| Battery model | Technology | Capacity |
|---------------|------------|----------|
| Battery Li | Lithium | 750 mAh |

Table 1.1- BATTERY FEATURES

| | | | |
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Table 1.2 shows the rated ranges for OT-600(A) cell phones in standby, in talking modes and MP3/video playing time (in flight mode). These typical values are expressed in normal temperature conditions with batteries initially charged and under good ratio coverage.

Battery range depends on the network characteristics, the ambient temperature and particularly on movements that cause cell changes.

| Mode | OT-600(A) | | |
|-----------------------|-----------------------|--------------------------------|---|
| | Standby (paging 5) | Talking(with Pim*+50%DTX**) | MP3/video playing time(RF standby mode) |
| Power pack Lithium | 300-400 Hours | 10 Hours | 15 Hours |

* Pmin: minimum transmission power

** DTX: no transmission during period of silence

Table 1.2 - BATTERY RATED RANGES

For a normally discharged battery (which has not been stored), the charge/discharge time are those indicated in table 1.3

| Mode | Typical Charge time |
|-----------------------|------------------------|
| Power pack Lithium | Less than 3 hours |

Table 1.3 - TYPICAL CHARGE TIME

Precautions when using and storing batteries:

If your battery is brand new, recharge it before use: the icon will then appear after a short while.

If the battery is deeply discharged, the battery charge indicator can take several minutes to appear and accompanied by a slight sound.

1.5.2 – CHARGERS

The power supply is a **current generator**.

It includes an electrical part: AC to DC conversion based on a switch regulation, which must be connected to an indoor plug.

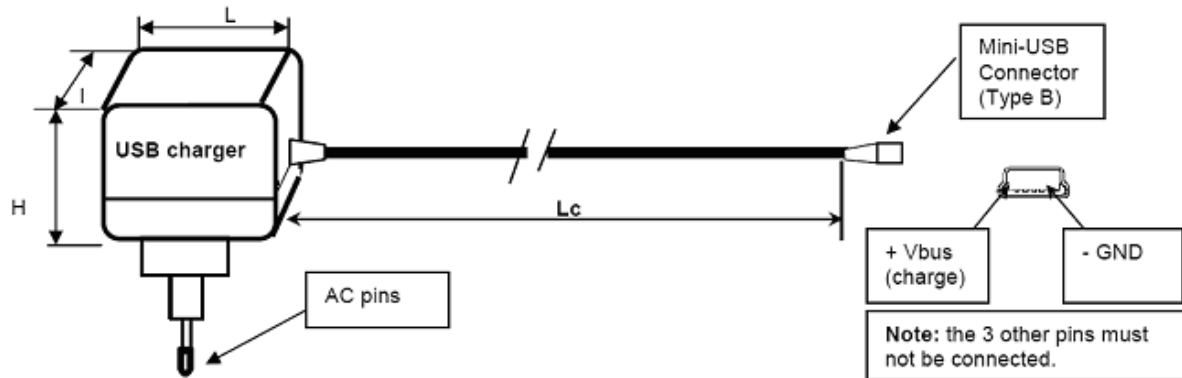


Figure 1.4 – DESCRIPTION TO THE CHARGER

Mechanical dimensions

$L \times I \times H = 63.4\text{mm} \times 38.5\text{mm} \times 24\text{mm}$ / Upon JRDC approval

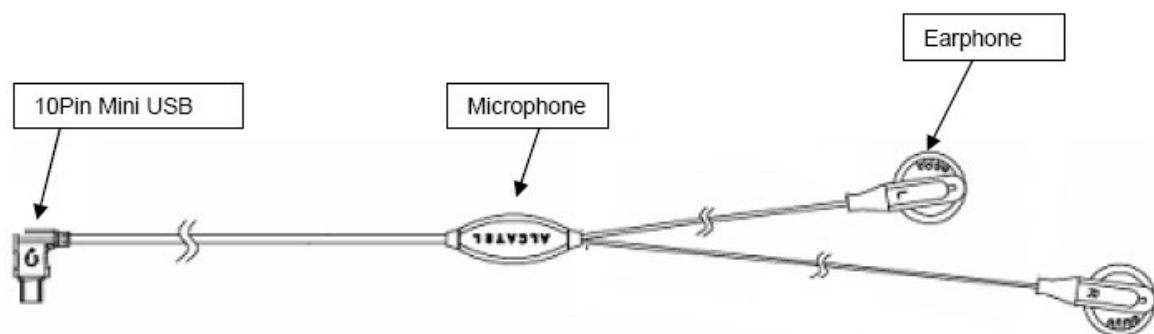
$L_c = 1.5\text{m} \pm 0.1\text{m}$

Maximum Weight (total): 54g / Upon JRDC approval



Figure 1.5 - USB CHARGER

1.5.3 - COST DOWN STEREO HEADST



| Microphone | | Earphone | |
|--|--|--|--|
| Electret condenser Microphone (without preamplifier) | | Sound pressure level (1mW): $\approx 115 \pm 5$ dB SPL (94 dB SPL = 1 dB Pa) at 1kHz with $V_{\text{input}} = 0.179\text{V rms}$ | |

| | |
|--|--|
| Sensitivity: ≈ -40 dBV/Pa ± 4 dB at 1kHz | Maximum input power: 10mW |
| Current consumption: ≤ 1 mA | Impedance: $32\Omega \pm 15\%$ |
| Signal/noise ratio: ≈ 50 dB | Resonant frequency: 20Hz-20KHz |
| DC voltage Vmicro range: 0.35-1.1V | Burst demodulation noise: < -45 dBpa |



Figure 1.6 – COST DOWN STEREO HEADSET

Chapter 2

Maintenance guide

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CHAPTER 2

MAINTENANCE GUIDE

2.1 - MAINTENANCE POLICY

This chapter describes the maintenance of the OT-600 (A) cell phones authorized at L1 repair centers. The maintenance operations can only be performed in approved repair centers.

2.2 - GENERAL

Main L1 maintenance operations are as followings:

Warranty inspections:

- Data code or invoice check
- Humidity stick check
- Anti-demolition stick check

Faults confirmation:

- Reproduce the faults as end user describes, to avoid any NFF or fault by end user mis-operation

Swap the Handset:

- Standard replacement of cell phones and take back the defect handset.

Accessories replacing:

- Check the battery and charger
- Check the headset
- Check the other accessories which are in warranty
- Exchange of defective accessories which are in warranty.

For hands-free vehicle kit:

- Functional check on it,
- Mechanical and electrical installation checks,
- Replacement of defective accessories in warranty.

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Final test:

- Switch on the mobile
- Insert a SIM card to test in/out going call
- Test the vibration function
- Cosmetic check

Send the faulty handsets to upper level RC with a dedicated form to describe the form.

If you input the following codes to cell phones, you can:

- Display the software version and IMEI number in each phone: ***#06#**
- Reset all users parameter and data: ***#73738#**
- Unlock the phone in case the lock function has been activated and the code lost(called Super code): **11223344**
- Access call duration directly(called DAP code): **###232#**
- Check current software version: ***#837#**

WARNING:

- 1 - all user personal data will be lost after entering the code ***#73738#**, except information in SIM card. This includes: pictures, sounds, downloaded applications and games, products directory data, WAP bookmark ... added by the user. This may also delete some of the original pictures/sounds/game provided within the phone. You can save and restore the data by using the Cloning software.
- 2 - After the sequence has been entered, phone auto switch on will take approx. 60 sec. Never manipulate the phone during this period of time.

2.3 - CELLPHONE MAINTENANCE

2.3.1 - REQUIRED TOOLS

Cellphone testing require:

- A charged battery,
- A functional micro-SIM card.

We recommend the following tools:

- A PC with OS(Windows 2000/NT/XP),
- A multimeter for battery test,
- A galvanometry meter for charger measurement,

| | | | |
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- A suit of screw driver.

2.3.2 - HUMIDITY STICKER CHECK

OT-600(A) cellphones are fitted with a sticker detecting liquid (on the frame). The sticker contains a detective colored bar which will become obscure once under humid condition, as the picture on the right showed:



Figure 2.1 - HUMIDITY STICKER

If a cellphone is sent to the repair center with an obscure bar or the bar is missing, that means the cellphone is out of guarantee.

2.3.3 - CELLPHONE MAINTENANCE PROCEDURE

- Check that the SIM card is set correctly
- Insert the end-user battery.
- Press the Switch on button until the website message appears.
- If the cellphone can not be power on, visually check the condition of the battery connector and replace the battery if necessary (see paragraph 2.4 for battery test).
- If the cellphone asks to insert the micro-SIM card, visually check the card and connector and try another SIM card to make sure which part fail.
- Enter the phone code if necessary.
- If power on OK, test the keypad, and each function under each menu.
- Make a call.
- Receive a call.
- If the phone is considered as faulty, upgrade the software (without forgetting to save customer information first - see paragraph 2.6).

2.3.4 - REPLACING CELLPHONE PARTS

2.3.4.1- PRELIMINARY

Before any sub-assembly removal (except the antenna), the back cover, the battery and the micro SIM-card must be removed. The following diagrams show the different stages to realize these operations.

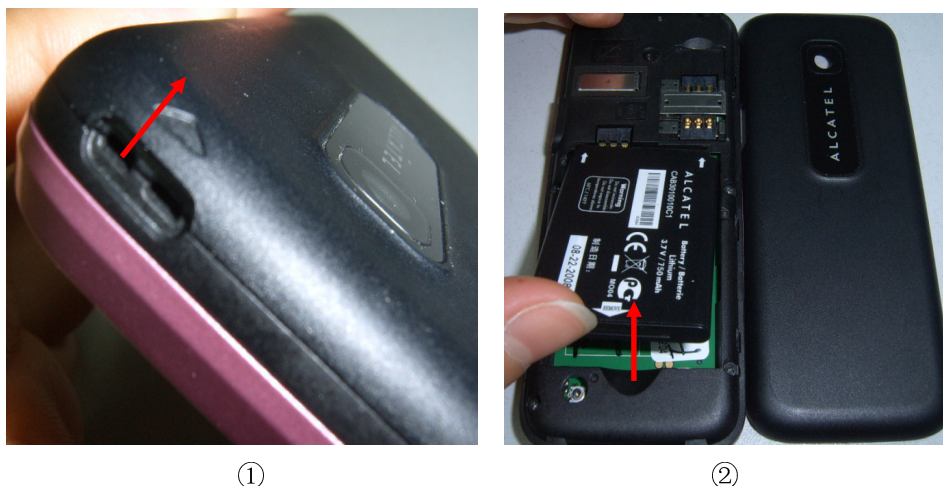


Figure 2.2 – REMOVING THE BATTERY

2.3.4.2 - PRECAUTIONS

The heart of the cellphone, containing all the digital circuit (microprocessor, ASIC, memories, display, keypad, etc) and the high-frequency transceiver circuit, is protected by the upper and lower shells.

However, certain areas sensitive to electrostatic discharges are completely or partially visible (keypad keys, micro-SIM drive, etc) and in order to prevent any risk of damage during removal/installation of the shell, the operator's wrist should be grounded when working on the heart of the phone.

This operation is illustrated in the following figure. The operator wears a conducting bracelet connected to an anti-static pad placed on the work surface, itself connected to the workbench metal structure, the whole being earthed.

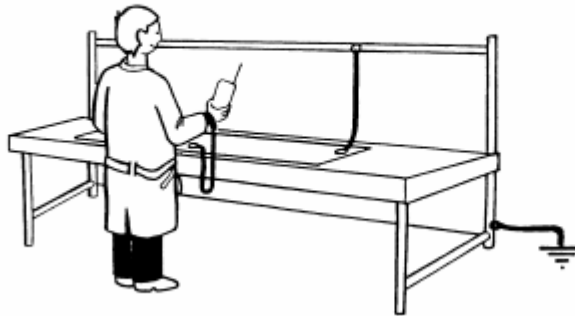
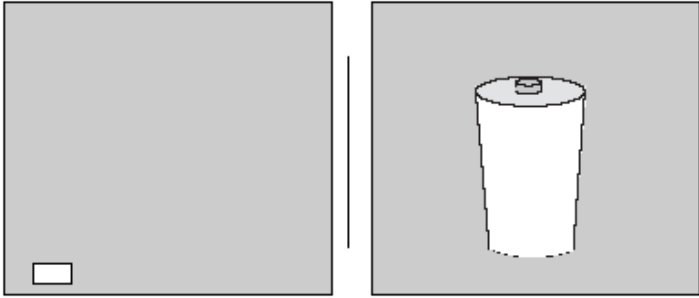




Figure 2.3 - PROTECTION AGAINST ELECTROSTATIC DISCHARGES

2.4 - BATTERY TEST

2.4.1 - CHARGING PROCESS

Table 2.1 describes the various events related to connection of a standard charger connected to a cellphone.

| | OT-600(A) | |
|--|---|-----|
| Cellphone status before charger connection | ON | OFF |
| During charging | Display lights up and following battery icon displayed:  Sequential icon flashing:   | |

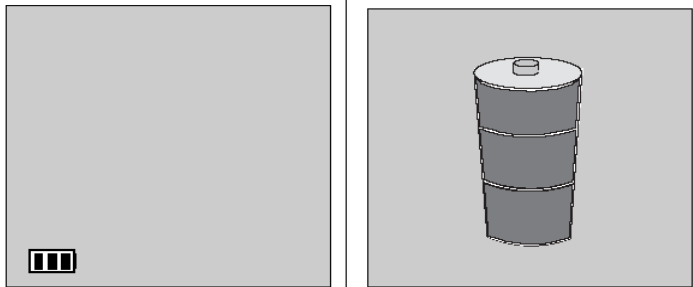
| | |
|---------------------------------------|--|
| After charging (charger connected) | <p>Following fixed battery icon display :</p>  |
|---------------------------------------|--|

Table 2.1 - BATTERY CHARGE STATUS ON THE CELLPHONE

The charger or the cell phone's charge function is defective (connectors or electronics) if the display does not light or the icons do not flash.

In this case, try to charge the battery on the cellphone with another charger.

If the charge process runs correctly, replace the charger. If it does not work, try to charge with another battery. If the charge process runs correctly, replace the battery. Check the Audio/Charge connector. If it is damaged, replace the cellphone.

For a normally discharged battery (with not a long time of stocking), charging time is indicated on table 2.2.

| Battery \ Mode | Typical Charge time |
|----------------|---------------------|
| Lithium | Less than 3 hours |

Table 2.2 - BATTERY TYPICAL CHARGE TIME

2.4.2 - BATTERY SPECIFICATION (LITHIUM)

| | |
|------------------------------|--|
| Nominal Voltage | 3.7V |
| Capacity | Minimum 750mAh (From 4.20V to 2.75V cut-off at current 0.2C) |
| Charge Method | CC / CV (Constant Current / Constant Voltage,) |
| Standard Charge Current | 1C |
| Max Charge Current | 1.5C |
| Max Recommend charge Voltage | 4.225V |
| Max Discharge Current | 1.5C (for continuous discharging mode) |
| Discharge Cut-off Voltage | 2.75V / cell |
| Operating Temperature: | |
| Charge | 0 ~ +45°C |
| Discharge | -20 ~ +60°C |
| Storage Temperature | |
| 1 month | -20 ~ +60°C (*) |
| 3 months | -20 ~ +45°C (*) |

| | | | |
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1 year -20 ~ +25°C (*)

Storage Relative Humidity 65±20%

Note (*): Capacity recovery rate should be more than 80% under the shipment status.

The off-load voltage of a normally discharged battery is greater than 2.5 V. If not, charge the battery during a few minutes and test if the voltage is greater than 3.3 V. If not, at least, the battery is not in good condition; replace it.

After 10 minutes charging of a normally discharged battery, the cellphone can be switched on and the battery will then behave normally: continue the charge process. If not, either the battery or the cellphone charge function is defective. Replace items until the faulty one is identified.

2.5 - TESTING THE CHARGER

When the standard charger is connected to the cellphone, check correct running of the charge sequences on its display (see paragraph 2.4.1).

Use the galvanometry meter to measure the current of the charger.



Figure 2.4 – GALVAMOMETRY METER

Connect the power supply, the charger to the meter (on the side of "IN"), and connect the cables from "OUT" side to the handset, you will see how much the current is on the screen.

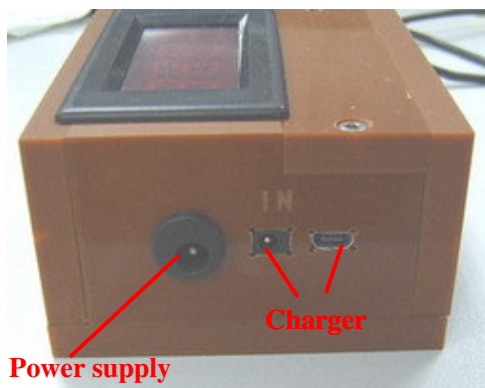


Figure 2.5 – HOW TO CONNECT THE GALVAMOMETRY METER

The measurements at the charger output should be: 450 mA~550 mA

2.6 - USER INFORMATION TRANSFER

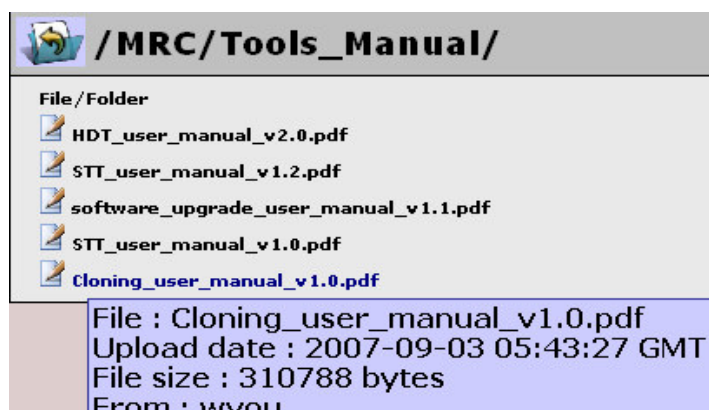
Concerning OT-600(A), the clone tool allows save the customer information for users (directory, notebook...) with a PC and downloading cable.

(1) Find cloning tool on MLDC as below detail location:



(2) Install the cloning tool in your computer.

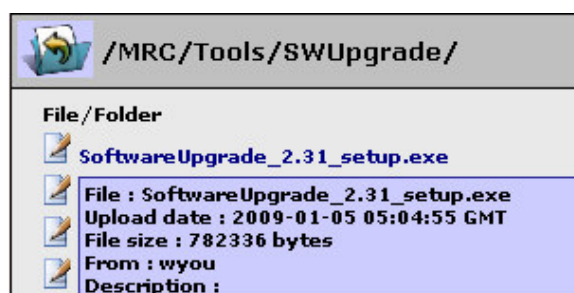
(3) Follow the user manual on MLDC to upgrade the mobile.



2.7 –SOFTWARE UPGRADE

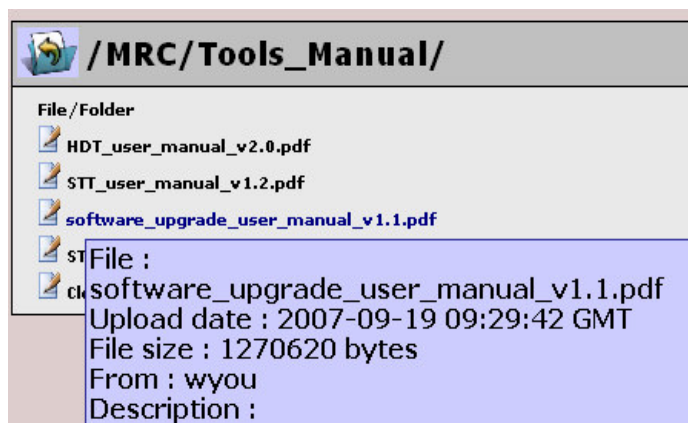
In level 1 Repair center, we can do software upgrade downloading for the mobile which need software updated. This downloading method is online and with your account.

(1) Download the SWUpgrade tool form MLDC.



(2) Install the tool in your computer.

(3) Detail steps for usage pls. refer to the file of "software_upgrade_user_manua_v1.1" on MLDC.



For multidownload, we have verified 4 at one time. And the capacity is about 20 handsets/hour/PC (depend on the internet and PC statement on your site).

Note: When you do multi-download, pls close other application programs to save enough memory for the downloading tool.

If you meet some error messages, click OK and re-set the battery, then downloading again.

End of the document

B92P/OT-600(A)

Level 2 Repair Document



B92P

Note: this manual is non-contractual and TCT Mobile phone can modify without prior notice the characteristics of described equipments.

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| Edition | Modification | Date |
|---------|--|-----------------------------|
| 0.1 | Draft Creation | Feb. 1 st , 2009 |
| 0.2 | Add SWupgrade pic Add HDT pic | Feb. 8 th , 2009 |
| 0.3 | Add disassembly pic Add repair process and time | Feb 11 th , 2009 |
| 1.0 | Add STT & cloning Add IMEI label spec. | Feb 27 th , 2009 |
| | | |

| | Function | Name | Date | Signature |
|-------------|------------|-------------|------|-----------|
| Written by | CPM | Sherry Gu | | |
| Verified by | CC manager | Sky Gao | | |
| Approved by | PM | Hua qiaowen | | |

| | | | | |
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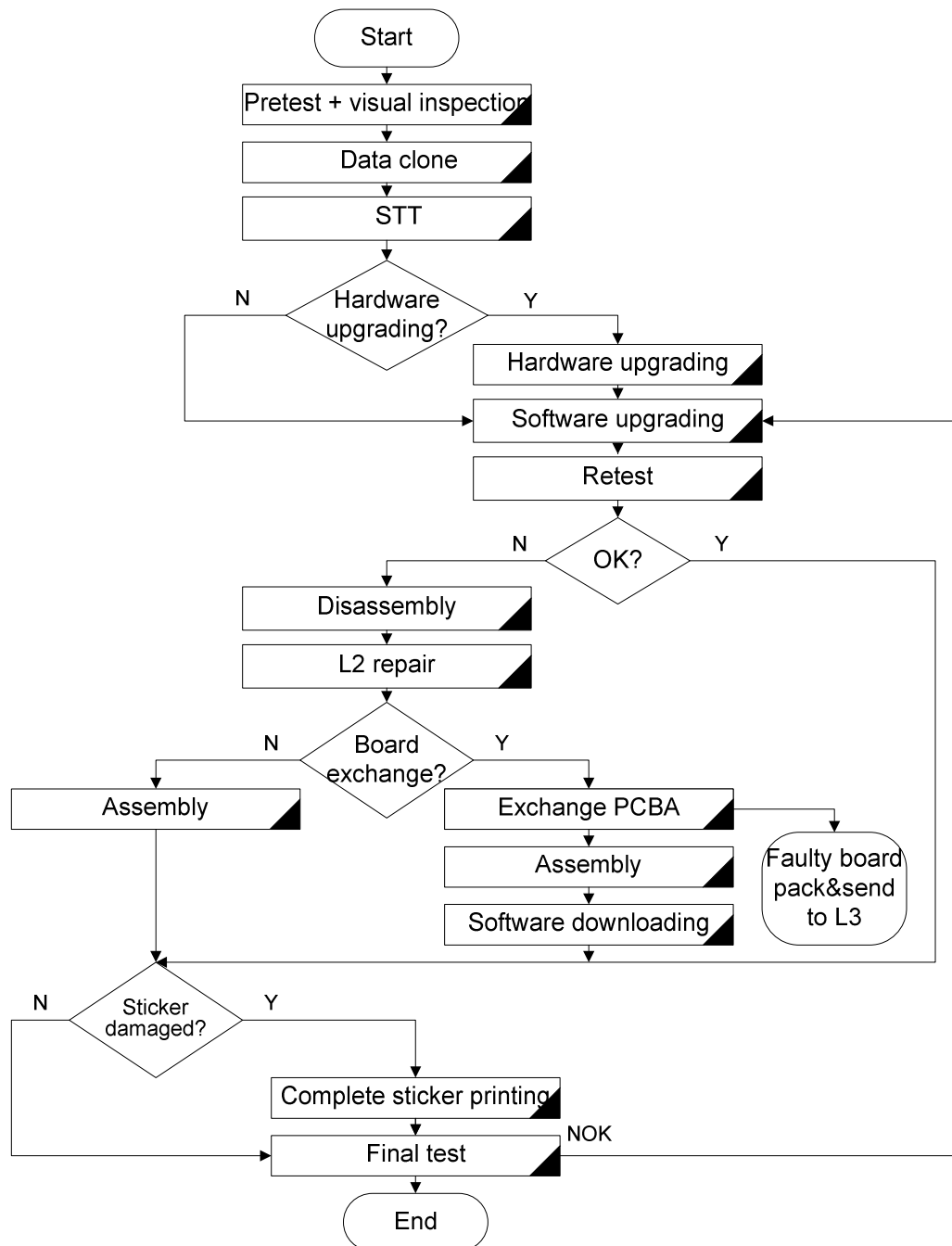
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1. LEVEL 2 REPAIR PROCESS



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2. PRETEST AND VISUAL INSPECTION

- a. Check handset aspect;
- b. Humidity sticker: OT-S600(A) cellphones are fitted with a sticker detecting liquid (on the frame). Check its state to decide whether it is under or out of warranty. (the original sticker is white and turn red in contact with water)



sticker OK

Sticker of a good terminal
This terminal is under warranty.



sticker NOK

Sticker of a terminal dived in water
This terminal is out of warranty.

- c. Insert SIM card and check its right fitting;
- d. Insert a battery, plug a charger on product, And check the icon on main display and sub display;
- e. Switch on handset and check every key of the keyboard, including the “navigation”, “soft key”, and “camera key”. Check the display and keypad backlight.
- f. Check the function of the vibrator through *My settings/Ring tones/Mode/Vibrate* Or long press “#” key;
- g. Make a phone call with a communication tester, during the communication, check the function of Hands-Free.
- h. Check their function If the end user complains about music or camera;

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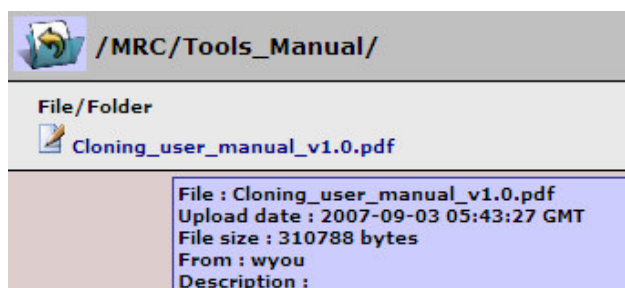
3. CLONING TOOL

(1) Find cloning tool on MLDC as below detail location:



(2) Install the cloning tool in your computer.

(3) Follow the user manual on MLDC to upgrade the mobile.



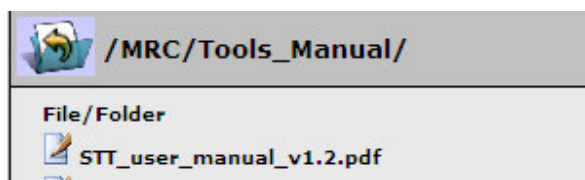
4. SAV TEST TOOL

(1) Find STT on MLDC as below detail location:



(2) Install the cloning tool in your computer.

(3) Follow the user manual on MLDC to upgrade the mobile.



| | | | |
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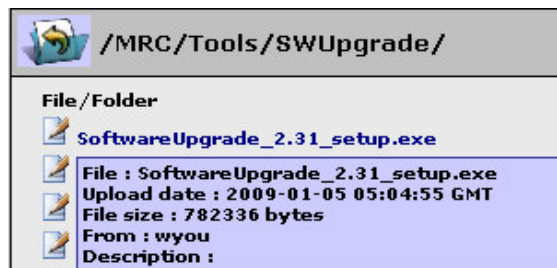
5. HARDWARE UPGRADE

For OT-600(A), there is no hardware upgrade in L2 repair.

6. SOFTWARE DOWNLOADING

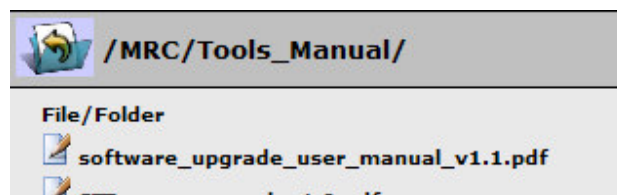
SWUpgrade tool is a method to download the SW from the SWupgrade server. Your internet connection is necessary during the process.

(1) Find softwareUpgrade tool on MLDC as below detail location:



(2) Install the cloning tool in your computer.

(3) Follow the user manual on MLDC to upgrade the mobile.



7. DISASSEMBLY and REASSEMBLY of OT-600(A)

7.1 ESD Safety



Please wear static loop or static glove

7.2 Disassembly tools

- a** .Plastic Wedge **b** . Screwdriver (TORX5) **c** . Hook **d** .Tweezers **e** . Soldering Jig
f . Soldering iron **g** . connector bar **h** . Hot wind gun

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7.3 Process

The steps of disassembly 600(A) are as below.

Step 1

Take off the battery cover, battery and SIM card if there is.

Take off the 6 screws from the furnished frame, position as the below picture showed:

Then separate the furnished frame from the PCB board.

| | | | |
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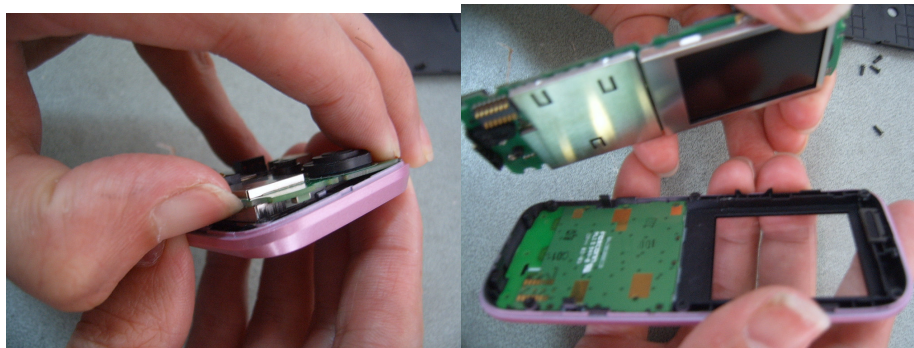
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Step 2

Remove the main PCBA as below.

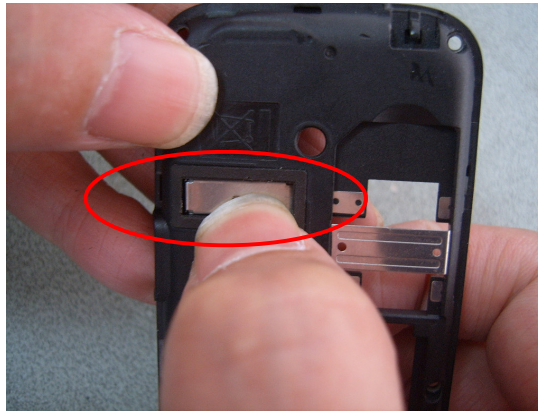


Step 3

Remove the vibrator by pushing directly:

| | | | |
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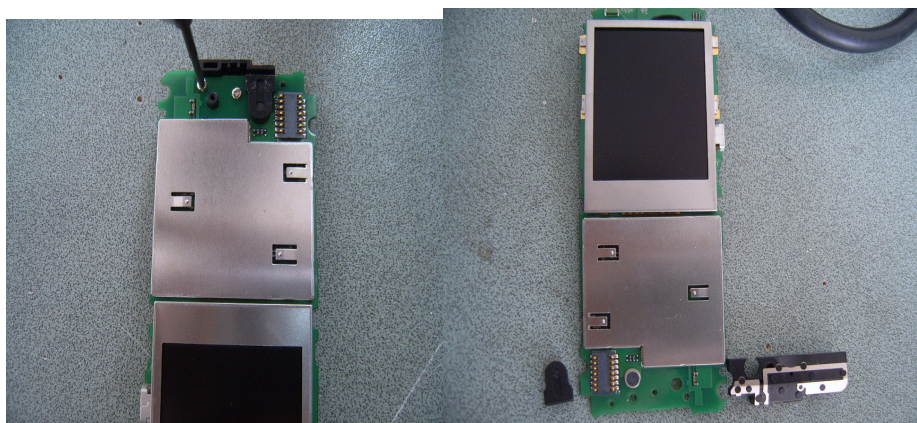
Step 4

Remove the keypad PCB and keypad from the front cover.



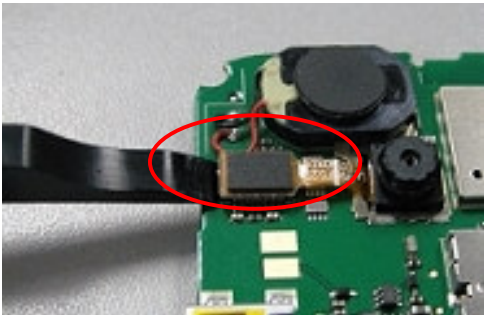
Step 5

Remove 2 antenna screws, antenna, camera and mic rubber from main PCBA



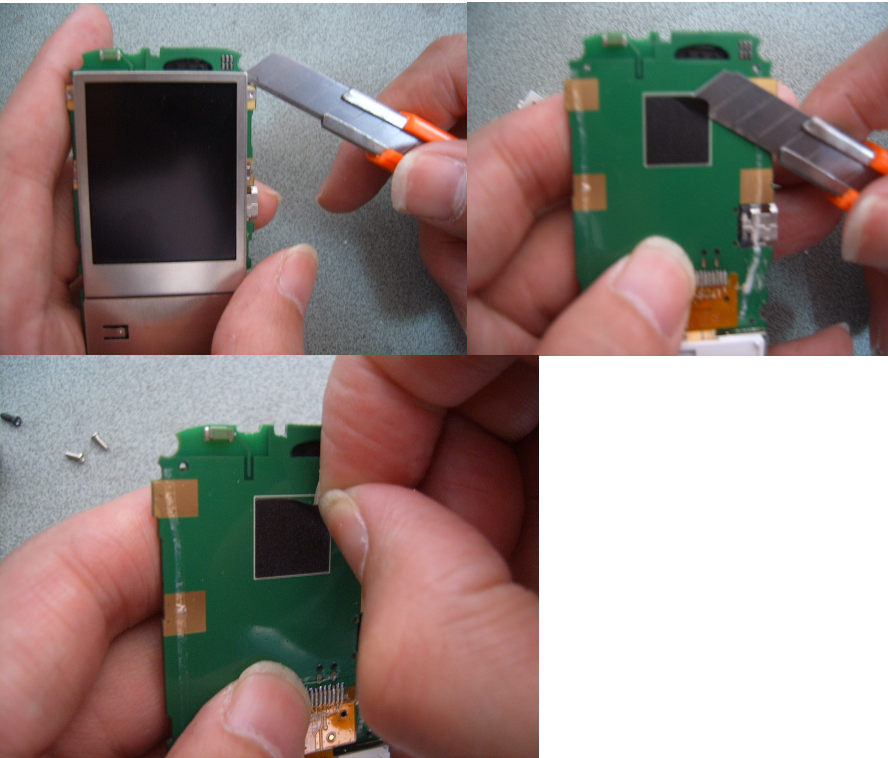
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Step 6

Remove LCD shielding and tear the acoustic seal sheet from main PCBA



Step 6

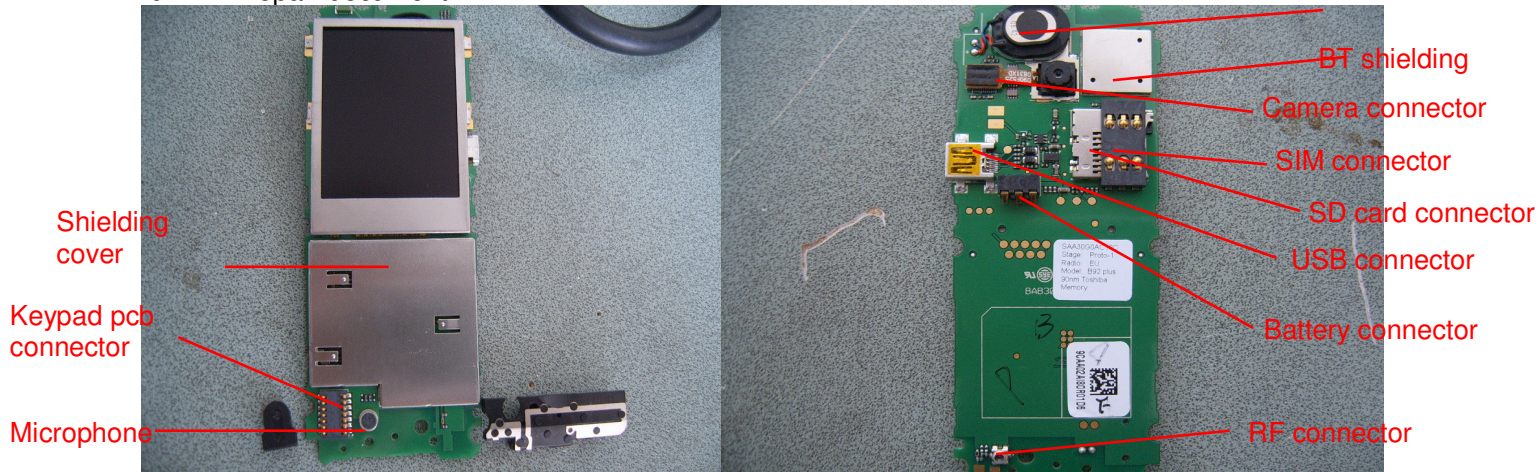
Remove LCD shielding and tear the acoustic seal sheet from main PCBA

Speaker

| | | | |
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Disassembly Notice:

- Put all the spare parts on right position (don't let all spare parts mixed and put on the clean place to avoid vitiated or stained for each spare part) after disassembly. When taking apart of LCD, take care not to dirty or damage it.

7.4 Reassembly Process

Please make reference to the disassembly process for assembly reverse an order of the disassembly steps.

7.5 L1 and L2 spare parts disassembly process evaluation

We list the B92P L1 and L2 parts disassembly time, technique levels and disassembly methods as below, for technique levels, Class 1 signifies easy to disassembly, Class 2 signifies normal to disassembly and Class 3 signifies hard to disassembly.

| L1 and L2 spare parts list | Time to disassembly | Technique use for disassembly | Disassembly Class | Remark | Proposition for backup stock |
|----------------------------|---------------------|-------------------------------|-------------------|---------------------|------------------------------|
| furnished front casing | - | - | Class 1 | | |
| furnished battery cover | 0.5s | - | Class 1 | | |
| furnished frame | 11.42s | connector bar | Class 2 | | |
| battery(750mAH) | 1s | - | Class 1 | | |
| Acoustic_Seal_Sheet | 6.76s | tweezers | Class 1 | | |
| keypad | 0.5s | - | Class 1 | | |
| Antenna Screw T1.4X4.0 | 4.72s | screwdriver | Class 1 | | |
| screw T1.6X4.5 | 28.75s for 6pcs | screwdriver | Class 1 | | |
| LCD module | 3.23s | soldering iron | Class 1 | | |
| LCD shielding asm | 21.3s | hook | Class 3 | Hard to disassembly | |

| | | | |
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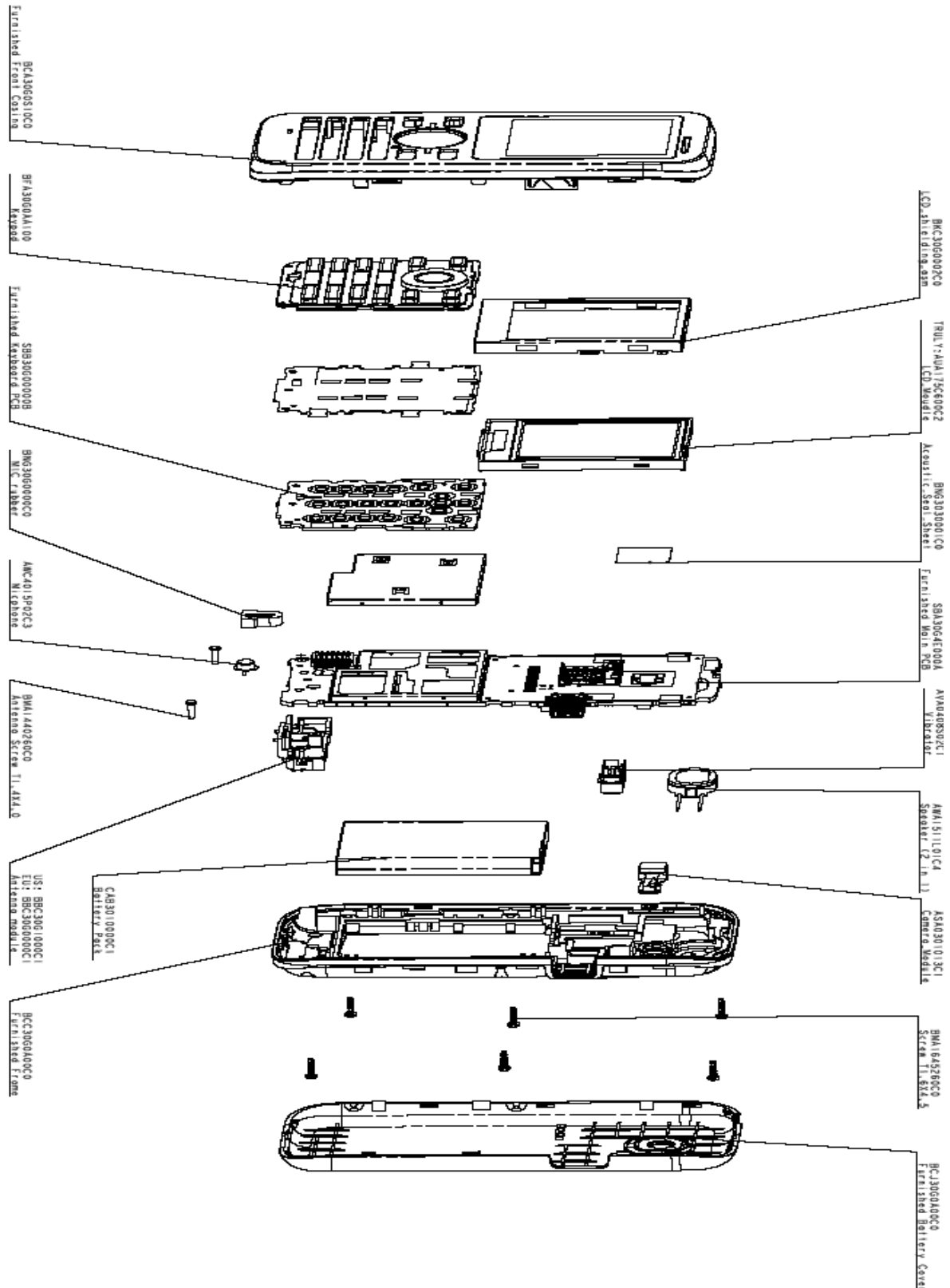
| Continue the table of last page | | | | | |
|--|-------|----------------|---------|---|-----|
| camera module | 2.2s | - | Class 1 | easy to damage camera FPC | Yes |
| camera bracket | 30.1s | hot wind gun | Class 2 | | |
| Mic rubber | 0.5s | - | Class 1 | | |
| vibrator | 1s | - | Class 1 | | |
| 2 in 1 speaker | 15.2s | soldering iron | Class 2 | | |
| microphone | 20.3s | soldering iron | Class 2 | easy to damage when soldering | Yes |
| camera connector | 120s | hot wind gun | Class 3 | It has 24pin and very easy to damage | Yes |
| USB connector | 120s | hot wind gun | Class 3 | 10pin and easy to damage | Yes |
| battery connector | 120s | hot wind gun | Class 3 | Plastic parts are easily damaged during heating | Yes |
| SIM connector | 60s | hot wind gun | Class 3 | Plastic parts are easily damaged during heating | Yes |
| antenna module(EU) | 0.5s | screwdriver | Class 1 | | |
| antenna module(US) | 0.5s | screwdriver | Class 1 | | |
| RF connector | 30s | hot wind gun | Class 3 | Plastic parts are easily damaged during heating | yes |
| T-flash card connector | 60s | hot wind gun | Class 3 | 8pins and Plastic parts are easily damaged during heating | Yes |
| BT shielding | 120s | hot wind gun | Class 3 | Big metal surface need long time heating for disassembly | Yes |
| shielding frame | 900s | hot wind gun | Class 3 | Big metal surface need long time heating for disassembly | Yes |
| shielding cover | 11s | hook | Class 2 | - | |
| Funished keyboard PCB | 1.02s | - | Class 1 | - | |
| BTB connector socket, 14pin, 1.2pitch, H=1.9mm | 120s | hot wind gun | Class 3 | 14 pin and easy to be damaged during heating | Yes |

(S: seconds)

| | | | | | |
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7.6 Disassembly Complete



| | | | |
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8. LEVEL 2 REPAIR

This chapter describes the LEVEL 2 repairs that can be done without any diagnostic equipment.

| | Problem description | Action And Solution |
|------------------------------|--|--|
| Charging | Bad or No Charge | 1.Check voltage of the battery: if 0V, charge some minutes and check the charge indicator; 2.Check the battery contact, change the battery connector (X902) if broken; 3.Check the charge plug on B cover, change it if necessary; |
| Switch on with battery power | Can 't Switch on | 1.Check voltage of the battery; 2.Check the battery contact, change the battery connector (X902) if broken; 3.Check the keypad. 4 Check BTB connector socket pin |
| Main display and Sub display | Missing line or column; no display; bad or no LCD backlight | Check Connection flex (FPC cable),change it if necessary; Replace display module if necessary; |
| Keyboard | Keyboard backlight or keyboard function | Check keypad film or keypad PCB, change it if necessary |
| vibrator | The vibrator does not work | Check the contact on the PCBA (dirty or oxidized), replace the vibrator if necessary; |
| Network Problem | No emission or No reception | Check the antenna contactor on the B cover; Check the contact on the PCBA (dirty or oxidized); |
| IRDA | No communication between the phone and the computer or between two mobiles | Check optic IRDA window, replace IRDA window if necessary; |
| Camera | Camera doesn't work | Check camera module Check also camera FPC broken or not |
| Audio | Bad or no emission (TX audio from mobile); Bad or no reception (RX audio on mobile); Hands-free problem; Key bip and melody problem | Check microphone, replace it if necessary; Check the contact on the PCBA (dirty or oxidized) Check loud speaker, replace it if necessary; Check the contact on the PCBA (dirty or oxidized) |

In case the LEVEL 2 repairs can't solve the problem, or if the board is damaged, exchange the board.

List of available component to be replaced on the PCBA in Level 2, refer to appendix 2

| | | | |
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9. BOARD EXCHANGE

In case of LEVEL 2 repair does not solve the failure, it is mandatory to change the board and apply the following process:

- 1) Prize up the fault PCBA board away (without accessory such as speaker, vibrator, LCD).
- 2) Get a new PCBA from swap stock. Reuse those accessories to assemble the mobile.
- 3) Fill in the fault code sticker with the fault code, the short code, the Hardware Technical Level, and the STT Result.
- 4) Put the sticker on the left bottom of faulty board.
- 5) Send the fault PCBAs back to L3 repair center with the suggested packaging method, the detail packaging method please see solution 1 of APPENDIX 2.

10. OTHER COMPONENT EXCHANGE

The other components exchange like *LCD module, keypad, vibrator, speaker, microphone, camera, FPC connection, audio/camera connector* and related mechanical components, please follow the detail steps from paragraph 8(Disassembly and Reassembly process), but need to be very careful to handle the components with related special tool or jig (especially replacing new components) and better to handle it with plastic tools (plastic tweezers and wedge etc.), besides must put static gloves, fingertips or wear static loop during the whole process of components exchange!

11. STICKERS

Find below the specification concerning the stickers for OT-600(A) products.

This sticker must be re-printed when the board is changed or upgraded .If the sticker is damaged, the mobile must be excluded of manufacturer warranty.



| | | | |
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| B 92 P | | |
|---------|----------|----------|
| EU IMEI | OT- 600 | 35765602 |
| US IMEI | OT- 600A | 01176200 |

| FCC ID number | Product name | Product type (and internal name) |
|---------------|--------------|----------------------------------|
| Null | OT- 600 | B92P |
| RAD098 | OT- 600A | B92PA |

Label information
Length = 27mm
Width = 22mm
Thickness = 0.05mm

| Zone | Variable | Signification |
|------|--------------------------------|---|
| 1 | - | Product name: XXXX |
| 2 | - | Distributor: For WW: TCT Mobile Limited For CN: 苏州 TCL 天—移动通信有限公司 GSM 双频 GPRS 功能数字移动电话机 |
| 3 | DATA3 | PTS='soft' techn. Release xxx |
| 4 | DATA10 or DATA 12 | Short code xxxx |
| 5 | DATA2 | PTM |
| 6 | - | Made In (by) ... according to made in file |
| 7 | - | China version—CMII:0000000000 / PCS version—FCC ID:RAD098 |
| 8 | DATA7 | Commercial Ref |
| 9 | DATA5 | Full IMEI |
| 10 | DATA5 | Bar code IMEI |
| 11 | DATA5/DATA11/DATA2/DATA3/DATA7 | DATAMATRIX Code IMEI No. / INDUS. REF. / PTH(PTM) / PTS / COM. REF. |
| 12 | DATA4 | Date Code xxx |
| 13 | - | Special Logo |
| 14 | - | |
| 15 | - | |
| 16 | - | |
| 17 | | Remarker (Bluetooth QD ID B014013) |
| NO | DATA11 | 3DS (INDUS REF) |

| | | | |
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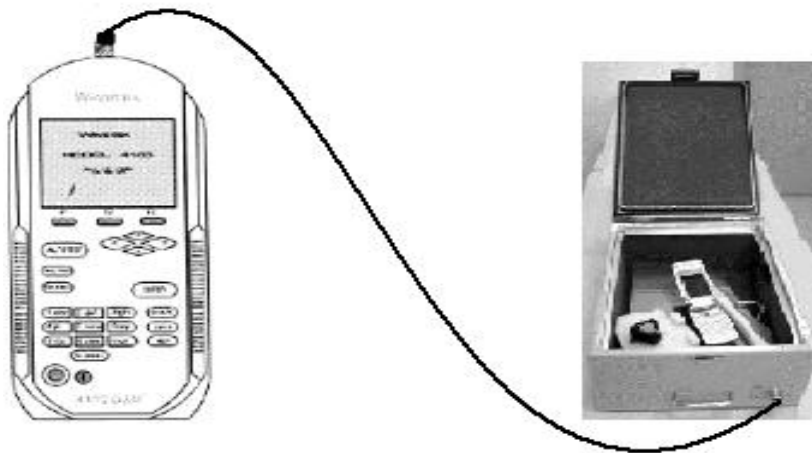
12. FINAL TEST

12.1 Function Test

During the function test, the following items must be checked and validated.

- Cosmetic aspect of the handset, the Software Technical sticker state on the Board
- Switch on the handset
- Default welcome message
- The display and keypad backlight
- Function of the all keys (beep and display) and the keyboard positioning
- Function of vibrator (*My setting/Ring tone/Mode/Vibrate* or by long press “#”)
- Plug of a charger: right position of the charger, display of the charge indicator
- Check the music and camera function

12.2 Measurement



| | | | |
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| Measurements | Channels | Power levels | Tol.min | Tol.max | Conditions |
|------------------------------------|----------|--------------|---------|---------|---------------|
| GSM | | | | | |
| Connection Mobile | 63* | 9 | None | None | Radiated meas |
| Call base from mobile | 5* | 9 | None | None | Radiated meas |
| Power level measurements | 5* | 9 | 22 dBm | 28 dBm | Radiated meas |
| Power level measurement | 5* | 5 | 31 dBm | 35 dBm | Radiated meas |
| Peak Phase error measurements | 5* | 5 | 0° | 20° | Radiated meas |
| RMS Phase error measurements | 5* | 5 | 0° | 5° | Radiated meas |
| Frequency error measurements | 5* | 5 | -90 Hz | +90 Hz | Radiated meas |
| RX Level (BS power level : -60dBm) | 5* | 5 | 45 | 55 | Radiated meas |
| Power level measurements | 120* | 5 | 31 dBm | 35 dBm | Radiated meas |
| Peak Phase error measurements | 120* | 5 | 0° | 20° | Radiated meas |
| RMS Phase error measurements | 120* | 5 | 0° | 5° | Radiated meas |
| Frequency error measurements | 120* | 5 | -90 Hz | +90 Hz | Radiated meas |
| RX Level (BS power level : -60dBm) | 120* | 5 | 45 | 55 | Radiated meas |
| DCS | | | | | |
| Power level measurements | 515* | 0 | 28 dBm | 32 dBm | Radiated meas |
| Peak Phase error measurements | 515* | 0 | 0° | 20° | Radiated meas |
| RMS Phase error measurements | 515* | 0 | 0° | 5° | Radiated meas |
| Frequency error measurements | 515* | 0 | -180 Hz | +180 Hz | Radiated meas |
| RX Level (BS power level : -60dBm) | 515* | 0 | 45 | 55 | Radiated meas |
| Power level measurements | 880* | 0 | 28 dBm | 32 dBm | Radiated meas |
| Peak Phase error measurements | 880* | 0 | 0° | 20° | Radiated meas |
| RMS Phase error measurements | 880* | 0 | 0° | 5° | Radiated meas |
| Frequency error measurements | 880* | 0 | -180 Hz | +180 Hz | Radiated meas |
| RX Level (BS power level : -60dBm) | 880* | 0 | 45 | 55 | Radiated meas |
| Keyboard test (1) | - | - | - | - | - |
| Audio test GSM | 70* | 9 | None | None | Radiated meas |

| | | | | | |
|----|-----|------------------------------|--|--|-------|
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| | | | | | |
|------------------------------------|------|---|---------|---------|---------------|
| Hang up | 70* | 9 | None | None | Radiated meas |
| Call mobile from BS | 700* | 9 | None | None | Radiated meas |
| Power level measurements | 700* | 0 | 27 dBm | 33 dBm | Radiated meas |
| Audio test DCS | 700* | 0 | None | None | Radiated meas |
| Hang up | 70* | 9 | None | None | Radiated meas |
| PCS | | | | | |
| Connection Mobile | 661* | 5 | None | None | Radiated meas |
| Call base from mobile | 513* | 5 | None | None | Radiated meas |
| Power level measurements | 513* | 5 | 15 dBm | 25 dBm | Radiated meas |
| Power level measurements | 513* | 0 | 25 dBm | 35 dBm | Radiated meas |
| Peak Phase error measurement | 513* | 0 | 0° | 20° | Radiated meas |
| RMS Phase error measurements | 513* | 0 | 0° | 6° | Radiated meas |
| Frequency error measurements | 513* | 0 | -180 Hz | +180 Hz | Radiated meas |
| RX Level (BS power level : -65dBm) | 513* | 0 | 35 | 55 | Radiated meas |
| Keyboard test (1) | - | - | - | - | - |
| Power level measurements | 880* | 0 | 25 dBm | 35 dBm | Radiated meas |
| Peak Phase error measurements | 880* | 0 | 0° | 20° | Radiated meas |
| RMS Phase error measurements | 880* | 0 | 0° | 6° | Radiated meas |
| Frequency error measurements | 880* | 0 | -180 Hz | +180 Hz | Radiated meas |
| RX Level (BS power level : -60dBm) | 880* | 0 | 35 | 55 | Radiated meas |
| Audio test 1900 | 683* | 5 | None | None | Radiated meas |
| Hang up | 683* | 5 | None | None | Radiated meas |
| Call mobile from BS | 683* | 5 | None | None | Radiated meas |
| Power level measurements | 683* | 5 | 15 dBm | 25 dBm | Radiated meas |
| Hang up | 683* | 5 | None | None | Radiated meas |

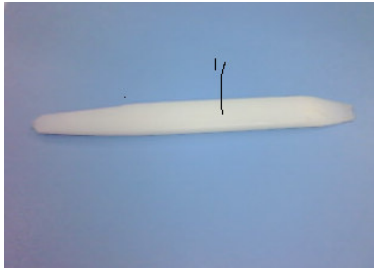
- These values are given for indication , compatible low ,middle and high channels have to be found
- All the keys must be tested during a call except « end key »

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APPENDIX 1 Tools and Equipments for L2 Repair Center

1) Repair Tools and Downloading Tools:



Plastic Stick



Tweezers



Steel Hook



Screwdriver (TORX6)



Soldering Jig



Soldering iron



Hot wind gun



Connector bar

2) Other mandatory Equipments

Final test kit (charger, batteries, Back covers)

Final test interface

Bench and socket

Stickers

| | | | |
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APPENDIX 2 HDT Fault Codes

| CODE | LIST | DESCRIPTION |
|------|------------------------------------|---------------------------|
| D05 | ERROR_CODE_SERPRODNAME_FAIL | SERPRODNAME FAIL |
| D06 | ERROR_CODE_COMCONF_FAIL | COMCONF FAIL |
| D07 | ERROR_CODE_SETSCATTERFILE_FAIL | SETSCATTERFILE FAIL |
| D08 | ERROR_CODE_SETERASEMODE_FAIL | SETERASEMODE FAIL |
| D09 | ERROR_CODE_ONTERMINAL_FAIL | ONTERMINAL FAIL |
| D10 | ERROR_CODE_READ_TRACE_FAIL | READ TRACE FAIL |
| D11 | ERROR_CODE_INVALID_INDREF | INVALID H/S 3DS |
| D12 | ERROR_CODE_INVALID_SC_OR_ICS | INVALID SHORT CODE OR ICS |
| D13 | ERROR_CODE_INVALID_COLOUR | INVALID COLOUR |
| D14 | ERROR_CODE_INVALID_MSITE | INVALID MANUFACTURE SITE |
| D15 | ERROR_CODE_INVALID_PRODDATE | INVALID PCBA PRODUCT DATE |
| D16 | ERROR_CODE_INVALID_PCBASER | INVALID PCBA SERIAL |
| D17 | ERROR_CODE_INVALID_PTM | INVALID PTM |
| D18 | ERROR_CODE_INVALID_PTS | INVALID PTS |
| D19 | ERROR_CODE_INVALID_TESTHISTORY | INVALID TEST HISTORY |
| D20 | ERROR_CODE_READ_BDADDR_FAIL | READ BDADDR FAIL |
| D21 | ERROR_CODE_READ_IMEI_FAIL | READ IMEI FAIL |
| D22 | ERROR_CODE_GET_IMEI_FAIL | GET IMEI FAIL |
| D23 | ERROR_CODE_LACK_IMEI_FAIL | LADK OF IMEI |
| D24 | ERROR_CODE_WRITE_IMEI_FAIL | WRITE IMEI FAIL |
| D25 | ERROR_CODE_CHECK_WRITE_IMEI_FAIL | CHECK WRITE IMEI FAIL |
| D26 | ERROR_CODE_WRITTEN_IMEI_MISMATCH | WRITTEN IMEI MISMATCH |
| D27 | ERROR_CODE_INVALID_IMEI | INVALID IMEI |
| D28 | ERROR_CODE_RESIGN_IMEI_FAIL | RESIGN IMEI FAIL |
| D29 | ERROR_CODE_DOWNLOAD_FAIL | DOWNLOAD FAIL |
| D30 | ERROR_CODE_DOWNLOAD_META_FAIL | DOWNLOAD META FAIL |
| D31 | ERROR_CODE_GET_BDADDR_FAIL | GET BDADDR FAIL |
| D32 | ERROR_CODE_LACK_BDADDR_FAIL | LACK OF BDADDR |
| D33 | ERROR_CODE_WRITE_BDADDR | WRITE BDADDR |
| D34 | ERROR_CODE_WRITTEN_BDADDR_MISMATCH | WRITTEN BDADDR MISMATCH |
| D35 | ERROR_CODE_CHECK_WRITE_BDADDR | CHECK WRITE BDADDR |
| D36 | ERROR_CODE_INVALID_COMMREF | INVALID COMMERCIAL REF. |
| D37 | ERROR_CODE_INVALID_SWLEV | INVALID SW LEVEL |
| D38 | ERROR_CODE_INVALID_BENCHNAME | INVALID BENCHNAME |
| D39 | ERROR_CODE_INVALID_ASTEC_DATA | INVALID ASTEC DATA |
| D40 | ERROR_CODE_INVALID_MCVER | INVALID MAIN CODE VER |
| D41 | ERROR_CODE_INVALID_LPVER | INVALID LANG PACK VER |
| D42 | ERROR_CODE_INVALID_CPVER | INVALID CUST PACK VER |
| D43 | ERROR_CODE_INVALID_SPVER | INVALID STUDY PARA VER |
| D44 | ERROR_CODE_INVALID_SECUVER | INVALID SECU INFO VER |
| D45 | ERROR_CODE_JTVER | INVALID JUMP TABLE VER |
| D46 | ERROR_CODE_SCATTVER | INVALID SCATTER FILE VER |
| D47 | ERROR_CODE_RPVER | INVALID RES PACK VER |
| D48 | ERROR_CODE_WRITE_TRACE_FAIL | WRITE TRACE FAIL |
| D49 | ERROR_CODE_CHECK_WRITE_TRACE_FAIL | CHECK WRITE TRACE FAIL |

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|-----|-----------------------------------|-------------------------|
| D50 | ERROR_CODE_WRITTEN_TRACE_MISMATCH | WRITTEN TRACE MISMATCH |
| D51 | ERROR_CODE_OFFTERMINAL_FAIL | OFFTERMINAL FAIL |
| D52 | ERROR_CODE_FR_COMM_FAIL | FR COMMUNICATION FAIL |
| D53 | ERROR_CODE_COMM_DATA_FAIL | COMMUNICATION DATA FAIL |
| D54 | ERROR_CODE_BACKUP_DATA_FAIL | BACKUP TUNING DATA FAIL |
| DUK | ERROR_CODE_UNKNOWN | UNKNOWN EEROR |
| DFF | ERROR_CODE_GEN_TRACE_FILE | GET TRACE FILE FAIL |

APPENDIX 3 Packaging Requirement

PCBA shipment requirement:

- Against Electro-Static.
- Avoid PCBA are laid to overlap each other.
- Against press outside package.

Solution 1: Each PCBA is packaged by shielding bag, put each PCBA into each cave of the carton (see picture hereunder).



Solution 2: Stack by special trays (15 trays maximum), put empty trays to fill space inside the carton and all trays should be bound tightly in order to avoid PCBA move out (see picture hereunder).



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SPARE PARTS FOR LEVEL1 REPAIRS ON OT- 600(a) PRODUCTS

| | DESIGNATION | 名称 | REFERENCE | QUANTITY | PRICE | REMARK |
|----|-------------------------|------------|--------------|----------|-------|--|
| 1 | swap handset EU | 周转机（欧盟） | F-A30G0A**01 | 1 | | C1=Titanium grey,G1=metallic blue,E1=metallic pink C1=Titanium grey,G1=metallic blue,E1=metallic pink |
| 2 | swap handset MX | 周转机（拉美） | F-A30G1A**01 | 1 | | |
| 3 | furnished front casing | 上前壳 | BCA30G0**0C0 | 1 | | |
| 4 | furnished battery cover | 电池后盖 | BCJ30G0A00C0 | 1 | | |
| 5 | furnished frame | 中壳 | BCC30G0A00C0 | 1 | | |
| 6 | battery(750mAH) | 电池(750毫安时) | CAB3010010C1 | 1 | | |
| 7 | travel charger | 充电器 | T5002684A*AC | 1 | | A:EU; G: Mexico |
| 8 | Acoustic Seal Sheet | 音腔密封片 | BNG3030001C0 | 1 | | |
| 9 | USB data cable | 数据线 | T5001431ABAA | 1 | | |
| 10 | keypad | 键盘 | BFA30G0*A100 | 1 | | A-Latin,B-Stroke,C-Cyrillic,D-Thai E-Zhuyin,F-Arabic,H-Indian,I-Hebrew |
| 11 | Headset stereo | 耳机 | CCA30B4000C0 | 1 | | |
| 12 | Antenna Screw T1.4X4.0 | 天线螺钉 | BMA1440260C0 | 2 | | |
| 13 | screw T1.6X4.5 | 螺丝 | BMA1645260C0 | 6 | | |



SPARE PARTS FOR LEVEL2 REPAIRS ON OT-600(a) PRODUCTS

| | DESIGNATION | 名称 | REFERENCE | QUANTITY | PRICE | REMARK |
|----|------------------------|-------------|--------------|----------|-------|--------------------------|
| 1 | LCD module | LCD模块 | AUA175C600C1 | 1 | | substitute: AUA175C600C2 |
| 2 | LCD shielding asm | LCD屏蔽罩 | BKC30G0002C0 | 1 | | |
| 3 | camera module | 摄像头 | ASA1301002C1 | 1 | | |
| 4 | camera bracket | 摄像头支架 | BME3030002C0 | 1 | | |
| 5 | swap PCBA EU | 周转PCBA (欧盟) | F-B30G00ALEU | 1 | | |
| 6 | swap PCBA US | 周转PCBA (拉美) | F-B30G10ALMX | 1 | | |
| 7 | Mic rubber | 麦克风橡胶 | BNG30G0000C0 | 1 | | |
| 8 | vibrator | 马达 | AVA0408S05C1 | 1 | | |
| 9 | 2 in 1 speaker | 喇叭 | AWA1511L01C4 | 1 | | |
| 10 | microphone | 麦克 | AWC4015P02C3 | 1 | | |
| 11 | camera connector | 摄像头连接器 | T1001939AAAA | 1 | | |
| 12 | USB connector | USB连接器 | ARH0100005C1 | 1 | | |
| 13 | battery connector | 电池连接器 | ARE0030027C1 | 1 | | |
| 14 | SIM connector | SIM卡连接器 | T1001797AAAZ | 1 | | |
| 15 | antenna module(EU) | 天线 (欧版) | BBC30G0000C1 | 1 | | |
| 16 | antenna module(US) | 天线 (美版) | BBC30G1000C1 | 1 | | |
| 17 | RF connector | RF连接器 | 3DS50145AAAA | 1 | | |
| 18 | T-flash card connector | T-flash卡连接器 | T1000471AAAA | 1 | | |
| 19 | BT shielding | 蓝牙屏蔽盖 | BKC3030000C0 | 1 | | |
| 20 | shielding frame | 屏蔽盖框架 | BKC30G0000C0 | 1 | | |
| 21 | shielding cover | 屏蔽盖后壳 | BKC30G0001C0 | 1 | | |
| 22 | Funished keyboard PCB | 键盘PCB | SBB30G00000C | 1 | | |