

Yaris-3.5

4015X/A/D/N



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

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1.0	2013-12-10	Draft creation	Zhirong Chen	Guiqin Ji	Weibo Chen
Rev.	Date	Modification description	Prepared By	Checked By	Approved By

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1 Level 2 repair process



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2 Warranty Check and Visual Inspection

2.1 Warranty confirmation of L1

- IMEI sticker check:
- 1) Power on the handset, enter *#06#
- 2) If the IMEI sticker in the back casing is not lost:

We should make sure that the IMEI number MUST be the same with the one on the IMEI sticker; if not, it's out of warranty policy.

Humidity sensitive label

If humidity sensitive label is not good, the cell phone will be considered as out of guarantee.

1). Liquid was detected by humidity sensitive label





sticker OK

sticker NOK

2). The humidity stick is in the battery jar where below the camera.



2.2 Visual mechanical check

Mechanical warranties check items:

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- 1) Corrosion
 - Corrosion on the USB connector, SIM connector, and other metal surfaces.
- 2) Hole (diameter > 1mm)
 - Holes on any surface, including the front casing, furnished frame, battery cover, touch Lens, keypad...
- 3) Bump
 - Bumps (diameter > 1mm) on any surface, including front casing, decorate frame, battery cover, touch Lens, keypad, etc.
- 4) Scratch
 - Scratches (length > 3mm) on any surface, including the front casing, decorate frame, battery cover, touch Lens, keypad, etc.
- 5) Distortion
 - Bend, twisted or crushed on the h/s, cover/casing or connectors, etc.
- 6) Broken
 - Touch broken, casing/cover broken, etc.
- 7) Dropped
 - Keypad tear off, touch lens, connectors dropped, etc.
- 8) Gap
 - External physical damage relating to abnormal use, like front case and frame opened
- 9) Others
 - Damage caused by disassembly ,wrong part assembly, loss of components
 - Use in abnormal environment like high temperature causing plastic melts

2.3 Pretest

1) Check that the SIM card is set correctly.

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- 2) Insert the battery.
- 3) Power on the cell phone.
- 4) If the cell phone cannot power on, visually check the condition of the battery connector. Replace it if necessary.
- 5) If the cell phone asks to input NCK code, this means it is SIM locked and can only be worked with dedicated SIM card. Use the correct SIM card.
- 6) Enter the phone code if necessary.
- 1) If power on, test step by step with the auto test code:

Press *#2886# in dial screen and then you will see the interface displaying the SW version. Select "Auto" to start the auto test, or select "MANU" to do the MMI test manually.

If one of the test failed during "Auto" test mode, it will ask you "Restart?", press "YES" to restart the auto test from the first one and "NO" to exit the auto test, while "NEXT" to continue the auto test.

- Traceability display
 - I. 1). "Auto" test mode: You can get some information such as PT, PFT, BW, MMI and FT.

2). "MANU" mode: You can get information such as IMEI, CU-REF, PTH (PTM), Data Code, BT address, etc.

- II. Press "Pass" to continue.
- Touch Panel Test
 - I. "Please draw on the yellow area" according to instructions and it will show "TEST RESULT: OK!"
 - II. Press "PASS" to continue.
- LCD test
 - You will see the LCD display three colors RED, GREEN and BLUE if it functions well;

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- II. Press "Pass" to continue.
- III. You will see the LCD displays black if it functions well;
- IV. Press "Pass" to continue.
- V. You will see the LCD displays greychart if it functions well;
- VI. Press "Pass" to continue.
- VII. You will see the LCD displays grey if it functions well;
- VIII. Press "Pass" to continue.
- IX. You will see the LCD displays white if it functions well;
- I. Press "Pass" to continue.
- Keyboard Test
 - I. Press the key displayed on the screen. The key on the screen will disappear when you press it if it functions well;
 - II. Press "Pass" to continue;
- Keypad & LCD backlight test
 - I. The keypad and screen backlight will be flashing if it functions well;
 - II. Press "Pass" to continue;
- CAMERA

Press "Pass" to continue if the camera functions well;

- Audio elements
 - I. Put the phone near to your ear and you will hear a voice prompt which introduces some emergency call numbers if functions well
 - II. Press "Pass" to continue;
 - III. you will hear a voice prompt which introduces some emergency call numbers through speaker if functions well;

IV. Press "Pass" to continue;

V. Loop from Main MIC, you will hear a voice from the receiver if functions well;

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VI. Press "Pass" to continue;

- VII. Loop from Sub MIC, you will hear the voice from the receiver if functions well;
- VIII. Press "Pass" to continue;
- Vibrator Test
 - I. You can feel the phone's vibrating if it functions well;
 - II. Press "Pass" to continue
- Accessories present test
 - I. Insert headset according to the instruction and it will say "Headset detected" if functions well;
 - II. It will play a discrete sound to headset left channel.
 - III. Press "Pass" to continue;
 - IV. It will play a discrete sound to headset right channel.
 - V. Press "Pass" to continue;
 - VI. Loop the headset MIC, you will hear a voice from the receiver if functions well;
 - VII. Press "Pass" to continue;
 - VIII. You will hear FM playing from headset and it will display FM frequency on the screen if it functions well;
 - IX. Press "Pass" to continue;
 - X. Remove headset according to the instruction and it will say "Headset tested" if it functions well;
 - XI. Press "Pass" to continue;
- Charger test
 - I. Insert Charger according to instruction, then it will say "Charger:OK" and Charger LED will turn on if it functions well;
 - II. Remove Charger according to instruction

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III. Press "Pass" to continue;

- USB
 - I. Insert USB cable according to instruction, then it will say "USB:OK" and Charger LED will turn on if it functions well;
 - II. Remove USB cable according to instruction
 - III. Press "Pass" to continue;
- G-senor test
 - I. Put the handset up and towards up according to instruction;
 - II. Put the handset towards the directions indicated by instructions; it will say "All positions checked" after you following all the directions if it if it functions well;
 - III. Press "Pass" to continue;
- Light senor Test
 - "ambient light" value will change according to the phone's movement, and it will say "dark:OK" "bright:OK" if it functions well;
 - II. Press "Pass" to continue;
- Proximity Sensor Test
 - Put the handset near to your face and then move it away from you face; then it will say "near -> far:1" and "far->near:1" if it functions well;
 - II. Press "Pass" to continue;
- SIM test
 - I. Insert SIM card and the phone will detect it if functions well;
 - II. Press "Pass" to continue;
- Micro SD test
 - I. Insert memory card according to instruction and the phone will detect it if it functions well;
- Battery Test

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- It will display "Temp range: 20~50", "current is xxx" and the value of "Battery content"/ "Battery Voltage" if it functions well;
- Bluetooth test

Bluetooth will search automatically and it will display device address if it functions well;

WIFI test

It will search for WIFI hotspot and display searched result on the screen if it functions well;

GPS test

It will run GPS and search for satellite, and then it will display info such as "PRN", "SUR", etc. on the screen if it functions well;

- CALL
 - You will hear a voice prompt which introduces some emergency call numbers if functions well;

3 Battery

3.1 Battery information

1) Battery picture



2) Battery feature

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Model	Element	Capacity
Battery Li	Lithium	1300mAh

3) Battery life.

The bellowing table shows the nominal battery life respectively in standby and talking mode. These typical values are expressed in normal temperature with battery initially full charged and under good ratio coverage. Battery range depends on the network characteristics, the ambient temperature and particularly on movement.

Yaris-3.5	Yaris-3.5/ONE TOUCH 4015 D/X/A/N			
Power pack	Standby (Paging 5)	Voice talking(Pmin with		
Fower pack	Stanuby (Paging 5)	50% DTX)		
Power pack Lithium	433h(2G)/325h(3G)	6.8h(2G)/2.8h(3G)		

* Pmin: minimum transmission power

** DTX: no transmission during period of silence

4) Battery charge time.

For a normally discharged battery which has not been stored for long time, the charge time listed as below table.

Mode	Typical Charge time
Power pack Lithium	<3.5H

Note:

-, If the battery is new, charge it before use. Battery icon will appear after charging a short time.

 \Box_{∞} If the battery is deeply discharged, battery icon will appear after charging several minutes and accompany with a slight sound.

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3.2 Battery test

1) Below table describes the various events related to a standard charger connected to a cell phone.

	Yaris-3.5/ONE TOUCH 4015 D/X/A/N			
Cell phone status before charger connected	ON	OFF		
During charging	Display lights up and follow	ving battery icon displayed:		
After charging (charger connected)	Following fixed ba	ttery icon display :		

Table - Battery charge status on handset

2) If the display does not light on or battery icon does not flash when the charger or the cell phone's charge function is defective with mechanical or electronics.

In this case:

a) Replace the charger to charge.

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- Confirm it works correctly or not.
- b) Check the Charge connector on the cell phone.
 - If it is damaged, repair the cell phone.

3.3 Battery specifications

1) Battery pack electrical characteristics

ltem	Specification	Remarks		
Rated Capacity	1300mAh (min)	0.2C discharge with current from 4.20V to 3.00V		
Nominal voltage	3.7V			
	4.20V	0~45 ℃		
Charge voltage	4.10V	45~60 ℃		
Discharge cut-off Voltage	3.0V			
Standard Charging Current	0.5C			
Max. Charge Current	1C			
Standard Discharge Current	0.5C			
Max. Discharge Current	1C	Constant current		
Charging Method	CC-CV mode	Constant voltage with limit current		
Operating Temperature	Charge : 0~45℃ Discharge : -20~60℃			
Battery ex-factory status	Voltage	3.80~3.90V		

2) Environment

Items Unit Mini Typ Max Conditions

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Discharge Temperature	°C	-20		60	
Storage	C	-20 -20 -20		60 45 20	Less than 1 month Less than 3 months Less than 1 year
Relative Humidity/	%	45	65	85	65±20%

4 Software download

It is authorized to download software for the handset which needs to be updated. This downloading tool is called "Sugar MTK_SP". Thus internet access is necessary. TS Website: <u>https://css.tclmobile.cn/</u>.

Equipments requested when download:

- (1) A handset with full power;
- (2) PC with windows system;
- (3) A USB cable.

Install driver

At the final step of SUGAR setup procedure, it will remind you to install driver.

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Please select "Install driver" and press "Finish"; then the driver will be installed automatically.



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SW download process

I. Open "Sugar MTK_SP" 1.5.5 (you can get the latest version from TS website:

https://css.tclmobile.cn/). "Sugar MTK_SP" login window looks like follow picture.

Login Sugar	
R	ALCATEL
Server : User name:	Shanghai Server 💌 hljhrbtx0
Password:	***** T Dongle authorizatic Quit

Input 'User name' and 'Password', and then press "OK" to log on.

<mark>≓ Sugar IIK_SP 1.5.5</mark> Options <u>H</u> elp □ ☞ X = ■ ●	ę							
Download Product Models MTC 960	Current COM	NO Get V / 3 :Sele COM port	ersion) ect Step	2 / 3: C Button	Lick Up	Upgrade Step (3 / 3:	Stop Connect
ALCATEL	COM Port	Model	Comm Ref	Origin	Availa	Ela	P	Status
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Status Ready.						E	lapsed (time: 00:00:00
WARE : a USB cable is nec	essary for d	ownload!				C	COMO 92	1600 bps

- II. Use "Get version" function to check current SW vision, available version from server and handset info such as IMEI, PTM, CU ref, data code, etc.
 - 1) Select the product models "ONE TOUCH 4015".

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ALC 1783	COM Port	Hodel	Comm Ref	Origin	Availa	Ela	P	Status
	J New	One T	8/4	3/A	8/A	00;	0%	Ready.
Status Ready.						z	lapsed	time: 00:00:00
EWARE : a USB cable is nec	essary for do	wnload				0	000 92	1600 bps

2) Select Com port which created by your installed cable.

Sugar LTK_SP 1.5 tions Help	. 5						
	8						
Download							
Product Models	Current	Get Vers	iion		0	Upgrade	5top
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1	1						
tatus Ready.	-taolog					Elag	osed time: 00:00:
URE : a USB cable is n	ecessary for a	download!				COM	0 921600 bps

3) press "Get Version" button; power off the handset and connect it with PC by USB cable; long press "power on key" until the download process starts(the LCD may flash during this process, please keep on pressing "Power on key" until the download process starts.).

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Sugar MIK_SP 1.5.	5						
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III. Click 'Upgrade'. Power off the handset and reconnect it with PC by USB cable;

BEWARE : a USB cable is necessary for download!

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COM5 921600 bps

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IV. SW Upgrade process finished.

🚅 Sugar NIK_SP 1.5.5			X
Options Help	2		
Download	¥		
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	Step 1 / 3 :Select Step 2 / 3: Click Up COM port Button	Step 3	/ 3: Connect
15:03	COM Port Model Comm Ref Origin Availa JCOM5 One T 4015X-2AALEU0 AG4AA40 AG4ZZ41	Ela :	P Status 100% Upgrade
	N/A New One Sugar	00:	0% Ready.
Status [COM5] Upgrade fin	i shed!	Elaj	psed time: 00:26:10
BEWARE : a USB cable is nec	essary for download!	COM	5 921600 bps

NOTE: If SW download fails, please unplug the USB cable and reconnect it, then long press "power" key + "volume up" key to enter forced downloading mode.

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5 Disassembly and assembly ONE TOUCH 4015D/X/A/E

5.1 ESD Safety



Please wear static loop or static glove

5.2 Disassembly tool

u may use the following tools during the disassembly and reassembly procedure:



Plastic Flake



Screwdriver



Tweezers



Soldering iron



Hot wind gun



Thin plastic flake

5.3 Disassembly process

The steps of disassembly ONE TOUCH 4015 are as below.

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Step1: Remove the screws of the furnished back cover, pry up and swipe along the four edges of furnished back cover with plastic flake to separate furnished back cover with furnished underfilling. Be careful of the buckles because it is very easy to make the buckles deform.





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NOTE: The furnished back cover can't be reused if any of the buckles is deformed or damaged.

Step 2: Remove the FPC, camera of the main board and remove the main board from face shell.



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Step 3: Separate the LCD and TP

1). Use the hot wind gun in temperature 130° C, air level 3-4, height 5-10mm, blow the TP for about 5 to 10 minutes and use plastic flake to pry up the LCD, and then remove it.



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2). Use the hot wind gun in temperature 130° C, air level 3-4, height 5-10mm, blow the TP for about 5 to 10 minutes and use plastic flake to pry up the TP remove it from face shell.



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Step 4: Disassembly complete



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Disassembly Notice:

1). Receiver is easily to be damaged during disassembly process. Thus please do not disassemble receiver unless it is necessary.

2) TP adhesive up, TP adhesive down, TP foam should be change with new one after Separate the LCD and TP.

5.4 Reassembly Process

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

Notice:

Before assembling furnished back cover, please check whether there's any deformation or damage for the buckles; If yes, replace it with a new furnished back cover.

5.5 Disassembly process evaluation

We list the ONE TOUCH 4015D/X/A/E 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.

Spare part	Time for disassembly	Jigs for disassembly	Difficulty Class	Remark
Furnished back cover	10s	Screw driver Plastic Flake	Class 2	
screws on furnished main PCBA	14s	Screw driver	Class 1	
Audio jack cover	5s	Tweezers	Class 1	
Furnished main PCBA	15s	Plastic flake Tweezers	Class 2	
Camera	8s	Plastic flake Tweezers	Class 1	
power key fpc assembly	8s	Plastic flake	Class 1	
Main Ant (speaker box)	10s	Screw driver Plastic flake	Class 2	
Volume key FPC	10s	Soldering iron	Class 2	
Vibrator	10s	Soldering iron	Class 2	

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6 Disassembly Complete

Explored view



Below table lists ONE TOUCH 4015A L2 spare parts. You could also refer to: https://css.tclmobile.cn/.

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Item	Description	Partnumber	Remark	Quantity
1	fur battery cover	BCJ27G0C00C0	电池盖组件,fur battery cover,Yaris-3.5,电池盖+泡棉,Gun Grey Resin	1
2	Battery pack	CAB31P0000C1	内置电池,Battery pack,Brandy,,1300mAh,3.7V,ALCATEL logo,可充电,不含汞,BYD,,,,	1
2	Normal Charger	084300740003	普通充电器,Normal Charger,black,US STANDARD,USB standard-A,W/O Wire,0,EUP,5 V,550	4
3	Normal Charger	CBA3007AG0CZ	mA,Alcatel,5 LEVEL,US,Reach,N/A,N/A,TENPAO	1
	Storeo Earohano	000016041104	立体声耳机,Stereo Earphone,3.5mm audio jack,LRGM,0 Keys,Open Type,Black,ALCATEL,3.0	4
4	Stereo Earphone	COBSTOURTIC4	mW,Non Reach,N/A,MH-MS156-C,MEIHAO	· · ·
5	Micro USB Cable	CDA3122002C1	数据线,Data Cable,Black,Micro 5pin,1 m,Non Reach,N/A,JWUB1019-T01,JUWEI	1
6	Furnished front casing	BCA27G1C00C0	主面组件,Furnished front casing,Yaris-3.5,US版,主面Gun Grey Resin	1
7	Furnished frame	BCC27G1A00C0	主底组件,Furnished frame,Yaris-3.5,1SIM US版,主底+CAMERA LENS+DECO+天线弹片,黑色素材,	1
	Touch Danal	4115270044000	触摸屏,Touch Panel,Capacitive,Yaris 3.5,109.30×58.79×1.23 mm,ZIF	4
ð	Touch Panel	AUE2/GUATUC2	13Pin,FT6306,PMMA+Film,Black,N/A,No Logo,N/A,131587C1,MUTTO	1
	Main LOD	4114247720704	主屏LCD,Main LCD,262K,3.47",320X480,TFT-TN,Wide View,MIPI,ZIF 25pin,ILI9488,N/A,TD-	4
9	Main LCD	AUA34/120/01	TNHV3512-3,TDT	'
10	Cooples 2in1	4944204700202	喇叭三合一,Speaker 3in1,Rotundity,D20.3×WH4.9mm,92dB±3dB,500 mW,spring,wth foam, w/o	4
10	Speaker ain i	AWA2047503C2	mesh&mayler,N/A,XHSD2029SW69P64-01,HAOSHENG	
11	Camora	A640201101C1	内置摄像头,Camera,CMOS,0.3M,FF,6.5×6.5×H4.2 mm,BTB,Parallel,SP0718,XY-080S,N/A,N/A,for	1
	Califera	ASAUSUTIUTET	Yaris,SZ5572B1S-0P0J0,E-WELLY	1
12	audio jack foam	BRA27G0002C0	耳机密封泡棉,audio jack foam,Yaris-3.5 s1,单面带胶tesa 4972,NS02,11.5X15.6X0.2,,	1
13	PCB CAMERA FOAM	BRA27G0003C0	PCB CAMERA泡棉, PCB CAMERA FOAM, Yaris-3.5,9.2X7.3X1.5mm, VHM-15+tesa4982,单面带胶,	1
14	RF conductive adhesive	BLA27G0000C0	RF导电布,RF conductive adhesive,Yaris-3.5,单面带胶,3.8X7X0.1,,	1
15	switch foam	BRA27G0008C0	switch泡棉,switch foam,Yaris-3.5,,6.45X3.7X1.7,单面带胶,	1
16	Screw	BM41//30252C3	螺钉,Screw,PB(Self-tapping),PB 1.4X0.45PXL3.0,Flat Head,D2.5X0.5,+ type,0,Without	3
10	ocrew	BINA 140020200	Nylok,SWCH18A,HV 380480,Plating White ZN,N/A,XIANGJIAN	
17	Scrow	PMA1645262C2	螺钉,Screw,PB(Self-tapping),PB 1.6X0.5PXL4.5,Flat Head,D2.6X0.6,+ type,0,Without	4
	Screw	DIVIA 104020200	Nylok,SWCH18A,HV 380480,Plating White ZN,N/A,XIANGJIAN	-
10	LED	AKAWH00034C1	发光二极管,LED,Mono-color,White,78.0 mW,2.8 V,0603,1.6x0.8x0.4mm,5.0 mA,N/A,HT-	1
10	220	ARAWI 10000401	193BP5,HARVATEK	· ·
10	EPC Connector	ARA0130003C1	FPC连接器,FPC Connector,Over PCB,13.0 PINs,0.30 mm,5.4X3.5XH1.0mm,W/O POST+W/O	1
13		AI 40 10000001	DIP,N/A,XF3H-1355-31AR,OMRON	'
20	EPC Connector	ARA0250003C1	FPC连接器,FPC Connector,Over PCB,25.0 PINs,0.30 mm,9.0×3.5×H1.0mm,W/O POST+W/O	1
20		711-710-20000001	DIP,N/A,XF3H-2555-31AR,OMRON	· · ·

21	BTB Connector(Socket)	ARC0240017C1	板对板连接器(插座),BTB Connector(Socket),OVER PCB,24.0 PINs,0.40 mm,6.9×5.0×H1.5mm,W/O	1
22	SIM Card Connector	ARD0060106C1	SIM卡连接器,SIM Card Connector,With Bridge,6 PINs,2.54 mm,16.40×15.90×1.50 mm,W/O POST-W/O DIP Improved SIM Conn for Menane CAE90-06153-012701 LINKCONN	1
23	battery connector	ARE0040020C1	电池连接器,battery connector,Over PCB,4.0 PINs,3.1 mm,12.4x4.3xH5.4mm,With POST+W/O DIP.N/A.KBC24S3H541B.KEIRAKU	1
24	RF Connector	ARF0020001C1	RF连接器,RF Connector,Over PCB,2 PINs,0 mm,1.8×1.8×0.85 mm,W/O POST+W/O DIP,mini RF 4 switch connector,818000586,ECT	1
25	Audio Jack	ARG0040006C1	耳机插座,Audio Jack,Cut PCB,6.0 PINs,D3.5 mm,12.5x6.5xH4.4 mm,W/O POST+With DIP,N/A,KJA2333ST50R,KEIRAKU	1
26	MicroUSB-B Connector	ARH0050040C1	MicroUSB-B连接器,MicroUSB-B Connector,Cut PCB,5 PINs,0.85 mm,5.85×10.0×H1.25 mm,W/O POST+With DIP,Reverse type,KIU90532ST1R,KEIRAKU	1
27	Memory Card Connector	ARJ0080063C1	存储卡卡座,Memory Card Connector,Push-Push,8 PINs,1.1 mm,11.40×5.50×H3.75 mm,W/O POST+W/O DIP,TF simple head for Tahiti mini,TF001-37116A81,JTCONN	1
28	Lateral Switch	ARQ0030002C1	侧键开关,Lateral Switch,3 PINs,3.90×2.05×1.60 mm,W/O POST+With DIP,over PCB,EVPAKBC1A,PANASONIC	3
29	Antenna spring	ARM0010025C1	天线弹片,Antenna spring,Over PCB,1 PINs,N/A,3.5x1.1xWH1.5,W/O POST+W/O DIP,N/A,PAN00- 01200-1502,LINKCONN	5
30	Acceleration sensor	AMY0000381C1	加速度传感器,Acceleration sensor,12pin LGA,2×2×1mm,N/A,BMA222E,BOSCH	1
31	MIC	AWC4015P22C1	麦克风,MIC,ECM,D4.0xH1.5mm,-42+/-3dB,PIN,N/A,BOM4015YP1.8-G423-RC10n-HF-1,Gettop	1
32	TP adhesive up	BPA27G0001C0	触摸屏上背胶,TP adhesive up,Yaris-3.5,3M93015LE, T=0.15mm,,,,,	1
33	TP adhesive down	BPA27G0002C0	触摸屏下背胶,TP adhesive down,Yaris-3.5,3M93015LE, T=0.15mm,,,,,	1
34	TP foam	BPA27G0005C0	TP泡棉胶,TP foam,Yaris-3.5,TESA 62948,57.14X99.94,IC处未避空	1
35	TP exterior peer off	BNH27G0002C0	TP 外保护膜 ,TP exterior peer off , Yaris-3.5 without Psensor,,59.59X110.1,pet,	1
36	Swap PCBA	F-B27G1ALMX1	客服周转主板,,Yaris-3.5,1SIM,,CU编码:4015A-2*ALMX1,	1
37	Swap Handset	F-A27G1AC101	客服周转机头,,Yaris-3.5,1SIM,Gun Grey Resin,,CU编码:4015A-2BALMX1,	1

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Yaris-3.5 US 1SIM (4015A) L2 spare part list

7 Level 2 repair

This chapter describes the Level 2 repair that can be done without any diagnostic equipment.

	Problem description	Action And Solution
Charging	Bad	1.Check voltage of the battery: if 0V,
	or	charge some minutes and check the
	No Charge	charge indicator;
		2.Check the battery contact, change the
		battery connector if broken;
		3.Check the charge plug on B cover,
		change it if necessary;
Switch on with	Can 't Switch on	1.Check voltage of the battery;
battery power		2.Check the battery contact, change the
		battery connector if broken;
		3.Check the power on key;
		4.Check BTB connector socket pin
Main display	Missing line or column; no	Check Connection flex (FPC
	display; bad or no LCD	cable),change it if necessary;
	backlight	Replace display module 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);
TF card	No communication between	Check the TF connector on the PCBA;
	the phone and the TF card	
Camera	Camera doesn't work	Check camera module
		Check also camera socket broken or
		not
Audio	Bad or no emission (TX	Check microphone, replace it if
	audio from mobile);	necessary;
		Check the contact on the PCBA (dirty or
	Bad or no reception (RX	oxidized)

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audio on mobile);	Check loud speaker, replace it if
Hands-free problem;	necessary;
Key beep and melody	Check the contact on the PCBA (dirty or
problem	oxidized)

In case the Level 2 repair can't solve the problem, or the PCBA is damaged, exchange the PCBA.

8 PCBA exchange

If Level 2 repair does not solve the failure, it is mandatory to change the PCBA and follow the process as below.

- 1) Collect the PCBA (without accessories, LCD and camera), with microphone.
- 2) Get a new PCBA from the swap stock. Reuse those accessories to assemble the mobile.
- 3) Fill in the record sticker with IMEI number, fault code, short code, Hardware Technical Level and software version.
- 4) Send the NG PCBA with record sticker back to L3 repair center with the recommended packaging method,

Note: packaging method please refer item "APPENDIX 1 Packaging Requirements".

9 Other component exchange

The other components exchange such as

2) Furnished underfilling;

> If TP or LCD is damaged, or furnished front casing need to be changed, please replace furnished underfilling directly; no need to return the defective furnished underfilling to factory;

> If both TP and LCD are good, but furnished front casing need to be changed, please replace a new furnished underfilling and return the defective furnished underfilling to factory.

NOTE: For packaging method please refer item "APPENDIX 1 Packaging Requirements".

- 3) USB connector
- 4) Main FPC
- 5) Receiver
- 6) Speaker
- 7) Main Camera

8) Volume keypad FPC

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9) Power key FPC

10) Other related mechanical components

Please follow the detail steps 5.3 (Disassembly and assembly process).

But need to be very careful to handle the components with related special tool or jig (especially replacing new components)

It is better to handle it with plastic tools (plastic tweezers and wedge etc.).

Besides operator must wear anti-static gloves, fingertips or wear static loop during the whole process of components exchange.

10Final test

Function Test

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

- 1) Cosmetic aspect of the handset,
- 2) The Software Technical sticker state on the Board
- 3) Switch on the handset
- 4) Default welcome message
- 5) Press *#2886# on the idle screen to start the auto test

APPENDIX 1 Packaging Requirements

- 1. Appearance Requirements of PCBA
 - ${\rm i}$. The failure code label, commercial label, custom label and network code should be stuck onto PCBA
 - ii The repair PCBA and custom label should be matched (see appendix one for the detailed information)

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- 2 PCBA Packing Requirements
 - i 、After packing with anti-vibration bag, the commercial label on PCBA should be easy recognized;

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label is easy to see



- 3、 Packing Requirements
 - i. Please pay attention to the following points when different models put into one box:
 - ii. Stick up the same models with tapes
 - iii. Mark the model, quantity and specification of custom label on tape
 - The packing box for PCBA should have marking sticker and well sealed by the tape iv.
 - with TCL logo ٧.
 - vi. Finally put all the packing boxes into packing cases strong enough and post to HK.

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Once the PCBA are damaged or cannot be repaired or delayed in custom because of unqualified packing, the shipping side will take the responsibility.

If you have any question or problem, please feel free to contact us

Thanks for your cooperation.

TCT Mobile Phone Global Customer Service TS Dept. December 10th, 2013

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