



# PHILIPS

## Philips Consumer Communications

CUSTOMER SERVICES

Author : Fabrice Tant  
Approval : Jean Pierre Hollande  
Operational Manager

### SERVICE REPAIR SUPPORT PROCEDURE

PCC/VY/691/E/TCD188LVL2/0026/TF/MLD

Creation

Date : 26/06/2000

Page : 1 of 30

## Service Manual

### Repair for Cellular Telephone

#### *SAVVY VOGUE DUAL BAND Level 1 & Level 2*





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# Service Manual

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### 1.0 PURPOSE

This document establishes the functional test procedures for service repair of SAVVY VOGUE transceiver.

### 2.0 SCOPE

The test plan is applicable to all level of service repair of SAVVY VOGUE transceiver.

### 3.0 REFERENCE

### 4.0 GLOSSARY / ACRONYM LIST

|                    |   |
|--------------------|---|
| Window or Bezzel   | Protective plastic over the LCD display                         |
| SW                 | Software  |
| PN                 | Hardware configuration of the Mobile                            |
| CN                 | Matrix for types of SW used on the different Hardware           |
| HW                 | Hardware  |
| ASC                | Authorized Service Center                                       |
| NSC                | National Service Center   |
| Test SIM card      | Use for functionality of Philips Mobiles                        |
| Test SIM card "SP" | SIM card used to simulate user interface and allows radio tests |

### 5.0 TEST EQUIPMENT AND TOOLS

#### Equipment / Tools

- Production Test SIM Card - Part No. : 4311 255 00781
- Test SIM Card "SP" - Part No. : 4311 255 00782
- RF Cable - Part No. : 941-555-1 (AMP)
- Digital Multimeter - Recommended Model : Fluke  
Specification with current reading in mA



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## 6.0 TEST & INSPECTION PLAN

The following test & inspection plan is derived from the Product Test Reference for SAVVY VOGUE.

### 6.1 User Interface Test

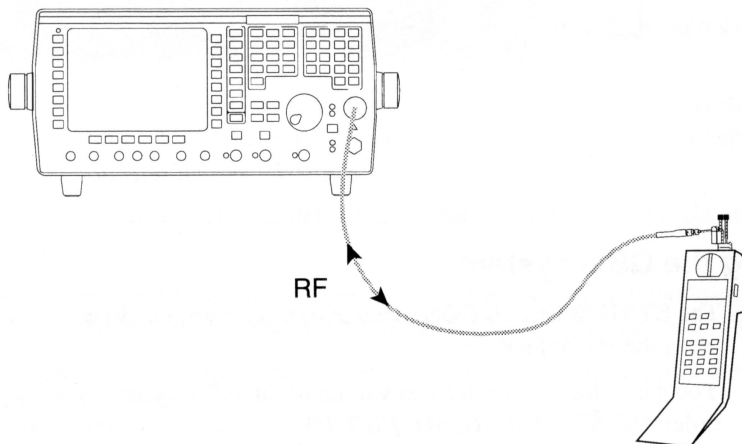
Using of TEST SIM Card "SP" / Production to test DUT as follow:

- ◆ On/Off Button
- ◆ LCD Back-light
- ◆ Keyboard Test
- ◆ Buzzer Test
- ◆ Audio Test
- ◆ Antenna Test
- ◆ LCD
- ◆ IMEI
- ◆ E-prom Status
- ◆ Production Number
- ◆ Transceiver 12NCs & Software Version

With a fast charger connected to the PRODUCT car-kit, perform check on charging IGN (Ignition) – Battery.

### 6.2 RF Test

The radio test must be performed with a Digital Radio Test Set connected with the specific RF cable to the mobile RF connector.



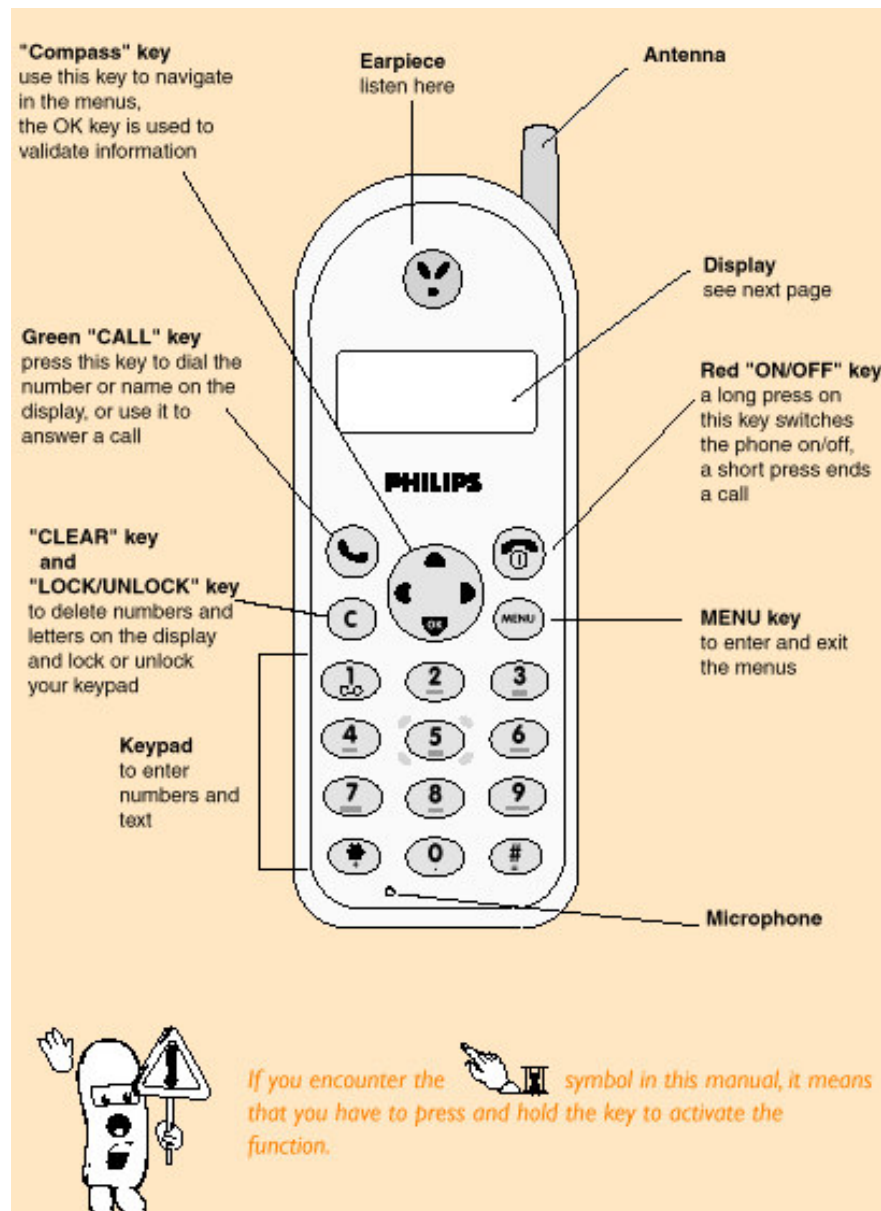


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### 7.0 Before You Start

#### 7.1 Description of the transceiver





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### 7.2 The display

**New text message(s)**  
- if on: you received new messages  
- if flashing: the memory is full, you need to delete old messages before you can receive new ones

**Silent mode**  
if on: phone will not ring or beep (except for the alarm clock)

**Network**  
if on: your phone is registered to a network  
if flashing: registration is in progress

**Battery level**  
the bars indicate the battery level (4 bars is full, no bars means recharging is needed)

**New voicemail**  
if on: there are new messages waiting in your voicemailbox (\*)

**Roaming**  
your phone is registered to a foreign network

**Reception quality**  
the more bars are shown the better the reception

**Graphics area**  
displays the clock and guides you through the menu

**Arrows**  
indicate in which directions you can go using the Compass key

**Cursor**  
indicates that you can enter numbers or text

**2 text lines**  
to enter numbers and text or to read text messages

(\*) Depending on the network.

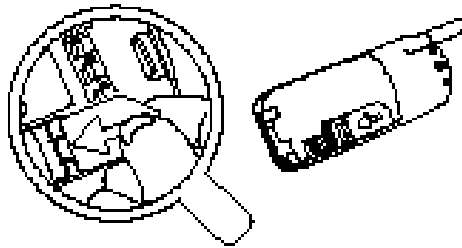


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### 7.3 Inserting the SIM card (Micro).

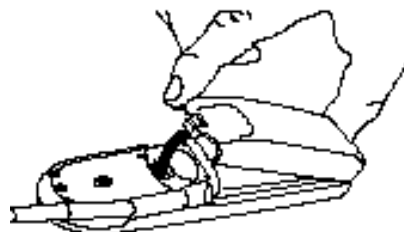
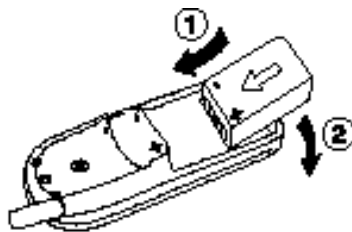
7.3.1 Remove the SIM card from its support and slide the card into the appropriate slot in the battery compartment (the chip must be facing inwards and towards the bottom of the transceiver).



### 7.4 Inserting the Battery and Battery Cover.

7.4.1 Slide the battery onto the contact near the middle of the transceiver, and press the battery in place.

7.4.2 Hook the battery cover onto the hinges on bottom of transceiver and press forward until the latch catches.







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### 7.5 Removing the Battery Cover and Battery.

- 7.5.1 Press on the latch on the back of the transceiver and lift off the battery cover.  
Lift up on the bottom of the battery and remove from the transceiver.



### 7.6 Charging the battery

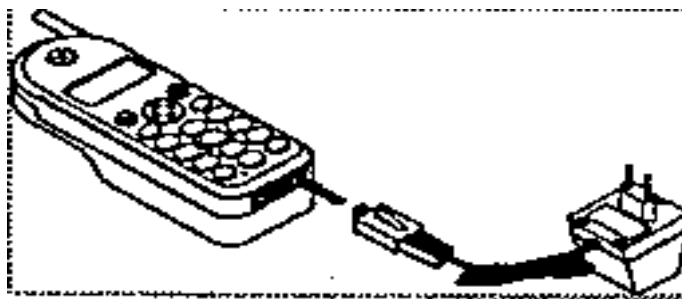
7.6.1 With the battery attached to the phone, plug the connector into the right socket at the base of the phone.

7.6.2 Plug the transformer unit into an AC power socket.

7.6.3 The battery icon on the transceiver's display indicates the state of the charge process:

- Bars moving - means the battery is charging.
- Steady - means the battery is fully charged.

If the battery is completely discharged, the battery icon will only appear 2 to 3 minutes after you connect the charger.





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### 8.0 Test Procedures

#### 8.1 Initial Functional Check for TCD188 Savvy Vogue

8.1.1 Insert the Test Production Card into the SIM Reader at the back of the cellular phone and clip on a charged battery on to the phone.

8.1.2 Press ON - Button for at least 2 second and the LCD of the product shows the message : "FA GOOD xx".

8.1.3 Following the instructions :

| Step | Procedure   | Observation  |
|------|---|--|
| 1    | Press Key 1<br><br>Press Key 1 again  | Continue Buzzer signal<br><br>Left corner displays 1<br>00   |
| 2    | Press key 2<br>Sleep Mode Test<br><br>Press key 2 again   | The mobile sleeps for 5 minutes or wakes up after a key press and display the error code (00 means sleep mode successfully achieved)<br><br>Left corner displays 2<br>01 |
| 3    | Press key 3<br>Audio loop test (Speak to Mic and listen echo from Speaker)<br>Press key 3 again | "AUDIO xx xx<br>"xx xx xx xx<br><br>Left corner displays 3<br>02   |
| 4    | Press key 4<br><br>Press key 4 again  | Antenna test<br>"Tx Level "05" (default)<br>"CHANNEL 001" (default)<br><br>Left corner displays 4<br>03  |
| 5    | Press Key 5<br><br>Press Key 5 again  | All pixels and hard icons on<br><br>Left corner displays 5<br>04   |
| 6    | Press Key 6<br>(Checkerboard test)<br>Press Key 6 again   | Checkerboard 1 pixel on<br><br>Left corner displays 6<br>05  |



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|    |   |   |
|----|---|---|
| 7  | Press Key 7 (Inverted Checkerboard)<br>Press key 7 again  | Checkerboard 2 pixel on<br>Left corner displays 7<br>06   |
| 8  | Press key 8 (Eeprom Status)<br><br>Press Key 8 again  | "H XXXXXXXX" (No digit "1" or "2" allowed)<br>"L XXXXXXXX"<br><br>Left corner displays 8<br>07  |
| 9  | Press Key 9 Product information<br>Compare information with label printed on back case<br>Press key 9 again | PN number : "Vyxxxxx<br>VY made in Le Mans<br>SA made in Singapore<br>EO made in Shenzhen<br><br>Left corner displays 9<br>08   |
| 10 | Press key 0 (Vibrator Test)<br><br>Press key 0 again  | Display product 12NC # and software version<br>The mobile's vibrator is running<br><br>Left corner displays 0<br>09   |
| 11 | Press * (IMEI Test)<br>Compare IMEI with label printed on back case<br><br>Press * again                    | "IMEI TEST"<br>" 449680/ 50 / xxxxxxx" for (TCD168)<br>06 made in Singapore<br>50 made in Le-Mans<br>69 made in China<br>"Serial Number/ Check digit"<br><br>Left corner displays *<br>11 |
| 12 | Press # (FA Status)<br><br>Press # again  | "FA GOOD XX" (Must be Good)<br><br>Left corner displays #<br>12   |
| 13 | Press C (Power Test)<br><br>Press C again   | " Power"/ Channel/level<br>"--/--/--" (ignore reading)<br><br>Left corner displays C<br>13  |



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|    |   |   |
|----|---|---|
| 14 | Press ◀ (Left arrowhead)<br>(Audio loop local effect)<br>Press ◀ (left dot) again | "LocalEffect"<br>" xx xx xx xx "<br>Left corner displays . ←<br>0C  |
| 15 | Press ▶ (Right arrowhead)<br><br>Press ▶ (Right arrowhead)again                   | "TypBat / xxxx" (ignore the number<br>"TmpRad / xxxx displayed)<br>Left corner displays . →<br>0D   |
| 16 | Press MENU (Carkit Audio loop on/off)<br><br>Press MENU again                     | "CAR KIT"<br>"xx xx xx " (ignore reading)<br>Left corner displays ◀<br>10   |
| 17 | Press OK button (Memory Test)<br><br>Press OK button again                        | "Flash Checksum " (ignore Number)<br>"Flash constructor ID / Flash type ID" (ignore #)<br>" OK" displayed vertically on the right<br>Left corner displays<br>0B |
| 18 | Press Up button<br><br>Press button again   | User Melody<br>Left corner displays<br>0A   |
| 19 | Press Green button<br><br>Press Green button again                                | " MANUAL TEST"<br>" GOOD "<br>Left corner displays >><br>0E   |
| 20 | Press Red button<br><br>Press Red button again                                    | " MANUAL TEST"<br>" BAD "<br>Left corner displays<br>0F   |

8.1.4 If any of the step failed functional, refer to Chapter 10.

8.1.5 Perform visual check on battery connectors, car kit connectors and casing.  
If corrosion or deform send to NSC for repair.

8.1.6 If the product is good, it is considered as a NFF product.

**All the NFF products must be directly returned to the customer.**



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### 8.2 RF Test

- 8.2.1 The Test SIM Card "SP" must be inserted in to the phone before starting the test.
- 8.2.2 Set the equipment as shown in picture chapter 6.2  
The RF cable to use is made by AMP (Part No.: 941-555-1)
- 8.2.3 Set in the offset field of the radio tester a - 0.3dBm lose for GSM Tests and a - 0.5dBm lose for PCN tests.
- 8.2.4 The followings operations must be done:
- Synchronization/Registration
  - Call set up from the mobile
  - Voice loopback (check sound quality)
  - Call release
  - Call set up from tester
  - Call release from tester
- 8.2.5 The followings parameters must be checked in TCH loop mode:

#### Emission parameters

- Power level
- RMS phase error
- Peak phase error
- Frequency error
- Power ramping

#### Reception parameters

- Rx level
- Rx quality
- BER (Byte Error Rate)
- FER (Frequency Error Rate)

Generally the test sequences built-in the testers will be used to check the mobile. You must assess that the test sequences limits comply with the standard specifications.



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### 8.2.6 GSM Specification (900 Mhz)

| Test Parameters          | Channel    | Level         | Standard Specification |
|--------------------------|------------|---------------|------------------------|
| <b>EMISSION</b>          |            |               |                        |
| Phase error RMS          | 1, 62, 124 | 5, 10, 15, 19 | 0 to 5.0 degree        |
| Phase error Peak         | 1, 62, 124 | 5, 10, 15, 19 | -20 to +20 degree      |
| Frequency Error          | 1, 62, 124 | 5, 10, 15, 19 | -90 Hz to +90 Hz       |
| Power Ramping Modulation | 1, 62, 124 | 5, 10, 15, 19 | Mask                   |
| Switching Transients     | 1, 62, 124 | 5, 10, 15, 19 | Mask                   |
| Power reading            |            |               |                        |
| Output Power             | 1, 62, 124 | Level 19      | 5 dBm +/- 4.4 dB       |
|                          | 1, 62, 124 | Level 15      | 13 dBm +/- 2.4 dB      |
|                          | 1, 62, 124 | Level 10      | 21 dBm +/- 2.4 dB      |
|                          | 1, 62, 124 | Level 5       | 32 dBm +/- 1.0 dB      |
| <b>RECEPTION</b>         |            |               |                        |
| Rx level                 | 1, 62, 124 | -100 dBm      | 8 to 13                |
| Rx Qual                  |            | -100 dBm      | 0 to 1                 |
| Rx Level                 | 1, 62, 124 | -83 dBm       | 28 to 33               |
| Rx Qual                  | 1, 62, 124 | -83 dBm       | 0 to 1                 |
| Rx Level                 | 1, 62, 124 | -60 dBm       | 48 to 53               |
| Rx Qual                  | 1, 62, 124 | -60 dBm       | 0 to 1                 |
| <b>TCH LOOP</b>          |            |               |                        |
| <b>SENSITIVITY</b>       |            |               |                        |
| BER at -85dbm            | 1, 62, 124 |               | 0%                     |
| FER at -85dbm            | 1, 62, 124 |               | 0%                     |
| BER at -102dbm           | 1, 62, 124 |               | 2.44%                  |
| FER at -102dbm           | 1, 62, 124 |               | 0%                     |



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### 8.2.7 PCN Specification (1800 Mhz)

| Test Parameters      | Channel            | Level    | Standard Specification |
|----------------------|--------------------|----------|------------------------|
| <b>EMISSION</b>      |                    |          |                        |
| Phase error RMS      | 512, 635, 760, 885 | 0, 5, 10 | 0 to 5.0 degree        |
| Phase error Peak     |                    | 0, 5, 10 | -20 to +20 degree      |
| Frequency Error      |                    | 0, 5, 10 | -180 Hz to + 180 Hz    |
| Power Ramping        |                    | 0, 5, 10 | Mask                   |
| Modulation           |                    | 0, 5, 10 | Mask                   |
| Switching Transients |                    | 0, 5, 10 | Mask                   |
| Power reading        |                    |          |                        |
| Output Power         | 512, 635, 760, 885 | Level 15 | 0 +/- 5.0 dBm          |
|                      |                    | Level 10 | 10 +/- 4.0 dBm         |
|                      |                    | Level 5  | 20 +/- 3.0 dBm         |
|                      |                    | Level 0  | 30 +/- 2.0 dBm         |
| <b>RECEPTION</b>     |                    |          |                        |
| Rx level             | 512, 635, 760, 885 | -100dbm  | 8 to 13                |
| Rx Qual              |                    | -100dbm  | 0 to 1                 |
| Rx Level             |                    | -80dbm   | 28 to 33               |
| Rx Qual              |                    | -80dbm   | 0 to 1                 |
| Rx Level             |                    | -60dbm   | 48 to 53               |
| Rx Qual              |                    | -60dbm   | 0 to 1                 |
| <b>TCH LOOP</b>      |                    |          |                        |
| <b>SENSITIVITY</b>   |                    |          |                        |
| BER at -85dbm        | 512, 635, 760, 885 |          | 0%                     |
| FER at -85dbm        |                    |          | 0%                     |
| BER at -102dbm       |                    |          | 2.44%                  |
| FER at -102dbm       |                    |          | 0%                     |



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### 8.3 Charging IGN (Ignition) - Battery

8.3.1 Plug the connector of the charger into the right socket at the base of the PRODUCT.

The battery symbol should indicates the state of the charge process:

- Bars moving - means the battery is charging.
- Steady - means the battery is fully charged.

If the battery is completely discharged, the battery icon will only appear 2 to 3 minutes after being connected to the charger.

8.3.2 Remove the charger by unplugging the connector of the charger out of the right socket at the base of the PRODUCT.

Remove the battery.

Remove the Production Test SIM card by gently sliding it out of the slot.





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### 9.0 Assembly / Dismantlement procedures

During dismantlement and assembly operations, an antistatic bracelet must be used.

#### 9.1 Dismantlement

- 9.1.1 Unscrew the ANTENNA
- 9.1.2 Take the product, remove TOP COVER and BATTERY
- 9.1.3 Remove the SIM card
- 9.1.4 Take the electrical screwdriver
- 9.1.5 Unscrew the M1,6x4,4mm screw on the SIM connector location
- 9.1.6 Unscrew the 5 M1,6x13,5mm screws
- 9.1.7 Unscrew the M1,6x9mm white screw
- 9.1.8 Remove the REAR CABINET
- 9.1.9 Remove the WHOLE BOARD from the FRONT CABINET
- 9.1.10 Remove the BATTERY CONTACTS from the connector (SUPPORT CONTACTS)
- 9.1.11 Unfasten the vibrator.
  
- 9.1.12 Remove the LCD JOINT
- 9.1.13 Unfasten the LCD
- Warning : Do not put your fingers on Zebra connector and copper areas**
- 9.1.14 Unfasten the SUPPORT EARPIECE
- 9.1.15 Unscrew the M1,6x9mm white screw
- 9.1.16 Unfasten the SHIELDINGs



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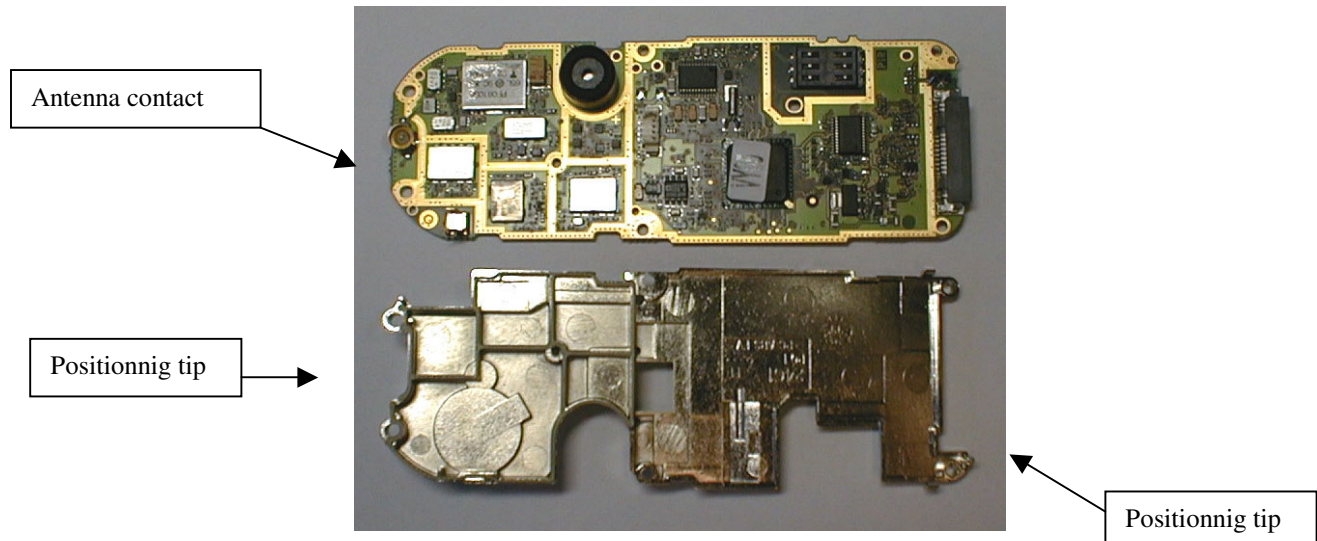
### SERVICE REPAIR SUPPORT PROCEDURE

PCC/VY/691/E/TCD188LVL2/0026/TF/MLD

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### 9.2 Assembly

- 9.2.1 Take set down the REAR SHIELDING on the antistatic tablecloth.
- 9.2.2 Take the BOARD and fix it on the REAR SHIELDING.
- 9.2.3 Check the presence and the straightness of the antenna contacts.



- 9.2.4 Take, fix the FRONT SHIELDING on the BOARD
- 9.2.5 Take the electrical screwdriver (screwdriver power 0,18 Nm)



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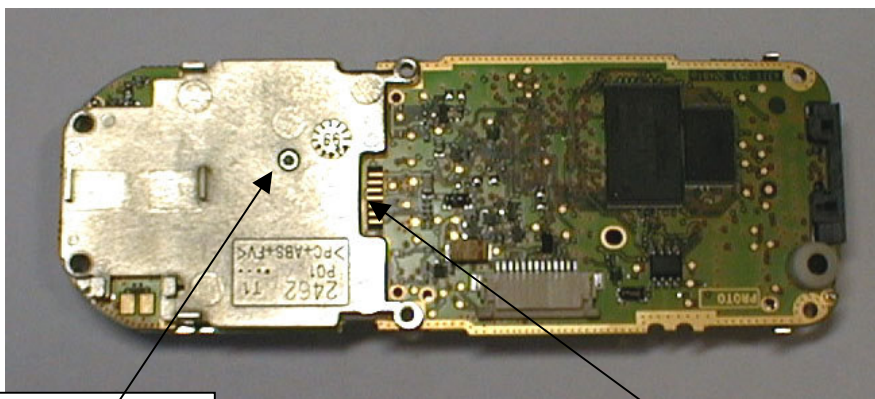
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9.2.6 Take and screw down a M1,6x9mm white screw on the SHIELDING

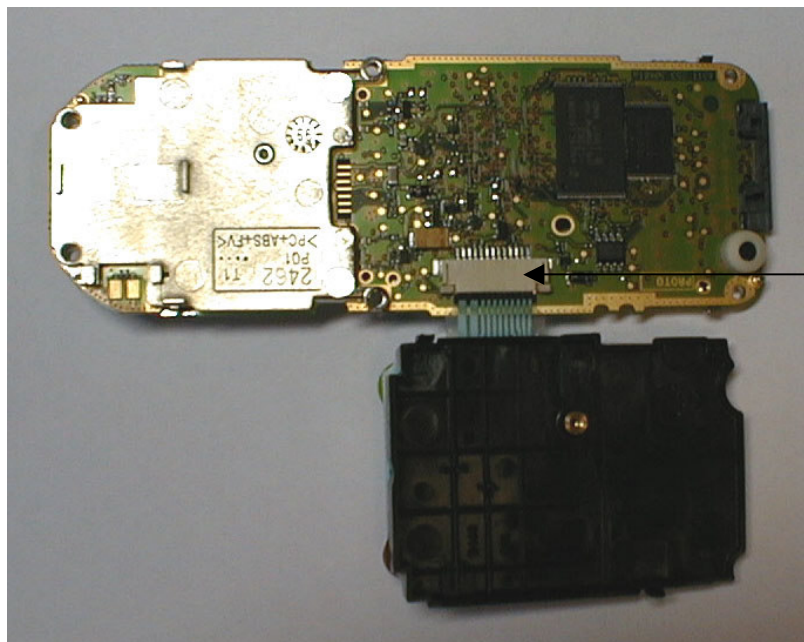
9.2.7 Attach the SUPPORT EARPIECE on the FRONT SHIELDING



Screw presence

Zebra copper area

9.2.8 Fasten the KEYPAD (don't forget to lock the connector)



Connector to lock



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Operational Manager

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Creation

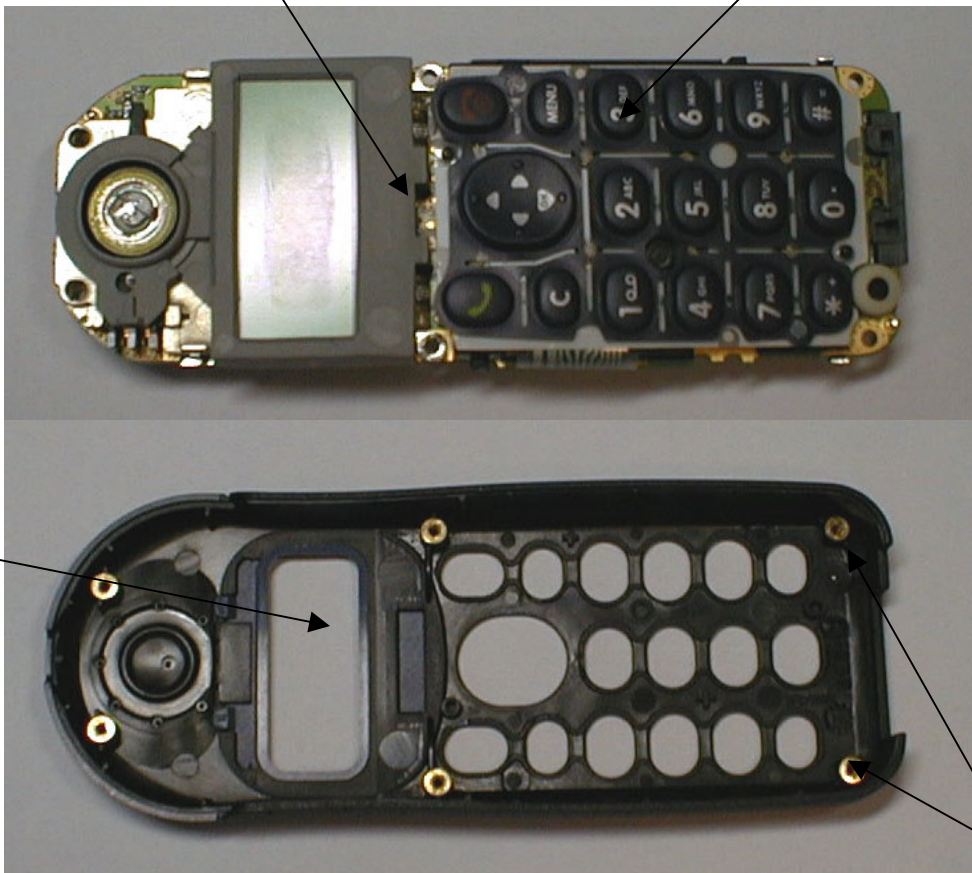
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- 9.2.8 Take and fix the LCD on the BOARD
- 9.2.9 Attach the SUPPORT EARPIECE on the FRONT SHIELDING
- 9.2.10 Remove the LCD PROTECTION
- 9.2.11 Take, put THE LCD JOINT on the LCD and EARPIECE

Fastened Earpiece

LCD module



Window protection

Inserts



## Philips Consumer Communications

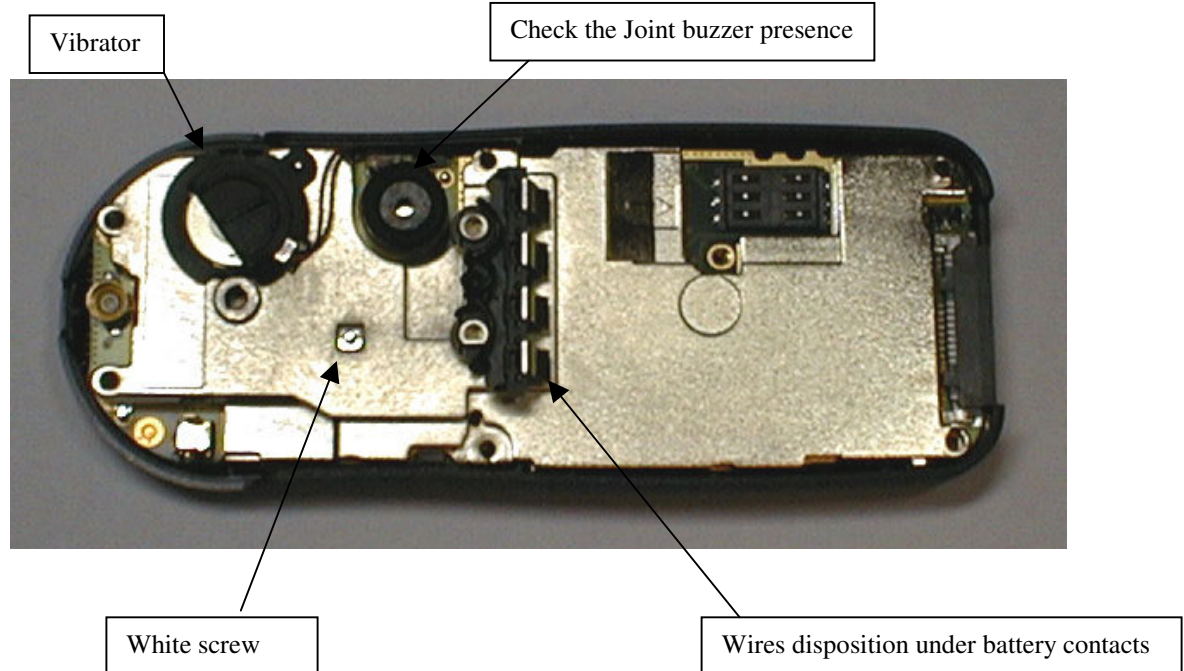
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|---|--|--|
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|---|--|--|

9.2.12 Take, turn around the FRONT CABINET on the antistatic tablecloth

9.2.13 Check the presence of the 6 inserts and the window's film protection

9.2.14 Blow on the LCD with the ionizing gun

9.2.15 Take the whole BOARD, return it into the FRONT CABINET



9.2.16 Check the white screw presence on the Shielding

9.2.17 Check the JOINT BUZZER presence

9.2.18 Take, plug the Vibrator cable to the small connector and set the VIBRATOR in the right location

9.2.19 Take, attach the BATTERY CONTACTS in the connector (SUPPORT CONTACT)

9.2.20 Dispose the wires above the connector

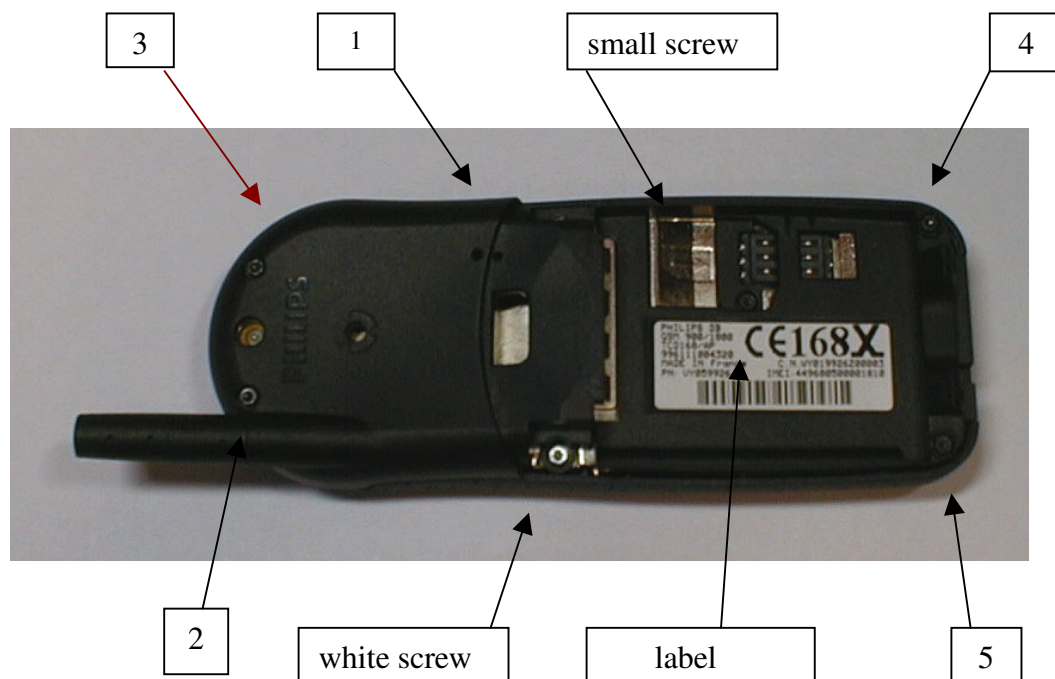
Warning : no Wire should be discernable after the rear housing lock



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9.2.21 Take, put the REAR HOUSING on the product



9.2.22 Take the electrical screwdriver

9.2.23 Take and screw down a M1,6x9mm white screw on the HOUSING

9.2.24 Take and screw down 5 M1,6x13,5mm screw on the HOUSING

9.2.25 Take and screw down a M1,6x4,4mm screw on the SIM connector location

9.2.26 Stick the LABEL on the back

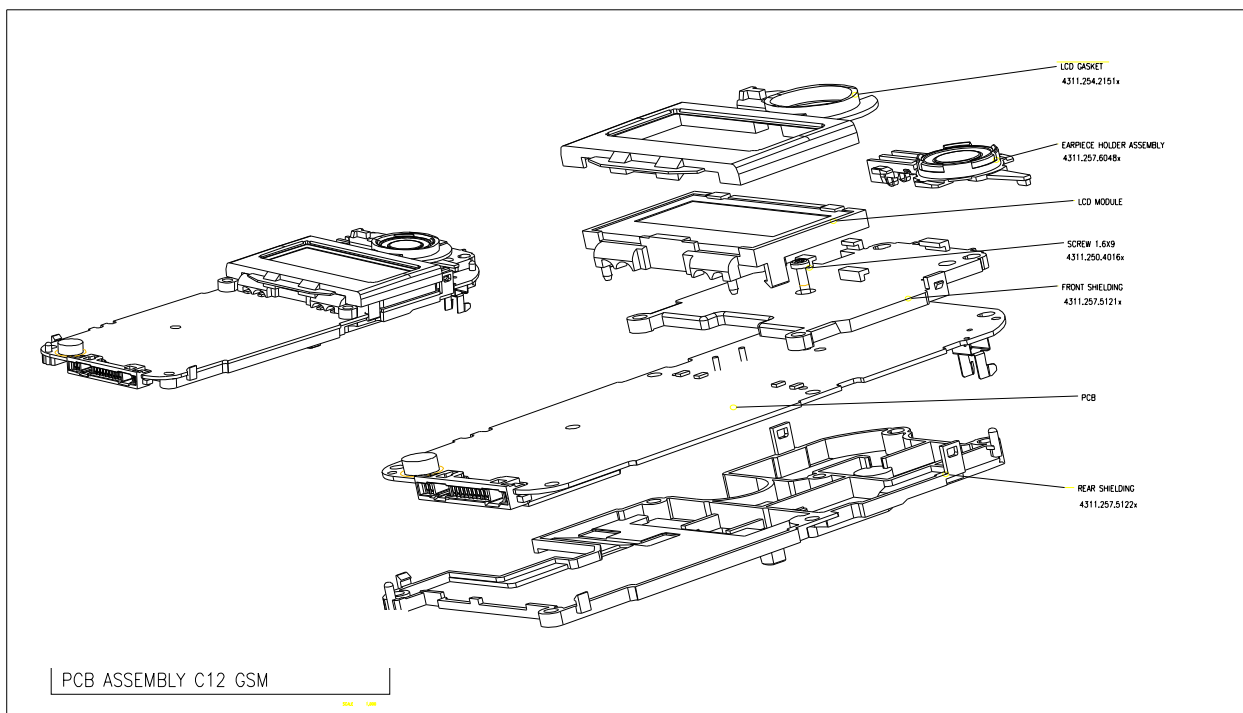
9.2.27 Screw the ANTENNA



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### 9.3 Overview





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### 10.0 Defaults Settings

#### 10.1 Reset customer parameters.

To reset customer parameters, it must use a GSM String. This Gsm String is **\*#RSAV\*#** or **\*#7728\*#**.

So, the defaults settings of the manufacturer are activated.

#### 10.2 Use of the GSM string **\*#RSAV\*#** or **\*#7728\*#**.

Procedure to follow :

- Turn on the mobile (a SP SIM card is not necessary).
- Enter the Gsm String **\*#RSAV\*#** or **\*#7728\*#**.
- You can see "Reset" but the customer parameters are not reset yet.
- Turn off the mobile.
- When you will turn on, the defaults settings will be activated.





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### 11.0 Solutions in case of problem during tests

If for any reason the phone needs to be disassembled to fix a defect detected during the test procedure, a complete functional test and a RF test must be done.

#### 11.1 The mobile does not switch on

- Check the tactile feeling of the ON/OFF button.
- Remove the battery. Check that both phone and battery contacts are not damaged.
- Clean the contacts.
- Plug the battery again, to be sure that it is securely fitted. Charge the mobile until the icon has stopped flashing.

Then unplug it from the charger and try to switch the mobile on.

If it's still not switching on, try to fix the mobile. If the failure can't be found out then send the mobile to repair.

#### 11.2 Charge does not start or no charger detection

- Check the charger contacts for dust or missing pins.
- Check the mobile connector.
- Remove the battery. Check that both phone and battery contacts are not damaged.
- Check the charger individually with a reference mobile. If the charger is working properly try to charge the customer mobile with a reference battery.

If neither the battery, nor the charger is to be incriminated, send the mobile for repair.

#### 11.3 The display show "No SIM card. Please insert your SIM card." Or "SIM FAILURE"

- If the SIM card cannot be inserted, check for any foreign part and try to remove it.
- Check the SIM card connector. All contacts must be at the same level. Examine that no dust is present on the connector contacts and on the SIM card contacts. If the SIM card connector is defective change it
- If the test SIM card can be detected but the message "SIM Failure" remains with customer card, his card must be damaged. Ask the customer to contact his network operator.

Otherwise send the mobile to repair

#### 11.4 Display problems

Contrast, icons and matrix of the display can be checked with the test SIM card by pressing keys 5, 6 and 7.

If everything is working in test configuration that means that a phone setting is disable or not suitable. It can be solved in the phone menu.

Change the LCD if necessary (not for small scratches).

Otherwise send the mobile to repair



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### 11.5 Buzzer problems

Buzzer tone can be checked with the test SIM card by pressing keys 1 and ▲.

- If it does not sound properly, change the buzzer. If the failure can't be found out then send the mobile to repair.

### 11.6 No sound in Loudspeaker

- Check microphone and earpiece, change them if necessary. If the failure can not be found out, then send the mobile to repair.

### 11.7 Communications problems

- Sound quality can be checked in audio loop test (sound distortion, whistling, echo, ...)  
- If the mobile passes the radio test successfully, we can assume that the phone is working properly. The customer must check the coverage area of his network operator or that he is not using the phone in a radio shadow  
(outside the coverage area, in a tunnel or between tall buildings, ...)

- If the mobile does not pass the radio test send the mobile for repair.

### 11.8 Defective antenna

- If the antenna is broken or curved => replace it

### 11.9 Keyboard problems

-The keyboard can be checked with the test SIM card.  
- If a key or a row is not responding, check the keyboard, change it if necessary. If the failure cannot be found out, send the mobile to repair.

### 11.10 Can't send SMS messages

- Check the center number. Maybe it is empty or wrong.



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## ANNEX 1

### IRIS REPAIR CODING SYSTEM

Symptom code      The code '0000' is used for No Fault Found

| Condition code       | 1  | 2  | 3   | 4   | 6   | 7   | 8   |
|----------------------|--|--|---|---|---|---|---|
|                      | NO ACTION  | LEVEL  | QUALITY   | NOISE   | PHYSICAL PROBLEMS   | SPECIAL FUNCTIONS   | OTHER CONDITIONS  |
| 1<br>GENERAL         | <b>Power problem</b><br>117 Short autonomy<br>119 Does not switch on<br>11B Switch on/off recurrent<br>11X Other Pow Sup problem | <b>Charging problem</b><br>121 Does not charge battery | <b>Display function problem</b><br>136 Character/pixel absent<br>13B No backlight<br>13B No backlight |   | <b>Physical damage</b><br>166 Damaged plug or socket<br>169 Defective antenna<br>16G Broken LCD | <b>General function problem</b><br>171 Faulty clock function<br>178 Faulty memory function                      | <b>Special requirements</b><br>185 Upgrade to be done only<br>18Z Symptom not available                 |
| 2<br>COMMUNICATION   | <b>No reception</b><br>21A Interrupted communication   | <b>Reception level problem</b>                         | <b>Transmission problem</b><br>231 No emission<br>234 No radio link between Handset & Base            | <b>Noisy communication</b><br>240<br>244 Echo       |   | <b>Special communication problem</b><br>277 No ringing (dial) tone<br>278 No buzzer ring<br>279 Not registering |   |
| 5<br>AUDIO           | <b>No audio</b><br>510   | <b>Audio level problem</b><br>521 Low audio level      |   |   | <b>Poor Audio recording (answering)</b><br>560  | <b>Poor special audio function</b><br>57A Hands-free problem  |   |
| 6<br>MECHANISM       | <b>No mechanical</b><br>61B Vibrator not operable<br>61D Pilot/compass key not operable  |  |   | <b>Mechanical noise</b><br>648 Foreign parts inside |   |   |   |
| 7<br>DATA PROCESSING | <b>No data processing operation</b><br>715 No keyboard operation<br>72B No subscription  |  |   |   |   | <b>Special data processing function problem</b><br>774 Defective CLI<br>775 Tariff update failure               | <b>SIM card problem</b><br>781 Simblock<br>782 IMSI<br>783 Does not read SIM card<br>785 SIM Error 46xx |

Each returned product must have an IRIS code to identify the failure



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## ANNEX 2 : Recommended Part List – TCD188

### COMMON PARTS - Out of Warranty

| REFERENCE      | DESIGNATION                     | POSITION | REPAIR LEVEL |
|----------------|---------------------------------|----------|--------------|
| 4311 257 60746 | FRONT SHIELDING                 | 0101     | 2            |
| 4311 257 60735 | REAR SHEILDING ASS'Y            | 0102     | 2            |
| 4311 257 51237 | REAR HOUSING ASS'Y C12C13       | 0104     | 2            |
| 4311 258 10153 | SUPPORT CONTACT ASS'Y           | 0113     | 2            |
| 4311 250 40154 | SCREW M1,6x13,5                 | 0178     | 2            |
| 4311 250 40164 | SCREW M1,6x9                    | 0176     | 2            |
| 4311 250 40223 | SCREW TORX M1,6 4x4             | 0177     | 2            |
| 4311 258 73511 | FIXE ANTENNA C13 DB             | 1708     | 1            |
| 2722 171 07182 | LCD AD 47306                    | 1710     | 2            |
| 2422 033 00293 | CON CCM04-1402-R901             | 1501     | 2            |
| 4311 254 24642 | GASKET MICRO C13DB              | 0179     | 2            |
| 4311 254 21265 | GASKET LCD C13/C13DB            | 0180     | 2            |
| 242203300293   | CON CCM04-1402-R901+B50         | 1501     | 2            |
| 431125751445   | Plus Top cover Batt Ass'y AAWB  | 0090     | 1            |
| 431125751455   | Slim Top cover Batt Ass'y AAAWB | 0090     | 1            |
| 431125872452   | Battery Slim 700 mAH            | -        | 1            |
| 431125872462   | Battery Plus                    | -        | 1            |
| 431125872413   | Standard Charger EC             | -        | 1            |
| 312242720943   | Fast Charger Europe             | -        | 1            |



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### → France

| OPERATOR   | REFERENCE      | DESIGNATION               | POSITION | LEVEL |
|------------|----------------|---------------------------|----------|-------|
| <b>FTM</b> |                |                           |          |       |
|            | 4311 254 34852 | WINDOW NAVY BLUE          | 0080     | 2     |
|            | 4311 254 34872 | WINDOW CORAL BRONZE       | 0080     | 2     |
|            | 4311 257 53243 | FRONT HOUSSING ASS'Y NB   | 0103     | 2     |
|            | 4311 257 53263 | FRONT HOUSSING YACHT META | 0103     | 2     |
|            | 4311 258 60103 | KEYBOARD + HOLDER NB      | 0110     | 2     |
|            | 4311 258 60123 | KEYPAD + HOLDER C14 COR B | 0110     | 2     |

### → Spain

| OPERATOR       | REFERENCE      | DESIGNATION               | POSITION | LEVEL |
|----------------|----------------|---------------------------|----------|-------|
| <b>TELSTRA</b> |                |                           |          |       |
|                | 4311 254 34861 | WINDOW AQUA-GREEN         | 0080     | 2     |
|                | 4311 254 34851 | WINDOW DEEP- BLUE         | 0080     | 2     |
|                | 4311 254 34841 | WINDOW BLUE-WAVE          | 0080     | 2     |
|                | 4311 254 34871 | WINDOW YACHT-METAL        | 0080     | 2     |
|                | 4311 257 53253 | FRONT HOUSSING AQUA GREEN | 0103     | 2     |
|                | 4311 257 52193 | FRONT HOUSING ASS'Y NB    | 0103     | 2     |
|                | 4311 257 53233 | FRONT HOUSING ASS'Y LB    | 0103     | 2     |
|                | 4311 257 53263 | FRONT HOUSING YACHT META  | 0103     | 2     |
|                | 4311 258 60113 | KEYPAD + HOLDER AQUA GRE  | 0110     | 2     |
|                | 4311 258 60103 | KEYBOARD + HOLDER NB      | 0110     | 2     |
|                | 4311 258 60093 | KEYPAD + HOLDER ASS'Y LB  | 0110     | 2     |
|                | 4311 258 60123 | KEYPAD + HOLDER C14 COR B | 0110     | 2     |
| <b>TELECEL</b> |                |                           |          |       |
|                | 4311 254 34852 | WINDOW DEEP BLUE          | 0080     | 2     |
|                | 4311 254 34842 | WINDOW BLUE WAVE          | 0080     | 2     |
|                | 4311 257 53243 | FRONT HOUSING ASS'Y NB    | 0103     | 2     |
|                | 4311 257 53233 | FRONT HOUSSING ASS'Y LB   | 0103     | 2     |
|                | 4311 258 60103 | KEYBOARD + HOLDER NB      | 0110     | 2     |
|                | 4311 258 60093 | KEYPAD + HOLDER ASS'Y LB  | 0110     | 2     |



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### → Germany

| OPERATOR      | REFERENCE       | DESIGNATION              | POSITION | LEVEL |
|---------------|-----------------|--------------------------|----------|-------|
| <b>E-PLUS</b> |                 |                          |          |       |
|               | 4311 254 34852  | WINDOW DEEP-BLUE         | 0080     | 2     |
|               | 4311 257 53243  | FRONT HOUSING ASS'Y NB   | 0103     | 2     |
|               | 4311 258 60103  | KEYBOARD + HOLDER NB     | 0110     | 2     |
| <b>D 2</b>    |                 |                          |          |       |
|               | 43 11 254 35901 | WINDOW D2 AQUA GREEN     | 0080     | 2     |
|               | 4311 254 35891  | WINDOW D2 NAVY BLUE      | 0080     | 2     |
|               | 4311 257 53253  | FRONT HOUSING AQUA GREEN | 0103     | 2     |
|               | 4311 257 53243  | KEYBAORD + HOLDER NB     | 0103     | 2     |
|               | 4311 258 60113  | KEYPAD + HOLDER AQUA GRE | 0110     | 2     |
|               | 4311 258 60103  | KEYBOARD + HOLDER NB     | 0110     | 2     |