SITE TECHNICAL DOCUMENTATION
D2005

Doc. No. : MTB DTS 15
Version : A
Date : April 05 2006

Produced by SAGEM COMMUNICATION GROUPE SAFRAN
ZI NORD Chemin de Baillot, BP 357, 82003 Montauban cedex, France
Tel (33) 5 63 21 21 21 - Fax (33) 5 63 21 21 54


vodafone


SAGEM
my400X

CONFIDENTIALITY

Contents

CHAPTER 1 - FOREWORD

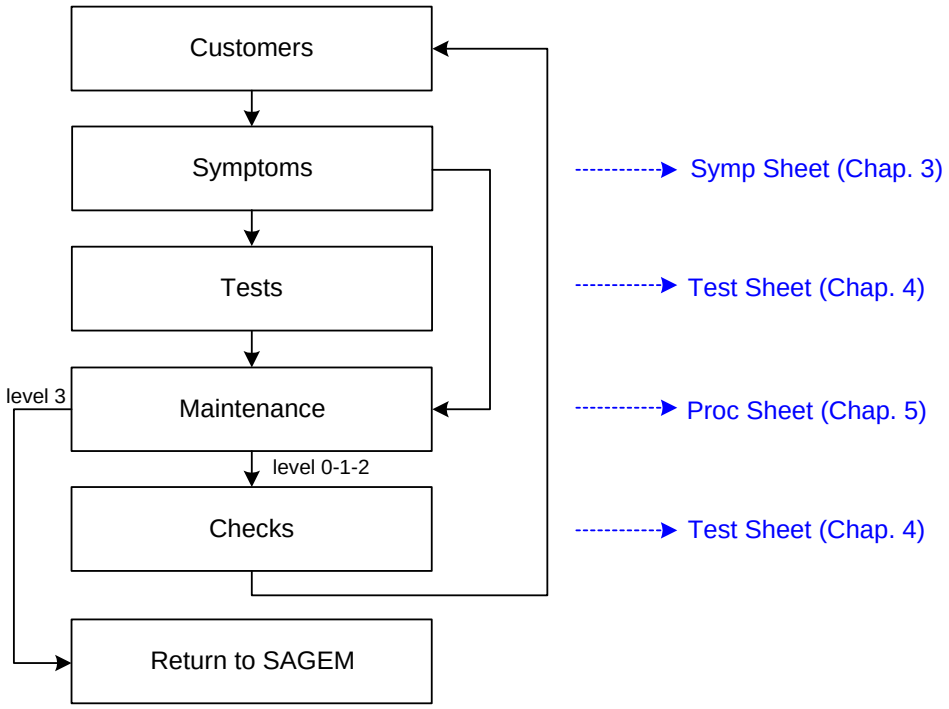
This document is common to all D2005 phones in the SAGEM. It is composed of independent sheets:

- Symptom sheets = Symp Sheet XX
- Test and check sheet = Test Sheet XX
- Maintenance procedure sheet = Proc Sheet X XX

The applicability of a procedure is indicated in the independent sheets title block.
These sheets are updated from time to time in Technical Information Bulletins (TIB).
The information contained in this document is non-contractual, since phone characteristics can change.
Phones are managed based on SAGEM handset codes; any order for spare parts must refer to these codes (typical code 25 xxx xxx-x).

1.1 HOW TO USE THE SITE TECHNICAL DOCUMENTATION

This is a modular document. Each sheet is single and independent. In some cases several sheets may have to be used in order to determine the complete procedure to be applied.
A troubleshooting chapter (chapter 3) is provided and is sorted according to the type of reported fault, to determine the maintenance procedure to be carried out.
These sheets describe the procedure to be followed. They refer to test sheets or removal and replacement maintenance sheets. Maintenance ,executed by the repair center, terminates either by returning the product to the customer, or by dispatching it to level 3 maintenance (return to factory).
The procedure sheets have not systematically consecutive numbers ,but always in a growing order.



All sheets include illustrations to make it easier to read the procedure.

Chapter 1: Foreword, describes general data about this document.

Chapter 2: Description - Operation, describes general data and options available in the D2005.

Chapter 3: Symptoms, contains troubleshooting procedures to be carried out on equipment.

Chapter 4: Tests and checks, contains tests and check procedures to be performed on the equipment.

Chapter 5: Maintenance procedures, contains level 0 to 2 maintenance procedures to be carried out on the equipment, and the procedure to return to SAGEM level 3.

Chapter 6: Accessories, describes the characteristics of accessories for D2005 phones.

Chapter 7: Technical Information Bulletins, contains the various modifications made to this documentation.

Chapter 8: Illustrated Parts Catalogue, contains the various reference for spare parts.

1.1.1 Use

The DTS can be used by means of computer or by paper medium

-For circulation on the DTS one can use the contents which consists of bonds hypertext, and in bottom of each page, one finds a bond which makes it possible to return until the contents.
-For the paper use an index east provides on last page which indicates the numbers of pages of each heading.

1.2 ABREVIATIONS

AAC	Advanced Audio Codeur
ADPCM	Adaptive Differential Pulse Codec Modulation
ALS	Alternative Line Services
AOC	Advice Of Charge
CCD	Charged Coupled Device
CLI	Calling Line Identification
CLIP	Calling Line Identification Presentation
CSTN	Colored Super Twisted Nematic
DCS	Digital Cellular System
EFR	Enhanced Full Rate
EMS	Enhanced Message Service
FDN	Fixe dial number
GPRS	General Packet Radio Service
GSM	Global System for Mobile
IMEI	Internationnal Mobile Equipment Identity
ISO	International Standard Organisation
LCD	Liquid Crystal Display
LU	Livret d'Utilisation
MMS	Multimedia Message Service
PCS	Personnal Communication Service
PIN	Personal Identity Number

PUK PIN Unlocking key
RF Radio Frequence
SAR Specific Absortion Rate
SIM Subscriber Identity Module
SMS Short Message Service
SMS CB Short Message Service Cell Broadcast
SMT Sagem Mobile Tools
TFT Thin Film Transistor
USSD Unstructured Supplementary Service Data
VGA Video Graphics Array
WAP Wireless Application Protocol
WiFi Wireless Fidelity
WSP Wireless Session Protocol

1.3 COMMENTS SHEET

Broad experience is very beneficial in several respects. Please let us know your comments so that we can improve the contents and presentation of this document.

Your suggestions will be read carefully by :
- the design laboratory,
- production,
- the purchasing department,
- the after sales service,
- all users of this document.

All your suggestions are valuable, they will help us to better satisfy you.
Please photocopy and fill in the sheet 1-4.

Document title: **Site Technical Document**

Reference :

Date :

Please fill in the following table :

	Excellent	Good	Fairly good	Passable
Easy to find the required information				
Clarity of information provided				
Quality and accuracy of information given				
Document outline				
Document presentation and appearance				
Quality of illustrations				
General satisfaction				

Do you think this document could be improved ? if so, how ? :

- ☐ Improve the overall view
- ☐ Improve the table of contents
- ☐ Improve the structure
- ☐ Add illustrations
- ☐ Add details
- ☐ Add information

Comments : _____
_____
_____

Would you like to discuss the problems mentioned in this questionnaire? If so, state :

Name of the person to be contacted : _____ Phone : _____

Company : _____ Date : _____

Address : _____

THANK YOU FOR PARTICIPATING IN THIS ENQUIRY. YOUR COMMENTS WILL HELP US CONTINUE TO IMPROVE THE QUALITY OF OUR DOCUMENTATION AND THUS BETTER SATISFY YOUR NEEDS.

When you have filled in this questionnaire, please send it :

- by mail, to **SAGEM S.A.**
  CHEMIN DE BAILLOT BP 357
  82003 MONTAUBAN CEDEX
  FRANCE

YOU CAN CONTACT US ON: cra.mobile@sagem.com

CHAPTER 2 - DESCRIPTION - OPERATION

2.1 REMINDERS ABOUT THE GENERAL CHARACTERISTICS OF GSM 900, DCS 1800 and PCS 1900

Table 1 below gives the characteristics of the radio interface for the GSM 900, DCS 1800 and PCS 1900 systems :

	GSM 900	**DCS 1800**	**PCS 1900**
Frequency Band (MHz)	880 - 915 925 - 960	1710 - 1785 1805 - 1880	1850 - 1910 1930 - 1990
Number of time intervals per TDMA frame	8		
Width 2 x W simplex (MHz)	2 x 25	2 x 75	2 x 60
Duplex spacing (MHz)	45	95	80
Modulation speed (kbit/s)	271		
Speech throughput (kbit/s)	13 (5,6)		
Maximum data throughput (kbit/s)	12		
Multiple access	Frequency and temporal multiplexing / frequency duplexing		
Cell radius (km)	0,3 to 30	0,1 to 4	0,1 to 4
SAGEM terminal power (W)	2	1	1

Table 1 : Radio Interface

Table 2 shows powers as a function of the network:

	GSM 900		**DCS 1800**		**PCS 1900**	
Class number	Maximum nominal power (W)	Allowable interval (W)	Maximum nominal power (W)	Allowable interval (W)	Maximum nominal power (W)	Allowable interval (W)
1	-	-	1	[0,63 ; 1,6]	1	
2	8	[5,0 ; 12,7]	0,25	[0,16 ; 0,4]	0,25	
3	5	[3,2 ; 7,9]	4	[2,5 ; 6,3]	2	
4	2	[1,3 ; 3,2]				
5	0,8	[0,5 ; 1,3]				

Table 2: Terminals power class

2.2 REMINDERS ABOUT THE CHARACTERISTICS AND OPTIONS

General characteristics

Name

Name	D2005

Size

Dimensions	NA
Weight	105x46x14
Volume	85

Power management

Battery type	75
Connector type	Li-Ion 850mAh
Charging time	Clam
Talk time	3hrs
Standby time	4hrs

User interface

Screen type	350h
Specific keys	NA
Colours	CSTN
Number of lines	65K
Screen size	up to 8
Screen resolution	27.2 x 32.5
Backlight	128 x 160
Sub LCD	Yes

Customisation

Handset colours	NA
Interchangeable covers	Silver, AstroBlack, IvoryCream

Radio

Type GSM	NO
GSM Band	triband
Voice codecs	900/1800/1900 MHz ou

Operating system

Operating System	HR, EFR, FR, AM

Connectivity

Radio

GPRS	NA
EDGE	YES
UMTS	no

Internet

Browser	NO
Push	YES
Fax modem	yes

Data transfer

Serial	yes
SynchML	NO
IrDA	no
Bluetooth	yes
USB	yes
Wifi	YES
PC synchronisation	NO

Multimedia

Messaging

SMS	yes
Notification	Notification via audio and text alert

EMS	MO/MT/CB
MMS	YES
E mail	50KB and 100KB max size
IMPS	no
Predictive text input	no

Video & images

Camera	T9
Image features	VGA
Video Player	yes
Image Format	3gp = H263+AMR

Audio

Audio player	Bmp jpeg png gif gif animed
Audio Recorder	only for ringtones
FM radio	AMR up to 30s
Polyphonic ringtones	no
Audio formats	32

Entertainement

Wallpaper	AMR NB, WAV, iMelody 1.2, Midi
Screensaver	14
Clock display	YES
Icons	digital or analog
Skins	Yes
Ringtone	YES
Boot up and shut down sequences	35
Bookmarks inserted in Games menu	YES
Embedded Games	yes
Downloaded application	YES, 2 JAVA COLOUR GAMES

JAVA

JAVA	YES

OTA dowload

Protocol supported	Kjava, CLDC1.1, MIDP 2.0
Wallpapers	EMS, MMS, WSP ou HTTP, WAP, M-Services, JAVA
Animation	YES
Menu icon	YES
Download skins	YES
Games	NA
Ringtones	YES
Java application	YES
Reproduction dossier	YES

Real time dowload

Flux audio	YES
Flux video	NO
Special features	NO

Call management

Voice features

Mute mode	
Numerotation vocale	yes
Integrated handsfree mode	no

Adress book features

Call group	yes
Ringtone and Icone customisation	no
Personal information management	yes

Advanced features

Conference call	yes
Anonymus mode	yes
Call wait	yes
Call forwarding	yes
Automatic redial	yes
SIM toolkit	yes
Vibrate mode	yes
Speed dialing	yes
Call list	Voice mail
Caller ID	yes
Any key answer	yes
Automatic hang up	yes

Special features

Keyboard features

Scroll key	yes
Programable key	YES
Side key	YES
Direct access key	YES
Keypad lock	YES
Silent key	yes
International access key	YES
Menu key	YES

Personnal management features

Calculator	yes
Alarm Clock	yes
Timer	yes
Organizer	yes
To do	yes

Voice recorder	yes
Currency converter	Yes up to 60s
Languages	yes

Memory

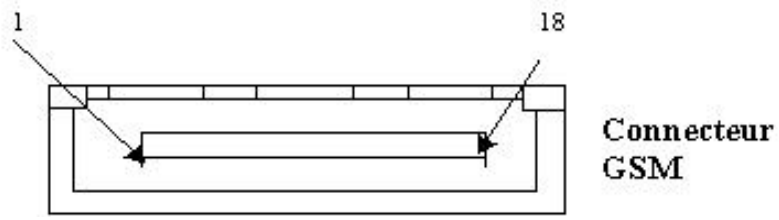
Memory

Internal phone book	Yes up to 8 languages
Memoire message	500
Redial List	100
Additional multimedia memory	20
Embedded memory	no

2.3 IN & OUT CONNECTOR

2.3.1 Connector description

This connector is located at the bottom of the transmission module and enables the connection to various accessories. It comprises power supply pins and signals.



2.3.2 Signal description

Symbol	Pin connector	Signal fonction
HSCMICIP	1	Differential inpout for external microphone
HSCMICN	2	Differential inpout for external microphone
HSOL	3	STEREO AND MONO AUDIO OUTPUT
HSOR	4	STEREO AND MONO AUDIO OUTPUT
VBAT	5	POWER SUPPLY IMAGE VOLTAGE, connect this signal to "CHARGER" (pin n°1) to switch the module on.
INTI2C	6	Interrupt signal reserved for sagem specific accessories
CTS	7	Link v24 suit for accessory data
RTS	8	Link v24 suit for accessory data
DSR	9	Link v24 suit for accessory data
DTR	10	Link v24 suit for accessory data
TXD1	11	Link V24 suit for accessory data
Chargeur	12	Phone set power ON and power supply signal
GND	13	ZERO VOLT
RXD1	14	Link V24 suit for accessory data
R1	15	Complete V24 tie for data accessories
DCD	16	Complete V24 tie for data accessories
RXD2	17	Application input serial n°2
Chargeur	18	Phone set power ON and power supply signal

2.4 IDENTIFICATION

All phones are identified with an identification label sticked on the antenna.

2.4.1 Illustration

2.4.2 Desrcription

a: IMEI (bar code),
b: IMEI (15 digits),
c: Cosmetic,
d: Indication of sim card tension (sim 3v),
e: Geographical indication of production,
f: Date code / production level,
Example. v24/6 = (v) place of production (v: VIP MONTAUBAN), (24) day of production, (6) last digit of the year of production.
g: Logo and/or customer specificity,
h: product reference / product designation,
i: sim insert logo,

2.4.3 Description after repair

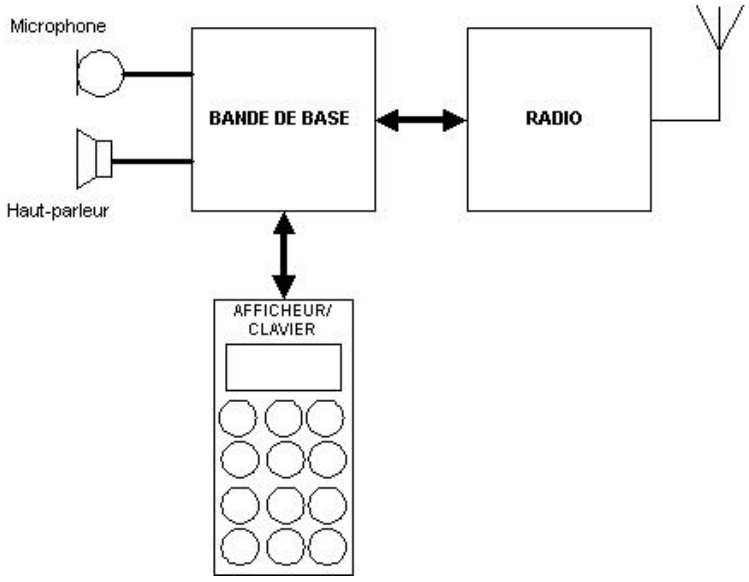
A new sticker is positioned by the Repair Center on the antenna:

This extra line will appear if the mobile has already been repaired.

- CRA XXX -> N° de CRA.
- 260/03 -> Date of repair (260), repairing day (03), last digit of year (03->2003).

2.5 PHONE BLOCK DIAGRAM

2.5.1 block diagram



2.5.2 Standards and environment

The phone complies with the following standards.

Directive EEC 1999 / 5 / CE
Safety (security) EN 60950
CEM EN 301 489-1 / EN 301 489-7
Voltage 73 / 23 / EEC
Network 3GPP TS 51.010-1 v 5.2.0 with included GCF-CC V 3.10.0
Requirements GT01 v 4.7.0 / TBR 19 edition 5 / TBR 20 edition 3
TBR 31 edition 2 / TBR 32 edition 2 / EN 301 419-1 / EN 301511
Health EN 50360 / EN 50361

2.6 EQUIPEMENTS

The description and operation of SAGEM D2005 are given in the "User's handbook" supplied with the handset. This chapter only describes equipment that operates with the D2005 handset.

2.6.1 Battery packs

ÿþ2 . 6 . 1 . 1 C a r a c t e r i s t i C S

Designation	Technology	Weight	Voltage	Capacity

2.6.1.2 Description

Li-ion type batteries are used. They are rechargeable using:

- mains power supply module.

Batteries caution use:

·Store the batteries in a dry and cool place (excessive cold and heat damage the batteries reliability).
·They must never be stored in bulk, even the rejects, to avoid any short circuits.
·Do not dismantle the battery packs. (Li-Ion regulations).
·Only use original mains power supply module.

2.6.1.3 Charging time

The following table shows typical charging times for different batteries.

Battery : Li-Ion 850mAh

Charger	
Voltage	
Charging times	3h00

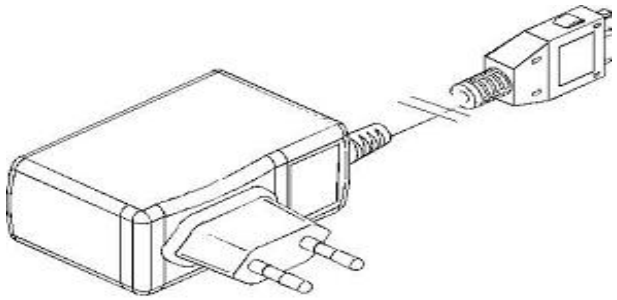
2.6.2 Mains modules

2.6.2.1 Description

These mains power supply modules accept large dynamic variations in the power supply network. They are available for a number of connector types:

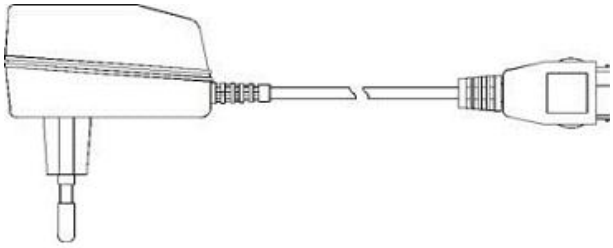
- E.E.C,
- United Kingdom
- United States,
- Australia.

2.6.2.2 Travel mains modules



Designation	Weight (g)	Volume (cm3)	Voltage
US Power supply	125	65	110/230 V
UK Power supply	110	90	110/230 V
AUS Power supply	100	75	110/230 V
EEC Power supply	100	75	110/203 V

2.6.2.2 Simple mains modules



Designation	Weight (g)	Volume (cm3)	Voltage
AUS Main module	190	105	230 V
CE Main module	180	85	230 V
charger block angled	180	85	240v
UK Main module	180	120	230 V
US Main module	210	105	110 V

CHAPTER 3 - SYMPTOMS

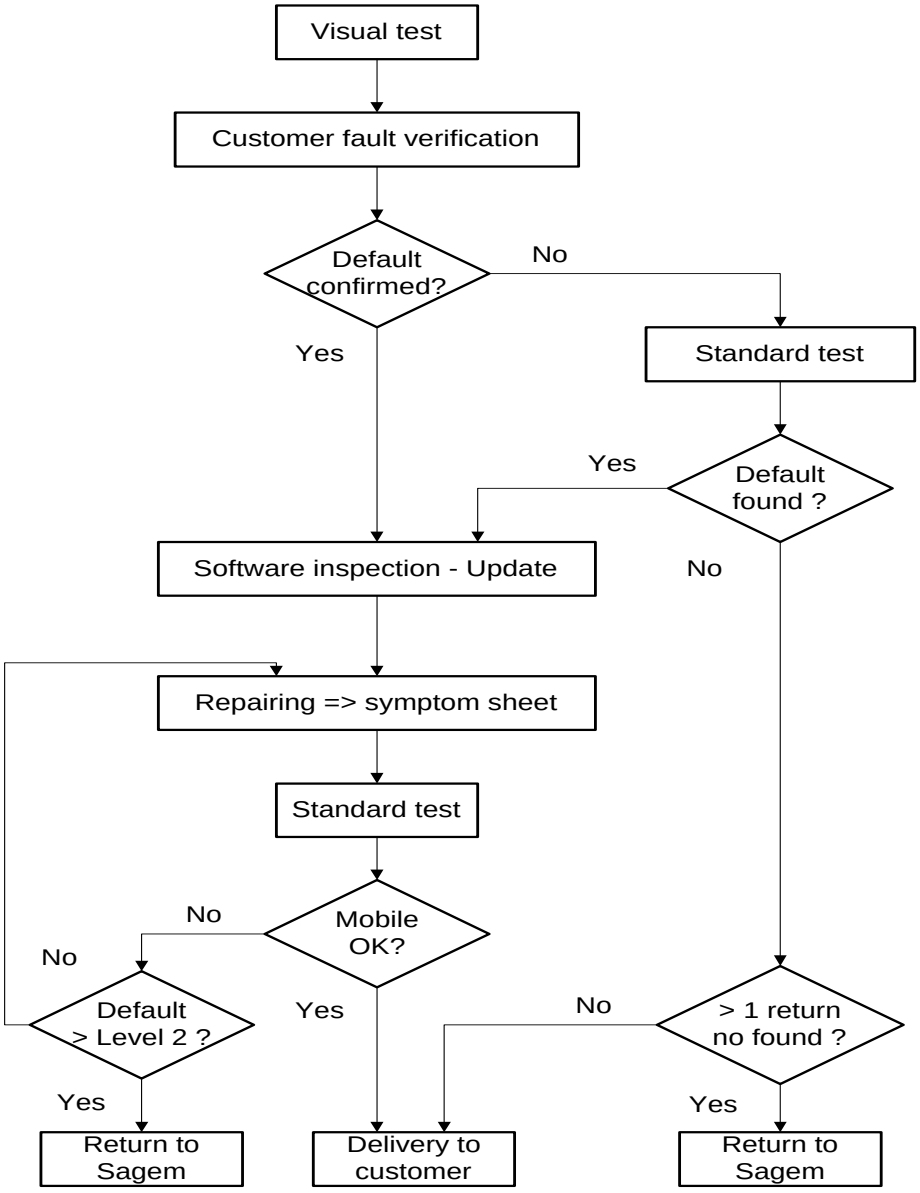
3.1 GENERAL

After you have received the customer return sheet (Proc Sheet 3 02), carry out the troubleshooting procedure.
This chapter will help you to identify the defective element(s), using the troubleshooting table.
It contains flow charts broken down by fault type. Each flow chart describes the procedure to be followed and contains cross references to tests or maintenance.
These flow charts should be followed in full. After a reference to a removal/replacement sheet or to a test to be carried out, you should return to the initial flow chart and continue the search until reaching a final conclusion.

The conclusion of each troubleshooting procedure is :

- Return to SAGEM =The Return to the SAGEM centre can concern either the card, or the radiotelephone according to instructions given to the Centres of repair.
- Delivery to the customer

The mobiles will not be refurbished without a special and wtitten authorisation .


Visual test
Customer fault verification
Default confirmed?
No
Yes
Standard test
Default found ?
Yes
No
Software inspection - Update
Repairing => symptom sheet
Standard test
Mobile OK?
No
No
Default > Level 2 ?
Yes
Yes
No
> 1 return no found ?
Yes
Return to Sagem
Delivery to customer
Return to Sagem

Visual test :

- -Connector condition (in / out connector, battery, SIM)
- -keypad concdition (elastomer,inscription)
- -Pane condition
- -Plug and position of battery
- -SIM card position
- -Oxidation
- -Charger test

Standard test :

- -Display test : Hot Line menu
- -Contrast control
- -All keypad keys test (check bips keys)
- -Test fonction camera
- -Audio and radio test
- -Battery charge test
- -Vibrating device test : Hot Line menu

Software inspection :

For all mobiles to repair, the checking by SMT is mandatory (Test Sheet 01).

3.2 LIST OF REPORTED DEFECTS

The following is a list of defects that may be reported :

Default	Anomaly	Procédure
A1	No power up	Symp sheet 04
A2	No display up	Symp sheet 04
A3	Freezes up	Test sheet 01
A5	Broken LCD	Symp sheet 04
A6	Line or digit missing	Symp sheet 04
B1	Defective contact battery	Symp sheet 01
B2	Defective charger connector	Proc sheet 1 20
		Proc sheet 3 01
B3	Defective board power supply	Proc sheet 1 20
		Proc sheet 3 01
B4	Defective charge icon display	Proc sheet 1 20
		Proc sheet 3 01
B5	Current consumption with phone off	Test sheet 04
B7	Autonomy	Symp sheet 01
B8	Electrically defective battery	Test sheet 03
B9	Mechanical problem on lock battery	Proc sheet 0 01
B10	Broken battery	Test sheet 03
B11	Defective charger	Test sheet 02
B12	Broken charger	Test sheet 02

B13	Intermittent cut with reboot	Proc sheet 1 20
		Proc sheet 3 01
B14	Intermittent cut without reboot	Proc sheet 1 20
		Proc sheet 3 01
C1	Not functioning keyboard	Symp sheet 05
C2	Lateral key problem	Symp sheet 05
D1	SIM missing	Proc sheet 1 20
		Proc sheet 3 01
D2	Other messages	Proc sheet 1 20
		Proc sheet 3 01
D3	EEPROM problem	Proc sheet 1 20
		Proc sheet 3 01
D4	Untuned mobile	Proc sheet 1 20
		Proc sheet 3 01
D5	Hard failure	Proc sheet 1 20
		Proc sheet 3 01
D6	SIM lock	Proc sheet 1 20
		Proc sheet 3 01
D7	Post code	Test sheet 01
D8	Return SAV	Proc sheet 1 20
		Proc sheet 3 01
D9	Unknown battery	Test sheet 03
E1	Defective loudspeaker (hails)	Symp sheet 10
E2	Loudspeaker voice distortion	Symp sheet 10
E3	Defective microphone	Symp sheet 08

E4	Vibrating device malfunction	Symp sheet 08
E5	Vibrating device malfunction	Symp sheet 07
E6	Defective audio connector	Symp sheet 08
F1	No network localisation	Symp sheet 02
F2	Intermittent calls drop	Symp sheet 02
F4	Radio control no OK	Proc sheet 1 20
		Proc sheet 3 01
F5	Outgoing call failure	Symp sheet 02
F6	Incoming call failure	Symp sheet 02
G1	Broken or damaged window	Proc sheet 0 03
		Proc sheet 1 13
G2	Broken or damaged cover	Proc sheet 1 13
G5	Broken or damaged keypad	Proc sheet 1 04
H1	Accessory problem	Proc sheet 3 01
I1	Oxidation mark	Proc sheet 1 20
		Proc sheet 3 01
I3	Monetic function	Symp sheet 03
I5	Defective SIM connector	Test sheet 01
I6	Defective sim connector	Proc sheet 1 20
		Proc sheet 3 01
I7	Lack function in the menu	Test sheet 01
I8	No fault found	Test sheet 01

3.3 ERROR MESSAGES DURING START UP

Message drawn	Message signification	Action
WARNING UNTUNED RADIO	Invalid EEPROM field (SAGEM)	SAGEM Factory Return
PB IMEI	Consistency problem at IMEI level	SAGEM Factory Return
SIM MISSING	SIM card missing or badly inserted	Insert the SIM card
IMEI ERROR	Consistency problem at IMEI level	SAGEM Factory Return
UNTUNED	Mobile not configured	SAGEM Factory Return
UNKNOWN BATTERY	Battery not recognised by the mobile	Replace the battery
MOBILE PHONE LOCKED	Number of seizures of sim locked code exceeded	SAGEM Factory ReturnNot repair under warranty
SIM BLOCKED	Three bad PIN codes have been input	Contact the operator
SIM LOCKED (with SIM)	SIM card not adapted to the operator	Replace the SIM card
SIM LOCKED (without SIM)	Attempt of corruption (EEPROM fields)	SAGEM Factory ReturnNot repair under warranty
BATTERY TOO LOW	Battery state	Replace the battery

Nota : Return centre after sales service department SAGEM can concern either the card, or the mobile, according to instructions given to the CRAs.

3.4 OTHER ERROR MESSAGES

Message drawn	Message signification
BUSY	Problems related to the network and Communications

K.PAD LOCKED PRESS *OK	Keypad locked
OPTION NOT AVAILABLE	Menu not available for this product version
PROG.KEY NOT VALID	Input Problems
ERROR!!	Calculation error with the calculator (division by zero)
NOT AVAIL	Not available
PIN ERROR	PIN input problems
PIN2 BLOCKED	Following input errors
PUK ERROR	Following input errors
PUK2 BLOCKED	Following input errors
CODE ERROR	The phone code input for locking the mobile is incorrect
NOT REACHABLE	Call forwarding if the mobile is not reachable
NOT AVAIL	Service not implemented in the network

3.5 LIST OF OBSERVED DEFECTS

A SAGEM code is assigned to each confirmed defect. This code should be entered on Proc Sheet 3 01, SAGEM Factory Return, if the phone to be repaired is returned to SAGEM (see chapter 5).

3.6 INFORMATION ABOUT NEW NOTICED FAULTS

Detection by the repair center of new fault shall induce to respect the following procedure

a) The concerned technician fills a precise report using the document NPD report SAV GSM 277 V1

b) Then, this document is transmitted by email to the concerned Area Manager or Support Engineers for approval. Accordingly, 2 ways are possible :

- The problem is already known by SAGEM, then the mobile have to follow the normal process in ARC with eventual additional data given by AM or SE
- Return of mobile to MTB is requested.

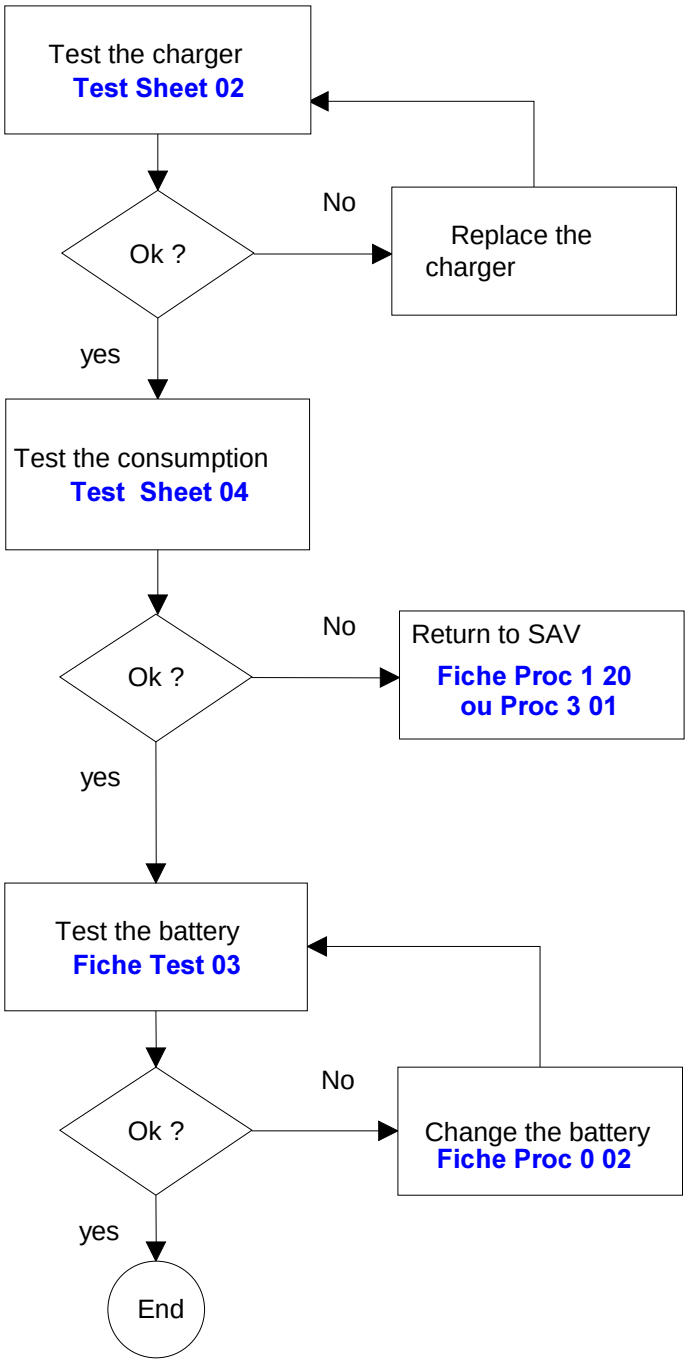
c) In that second case, the ARC will have to request a specific RMA number for this mobile in order to facilitate the treatment when arriving in SAGEM.

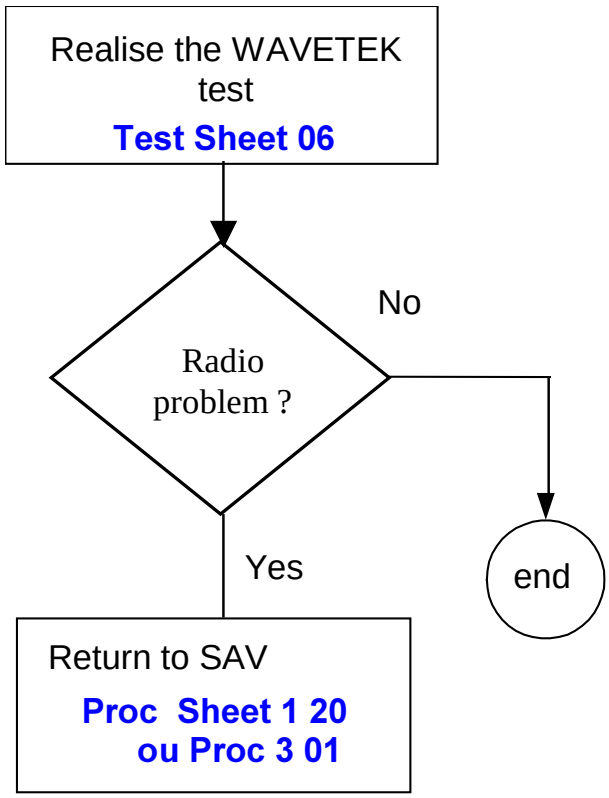
d) This mobile returned to SAGEM will be swapped following ARCs habitual process for MTB return but will be MANDATORY linked to a paper version of the document filled by the technician.

e) The treatment will have to be reproduced on the daily report and will be considered as level 3. Specified fault code will be then the technically closest one of the noted one, in the grid given by SAGEM

SYMPTOM SHEETS

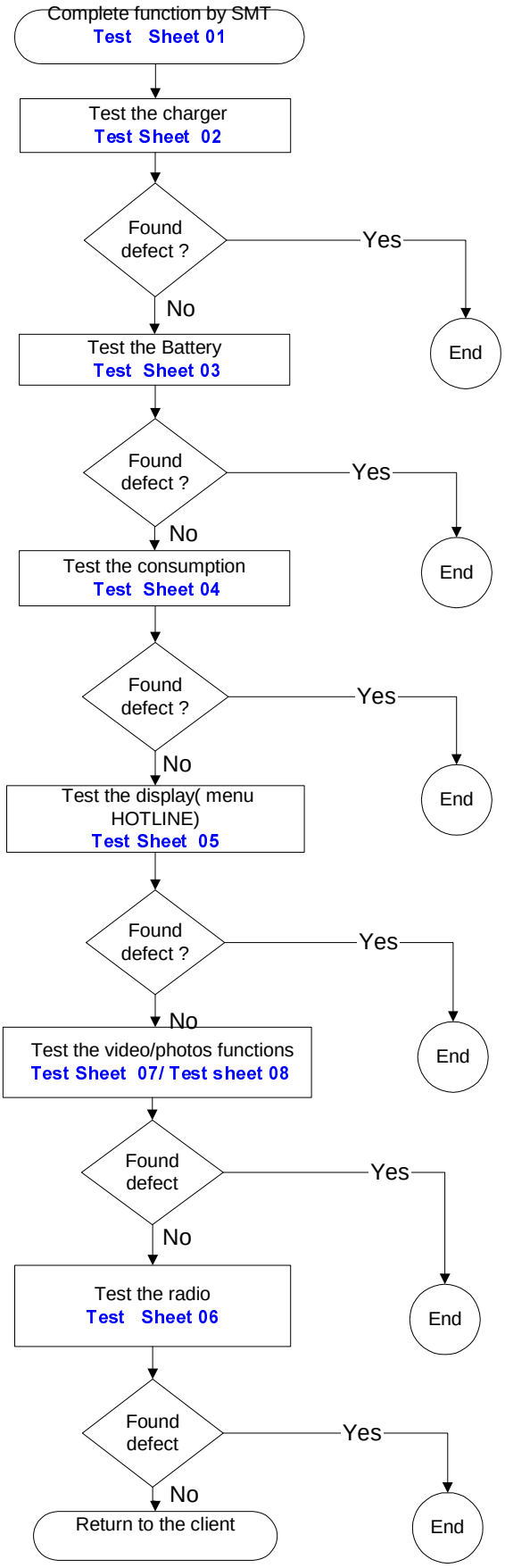
Sagem Communication Groupe SAFRAN	ENDURANCE BATTERY AND CHARGER PROBLEM	SYMP SHEET 01
D2005		1/1



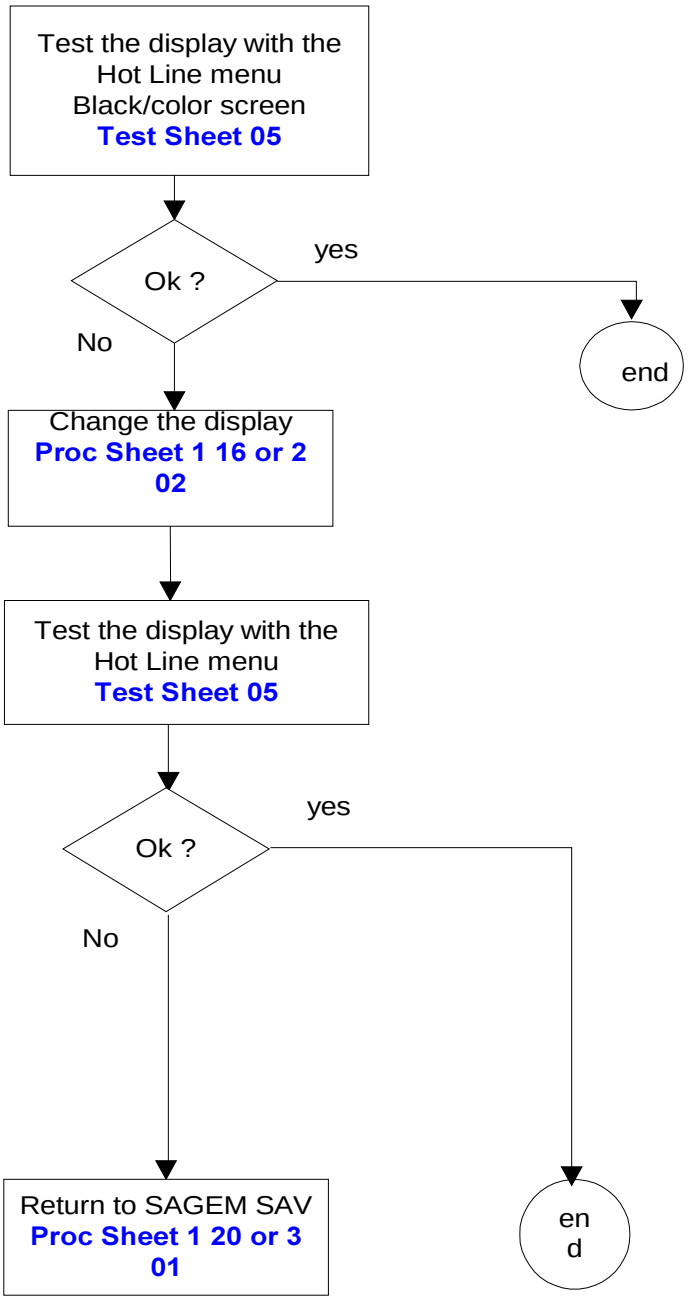


Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

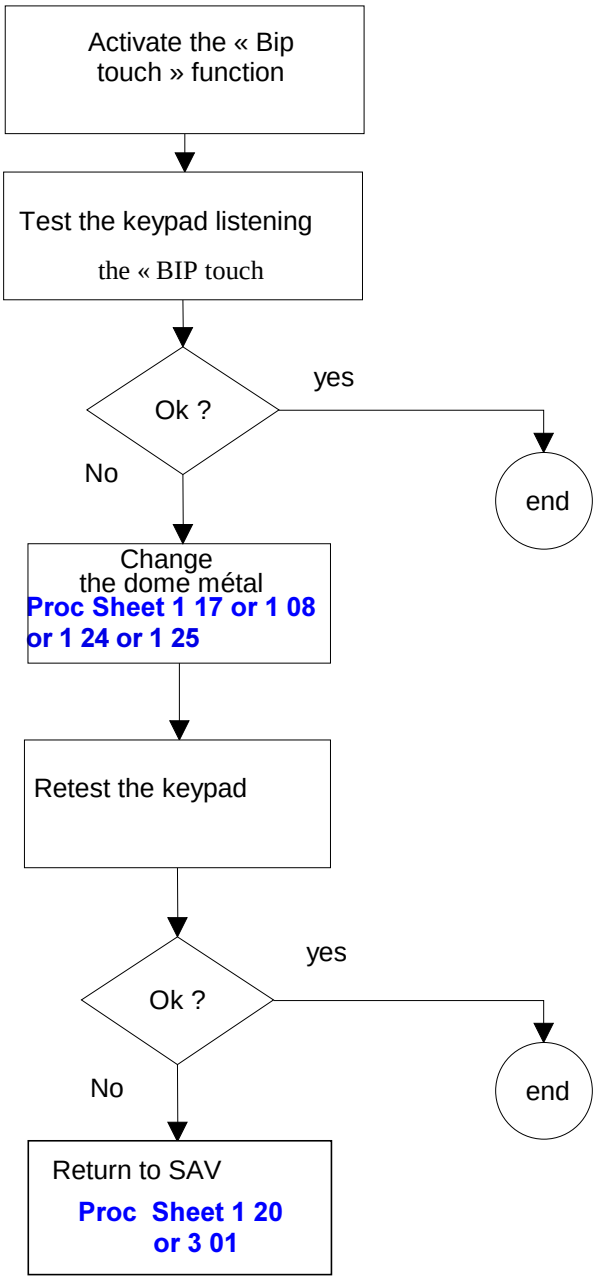


Sagem Communication Groupe SAFRAN	DISPLAY PROBLEM	SYMP SHEET 04
D2005		1/1

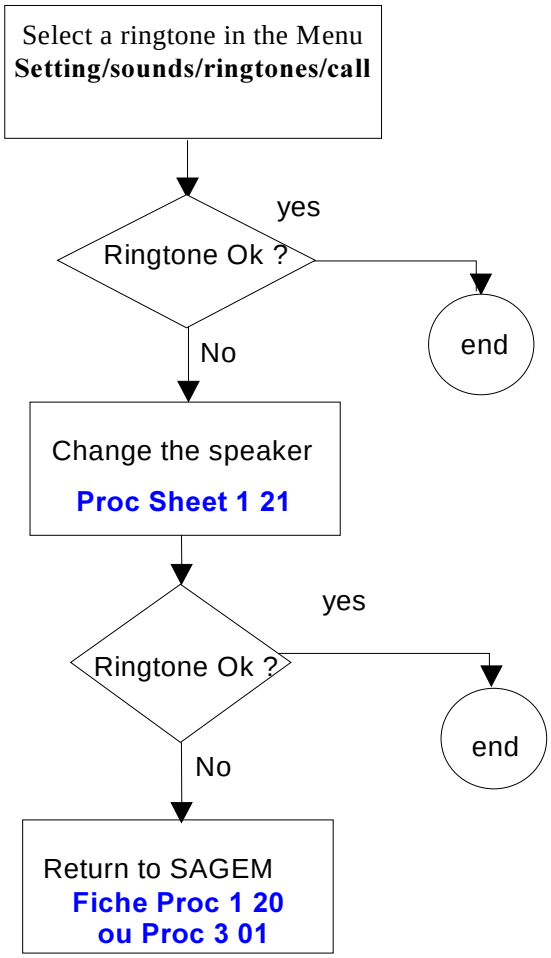


Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

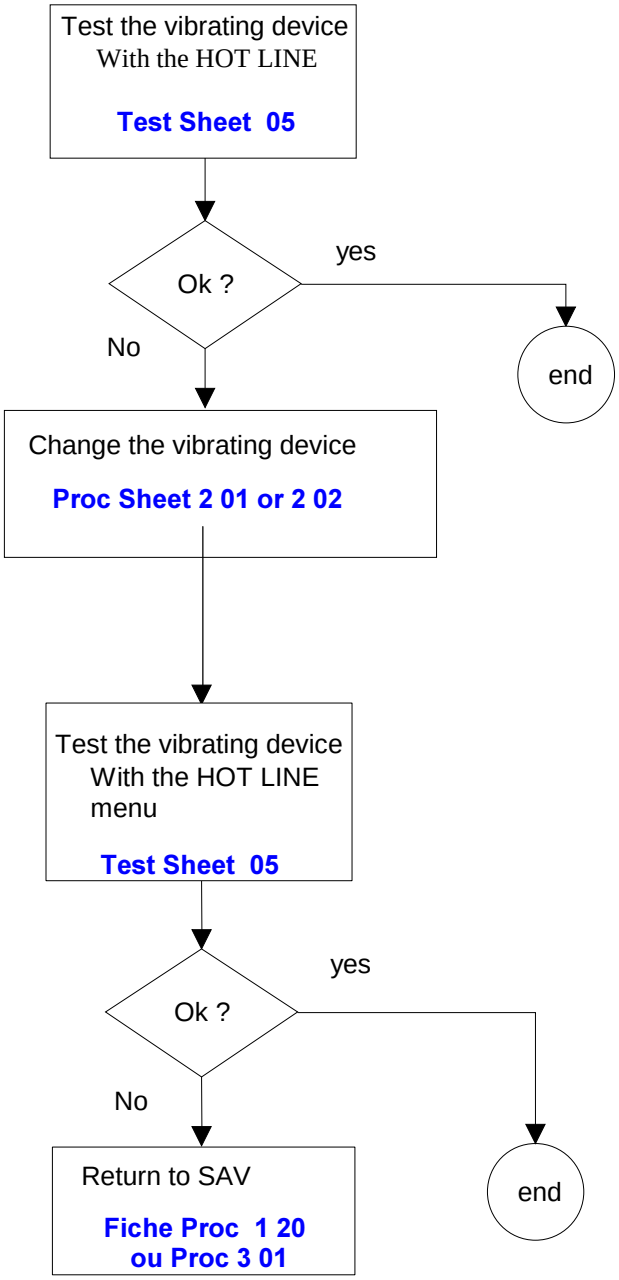
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet



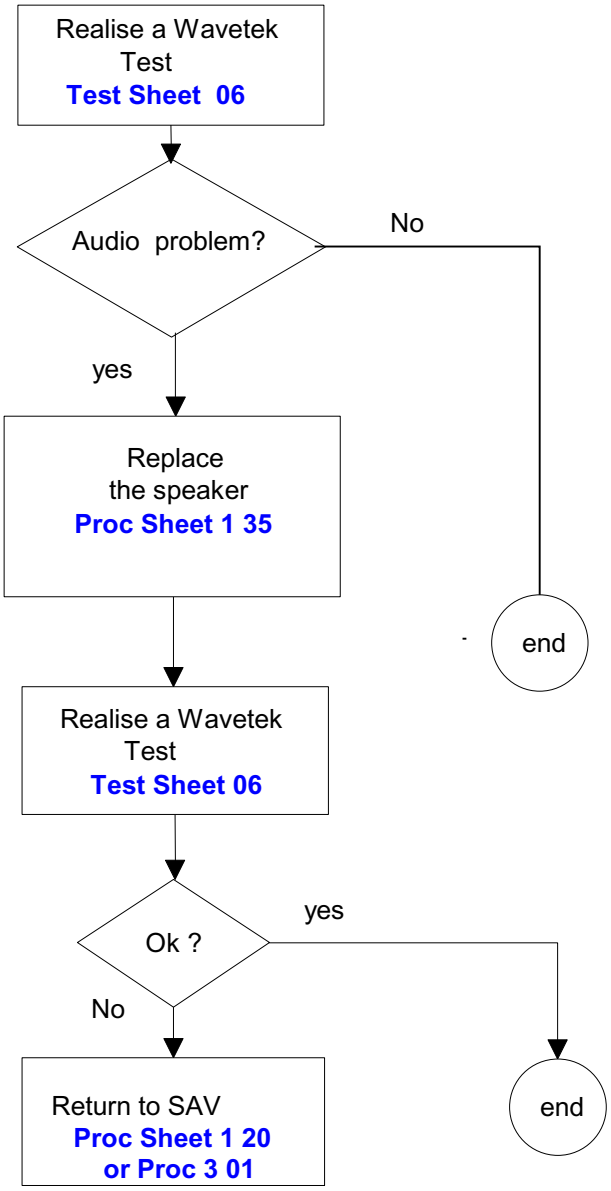
Sagem Communication Groupe SAFRAN	RING TONES PROBLEM	SYMP SHEET 06
D2005		1/1



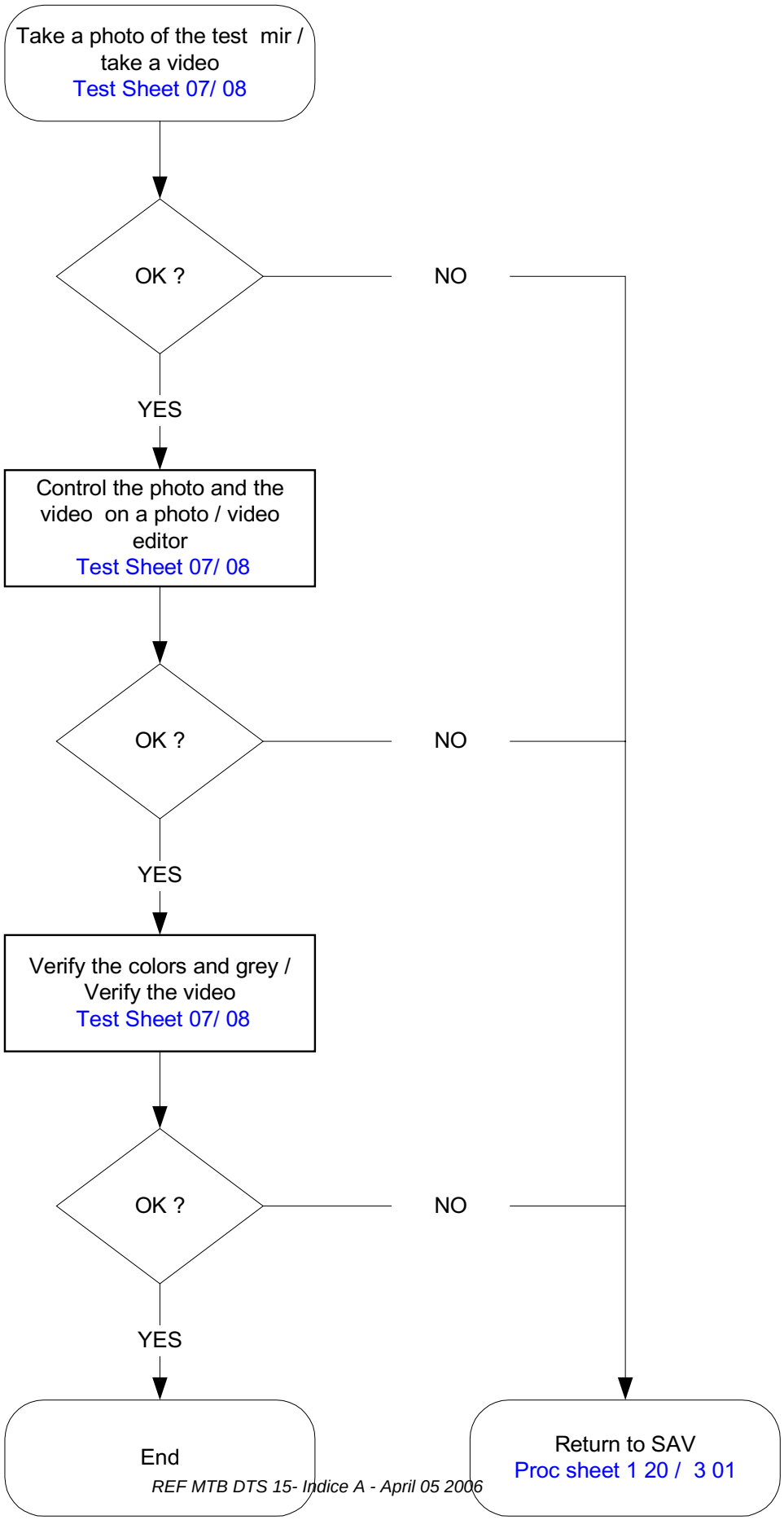
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet



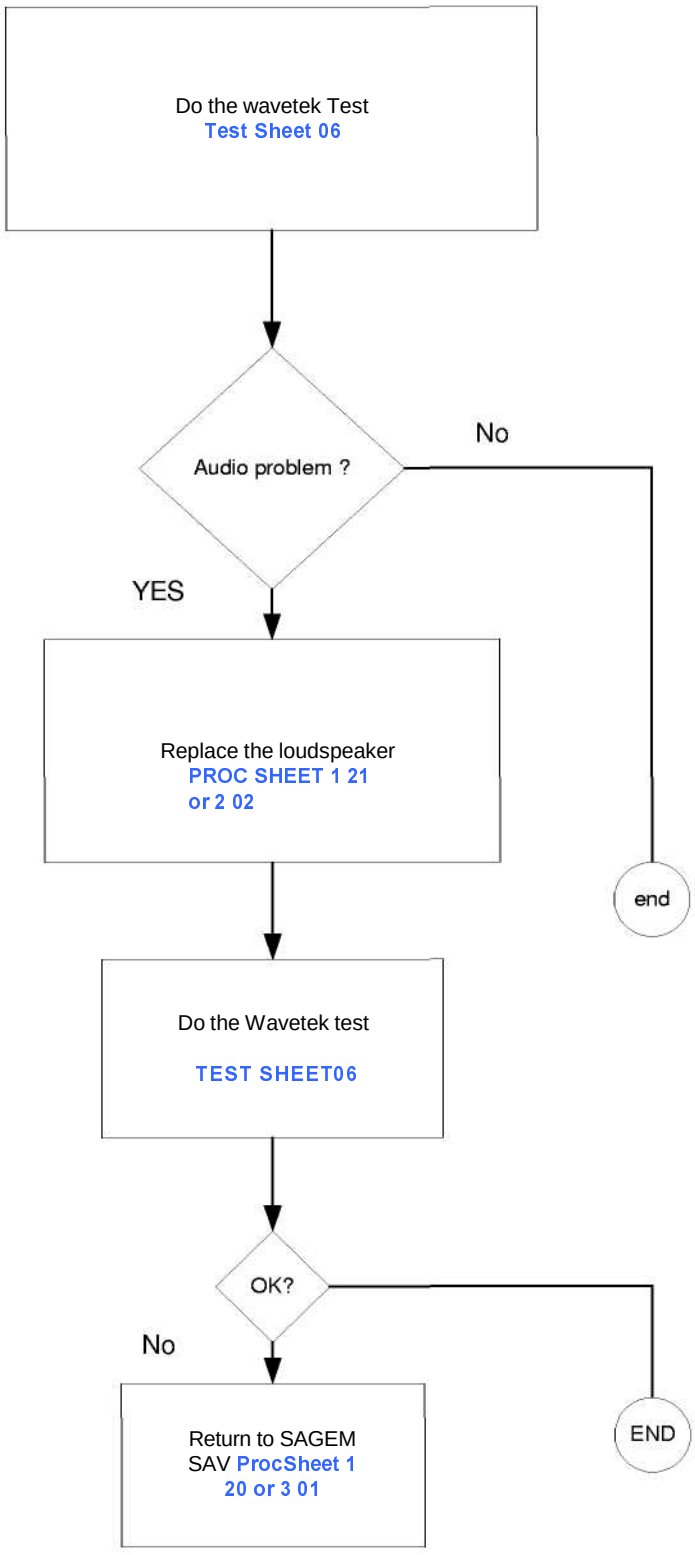
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet



Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet



Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet



CHAPTER 4 - TESTS AND CHECKS

4.1 ABOUT TESTS

Tests and checks are made after the troubleshooting procedures (chapter 3) and before the maintenance procedures (chapter 5).

They are broken down into modules and are sorted by types of confirmed faults. The user must be equipped with special test tools in order to carry out the tests.

4.2 TEST TOOLS

The references of SAGEM tools, listed hereafter, are given in Appendix 1 : Composition table.

The following test tools are necessary :

- the ARC downloading kit, including the test case provided with:
  - ·the data cable (to PC),
  - ·the retrofit cable,
  - ·the mains power supply module.
  - ·Retrofit adapter
- the radio test bench, provided with:
  - ·SIM card of test.
  - ·D2005 calibration tool
  - ·Adjustable regulate power supply 0-15V / 4A
  - ·Wavetek 4107
- CADEX C7000 / C7200 / ASTRATEK with myC3-2 adapter
  - ·Charger test kit
  - ·Voltmeter (minimum impedance : 20 KW per Volt in DC)
  - ·Ampermiter

- an IMEI labels printing station, including :
  - · Printer,
  - · Roll of labels,
  - · Connecting cable for PC (parallel printer cable),
  - · Printing software,

4.3 INSTALLING ON A WORKSTATION

4.3.1 Minimum required configuration

The minimum configuration of the workstation is :

- Processor 1Ghz,
- 128 Mbytes of RAM,
- Windows 2000, Windows XP,
- 2.1 Gbytes hard disk (1 Gbytes available),
- 1 parallel port and 2 serials port.
- USB port.
- Network card, sound card.

4.3.2 Installing the ARC downloading kit

The ARC downloading kit interfaces the SMT software with the phone to be repaired.

- Connect the 9-pin SUB-D connector to the PC serial port (COM1).
- Connect the power supply module to the mains power outlet.
- Connect the phone to be repaired to the system connector.

4.3.3 SMT functions

The SMT maintenance software can:

- Download new software if needed
- Configure default values and checks them.
- Unblocked the " PHONE CODE "
- Delete the customer directory and SMS
- Print identification labels.
- Make a electronic board swap.
- Adjust the display contrast
- Read the Site Technical Documentation (manual of repair)
- Select a test sequence

The procedures for using these functions are described in TEST Sheet 01.

TEST SHEETS

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

To run the functions described below, run the SMT application from the desktop icon.

Notice: The active connection with SMT (via the serial port), validates in itself the data functionality of the handset.

Download the latest software

1. Click on the DOWNLOAD button.
2. Follow the procedures on the screen.
3. Make sure that the mobile phone is not in standly mode (press the Start key)

The serial port of the PC is connected well, and that the port COM was well selected (pop-up menu TOOLS then CHANGE OF PORT COM)

Configure and check default values

4. Click on the CONFIGURE pop-up menu and then VERIFY (Verfab).
5. Follow the procedures on the screen.

Release the " PHONE CODE"

6. In the case when phone code was programmed by the user.
7. Click on the CONFIGURE pop-up menu and then on RELEASE
8. Follow the procedures on the screen.

Print identification labels

9. Click on the LABEL pop-up menu and then PRINT LABEL .
10. Follow the procedures on the screen (type the date of fabrication).

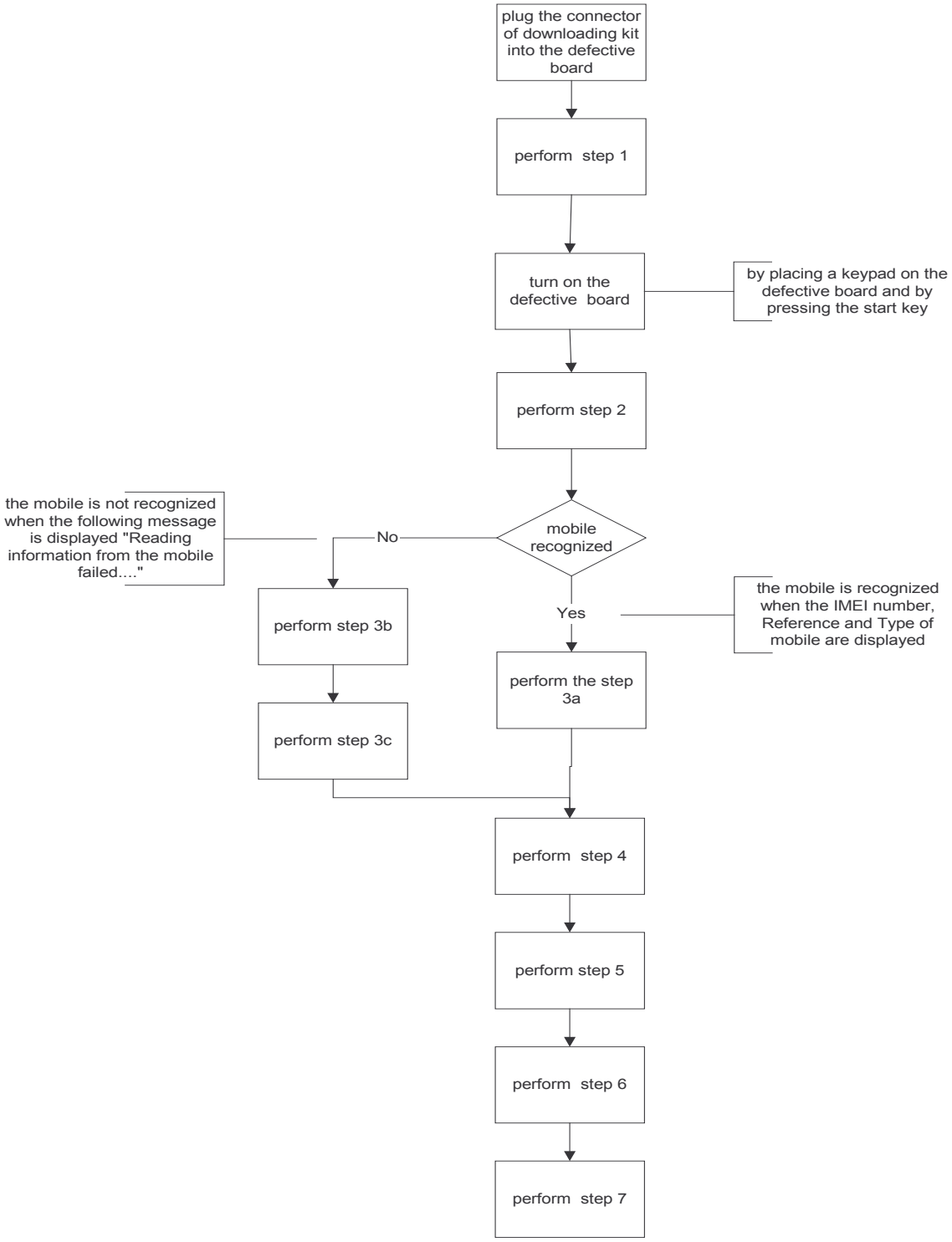
SMT SEQUENCE: Series of the different functions under SMT (sequence of tests)

1. Click on SMT SEQUENCE pop-up menu.
2. Select the different functions you want to carry out then click on the LAUNCH button.

- **Electronic board swap**
  11. Carry out the exchange of a defective card by SWAP card
  12. Follow the procedures on the screen.

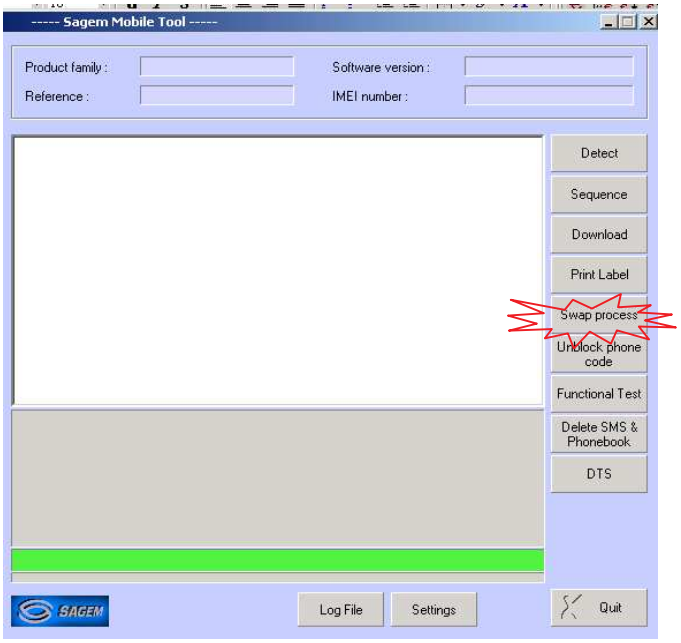
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

1. SWAP : Electronic board Configuration

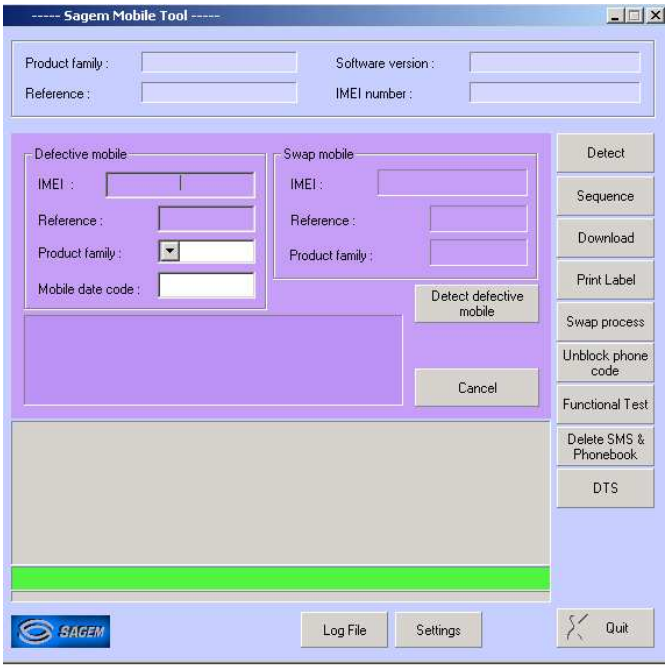


Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

Step 1
SMT Front page
Click on the « SWAP Process » menu.
Example



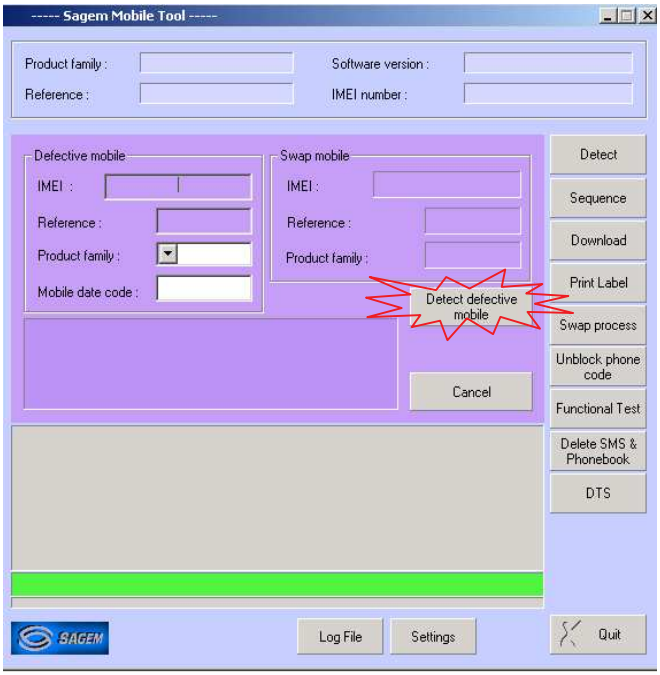
The following screen appears :



Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

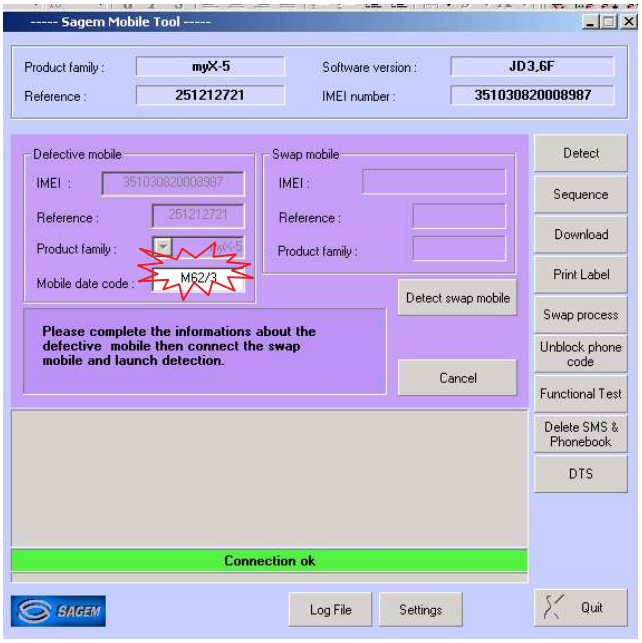
Step 2

Please click on « Detect defective mobile » button



Step 3a

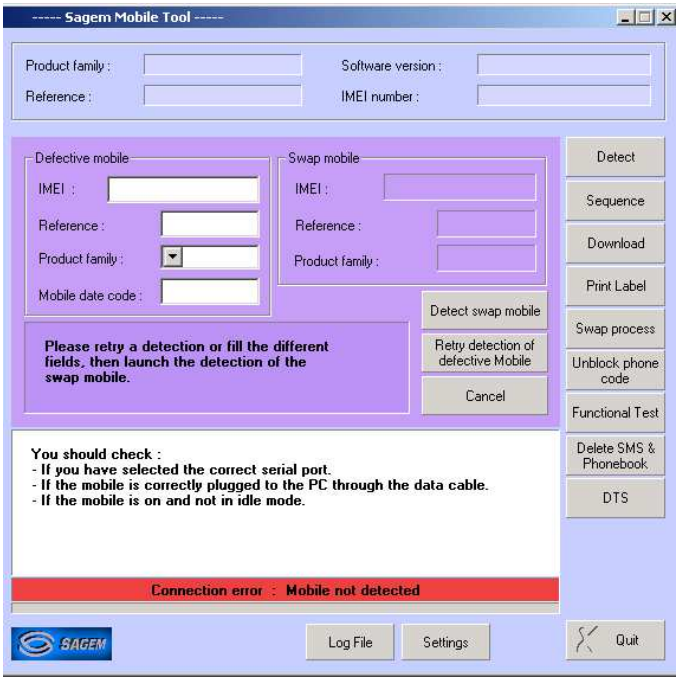
The following screen appears : the mobile is recognized. Then, enter the mobile date code



Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

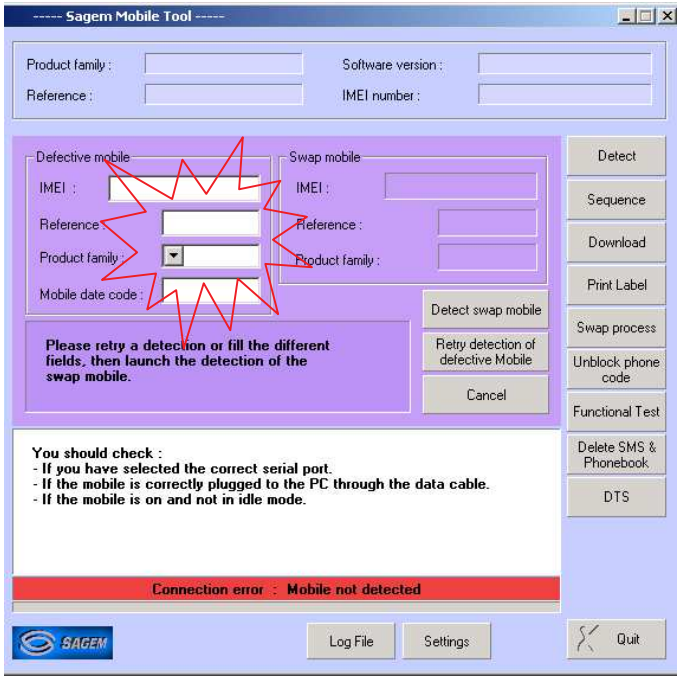
Step 3b

If this screen appears, the mobile is not recognized.



Step 3c

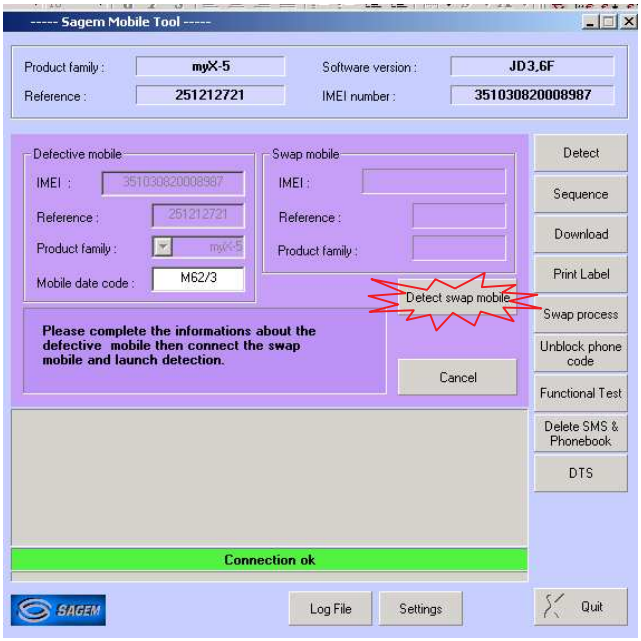
You must fill in the blanks requested according to the information written on the production label



Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

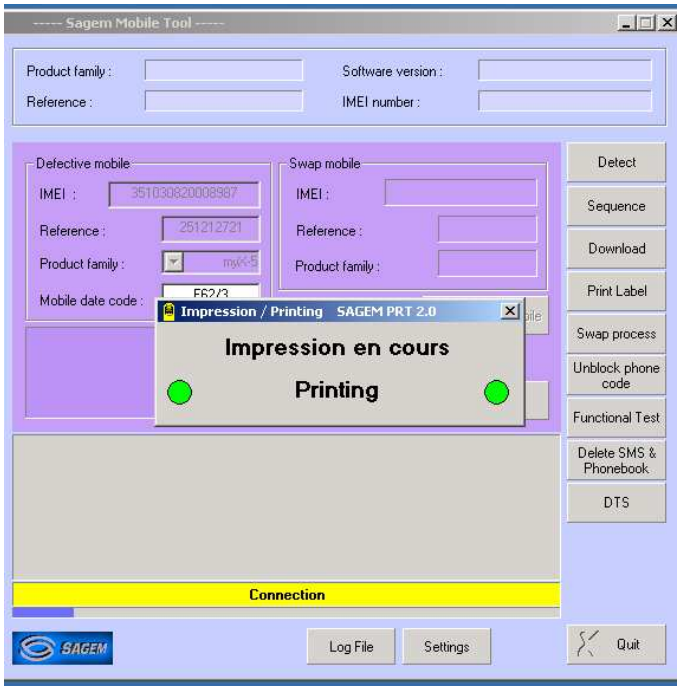
Step 4

Plug in and switch on the new mobile, then push on the "Detect Swap mobile" button



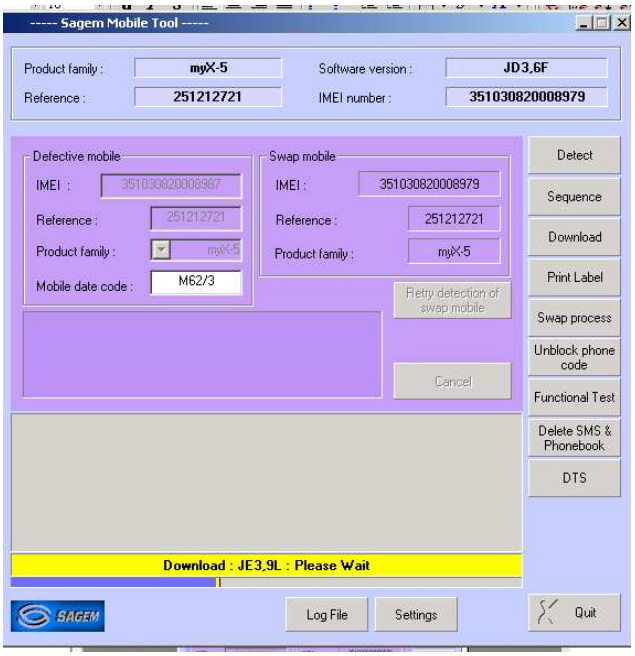
Step 5

After clicking on "OK", SMT prints the label which will be used to close the ESD bag of the defective board.

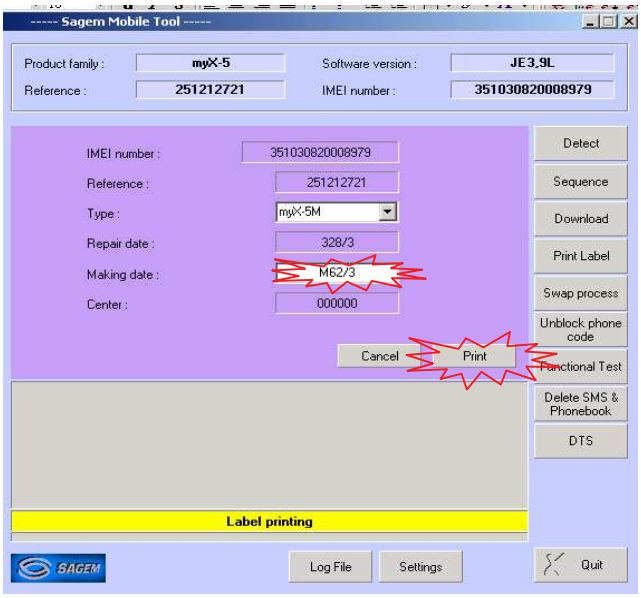


Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

Step 6
The downloading is stats if the mobile needs to be updated



Etape 7
SMT opens the following screen to print the new label : please dial the "MAKING DATE" (Production date) written on the label of the defective mobile.
Then stick the new label on the functional mobile



The swap board sequence is completed.

Sagem Communication Groupe SAFRAN	CHARGER TEST	TEST SHEET 02
D2005		1/1

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

Test description

To test the different battery chargers for every mobile

Test procedure

1. Check visually the charger connector
2. Connect the charger to the mobile and check battery icon scrolling
3. Access the HOTLINE menu by pressing ▽ and then *
4. Go to the APPLICATION menu and check that the battery tension is incrementing (BATTERY STATE menu)

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

Test description :

To test the batteries for D2005 mobiles.

Tools needed :

Cadex C7000 / C7200 / ASTRATEK.

Test procedure :

Measure the internal resistance with the CADEX battery tester or the ASTRATEK.

Read the result :

- If the internal resistance is lower than 300mOhms the battery is OK.
- If the internal resistance is greater than or equal to 300mOhms the battery is defective.

Notice: Choose on the battery type (Li-ion), the nominal battery voltage (3.6V) and the battery capacity (850mA).

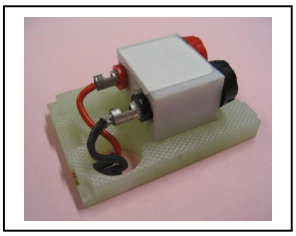
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

Test description:

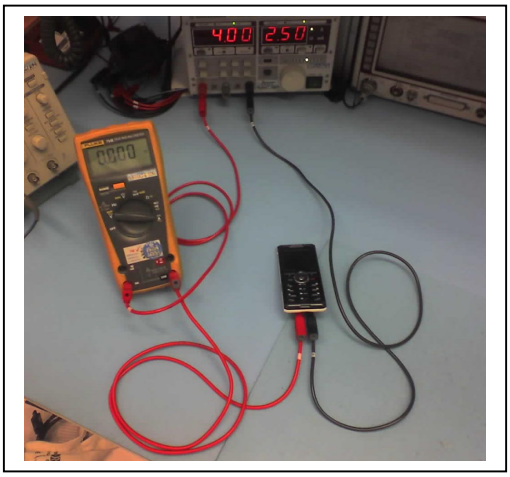
This test is for checking the mobile's consumption.

Tools needed:

A voltmeter
An Ammeter interface.
Battery adaptors (code :252627947).



How to plug:



- Connect the "+" terminal of the voltmeter to the '+' terminal of the ammeter.
- Connect the 'COM' or GND' terminal of the voltmeter to the red terminal of the battery adaptors.
- Connect the black terminal of the battery adaptors to the '-' terminal of the voltmeter.

Measuring in stand by mode:

1. Insert an operator SIM card.
2. Plug the mobile (as shown above).
3. Turn on mobile then wait until stand by mode.
4. If the value is greater than 2mA the mobile is defective.

⚠ Set the ammeter on direct current (100mA).

Measuring when turned off:

1. Insert an operator SIM card.
2. Plug the mobile (as shown above).
3. Turn on mobile.
4. Wait until complete ignition of mobile and then shut it.
5. If the value is greater than 1mA the mobile is defective.

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

Access to the "HOTLINE" menu

NOTE: “Hotline” menu is accessible with a valid SIM card

Access to the "HOTLINE" menu is possible with a powered up mobile.

The "HOTLINE" menu is accessed by pressing on the “menu” key and then the * key (long press).

Enter the corresponding code (in bold) to choose the menu to be viewed.

To go out the "HOTLINE" menu, press successively on the **C** key to return to the operational screen of the mobile.

Description of handset "HOTLINE" menu

- APPLICATION
  - VERSION: reads the installed software version and the IMEI code.
  - BATTERY: gives the value of the battery voltage.
- PROM : Not used.
- SIM LOCK : accesses the "SIM LOCK" menu (password required).
- LCD TEST
  - BLACK : displays the screen in black.
  - WHITE SCREEN
  - RED SCREEN
  - GREEN SCREEN
  - BLUE SCREEN
  - WHITE DRAUGTHBOARD
  - FOR PHOTO : displays functions on the screen to take a photo.
  - VIBRATING DEVICE : tests the vibrating device.
  - And LED (if the handset has this fonction)

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

Test description

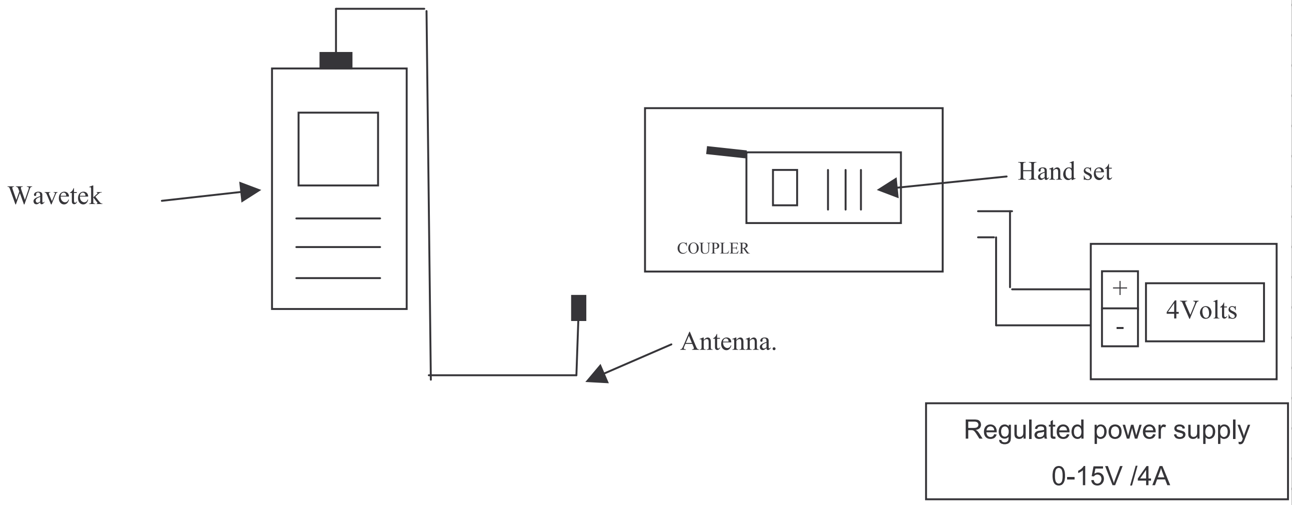
This test evaluates handset radio fonction during a call.

Required tools

a Wavetek or other network simulation tools.
a radio golden sample.
an adjustable regulated power supply 0-12V / 4A

Installation

RF test



Calibration process

1. Position the calibration tool on the radio interface (1) (provided with a SIM test card)
2. Press the start key on the network simulation tool.
3. And press on "AUTOTEST".
4. Choose the corresponding program using the "UP" et "DOWN" arrows.

   Mobile : **XXXXXXX**
   Frequency range : **GSM, DCS ,PCS (if used)**,
   Coupling type : **Antenna**.
5. Press "ENTER" and wait until the end of the calibration.
6. Follow the instructions shown on the Wavetek.
7. Compare the network simulation tool result with the calibration report.
8. If there are any differences, adjust the network simulation tool. (we can have a difference of 0,5 bB)
9. Do the calibration process (point 5) again, to be sure the calibration is correct.

Remark : You must do a radio calibration each week, if you receive any handsets during that week.

Reference document : User Guide for calibration Tool (SAGEM part number : 251407059)

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

Test procedure

1. Position the handset on the radio interface (1) (provided with a SIM test card)
2. Switch it on and Switch on the Wavetek (or other network simulation tool) and press on "AUTOTEST".
3. Choose the corresponding program using the "UP" et "DOWN" arrows.

   Mobile : Mobile reference.
   Frequency range : **GSM, DCS ,PCS (if used)**,
   Coupling type : **Antenna** .
4. Press "ENTER" and wait until the end of the calibration.
5. Follow the instructions shown on the Wavetek (or other simulation tool).

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

Test description

This test evaluates the functioning of the handset photo function.

Required tools

- The SAGEM test chart reference
- A USB data link
- Pictures and sounds transferring software from handset to PC ("My pictures and sounds.exe " available on www.planetsagem.com)
- A JPEG files publishing software

Test precautions
-Camera function test has to be done in a luminous environment
-Select the high resolution mode in the Settings / Photo / Size menus
- The lens must be clean .if not cleaned with a lint free wipe

Test procedure

– Put handset at about 30 cm from the colour test chart in order to visualize test chart entirely (inactive zoom). (Pattern for camera test : 251349685)
– Take photo by pressing on the dedicated key.
– Save the photo in the mobile.
– Link handset with the data link (serial / USB/ IRDA), download the picture (by means of My Pictures and sounds software) to the computer.
– Open picture file by means of a JPEG editor.
– Check the Colour / grey gradation presence

Remarks: **This test aims at verifying that the camera functions correctly.**
Result disparities, being able to be obtained by different situations (computer screen / ambient lighting / distance …), do not allow to confirm a qualitative judgment of the photo.

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

Test description

This test evaluates the good functioning of the handset video.

function. ***Required tools***

- USB data link
- Pictures, video and sounds transferring software from mobile to PC ("My pictures and sounds.exe " available on www.planetsagem.com)
- A 3GP files publishing software (ex: Quick Time)

Test precautions
-Camera function test has to be done in a luminous environment
-In the Camera menu, select Video Camera and Size restriction: None
- The lens must be clean. If not cleaned with a lint free wipe

Test procedure

- Check that the SILENT MODE is unselected
- Record an entire video sequence by pressing on the dedicated key.
- Save the video in the mobile.
- Link handset with the data link (serial / USB/ IRDA), download the video (by means of My Pictures and sounds software) to the computer.
- Open video file by means of a 3gp editor (ex: Quick Time 6.5).
- Check video totality presence

Remarks: This test aims to at verifying that the good operating video functions correctly. Result disparities, being able to be obtained by différent situations (screen computer / ambient lighting / moving speed ...), do not allow to confirm a qualitative judgment on the video.

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet
Procédure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

Test description

This test is to verify the good functioning of IRDA,BLUETOOTH and MEMORY CARDS.

Required tools

2 Mobiles with IRDA , BLUETOOTH or MEMORY CARD function.

Headset BLUETOOTH

Memory card.

Test procedure

IRDA:

Transfer informations from the first mobile to the second via IRDA et verify their presence in the memory of this mobile to validate the good transfert of the datas.
Reverse the procedure to validate the good reception of the datas.

BLUETOOTH:

Connect the headset to a mobile.
Proceed to a communication with the headset BLUETOOTH from a mobile to the other and verify the quality of reception and emission.

Remarks:

Verify the good function of the BLUETOOTH accessory before carry on the test .

MEMORY CARD :(according to the models and presence of the function)

Insert a memory card into the mobile and verify its good recognizing by the phone .

CHAPTER 5 - MAINTENANCE PROCEDURES

5.1 TECHNICAL WORK LEVELS

There are four technical work levels:

- Level 0,
- Level 1,
- Level 2,
- Level 3.

Each level represents a maintenance degree that depends on which elements are to be removed.

Note: Presence or use on the radiotelephone of non genuine element (material and software) leads automatically the exclusion from SAGEM warranty

5.2 SHORT LOOP PROCESS

1. Initialisation

From the communication by Sagem and the reception of the concerned products by the short loop process, the Repair Centre shall comply with the above procedure. The application of the Short loop process will end when received the authorisation of repairing given by Sagem.

2. Administrative checks to be done by the Repair Centre

- Authorisation from Sagem for treating the reference received (Part number)
- Process to be applied : short loop process or normal process (DTS, Normal, etc…). The Repair Centre shall check if the product received has to be treated according to the short loop process.
- Controls on the warranty conditions and DOA conditions (if the Repair Centre is authorised) communicated by Sagem.

3. Tests and controls :

- Checks if there are no external shocks or oxidation marks (the covers shall be dismantled in case of exchangeable covers)
- Checks and confirmation of the defect (real call with SIM, functional test keypad , display, vibrating device, etc…)
- Check the concordance between the defect declared by the end-user and the defect observed
- Call back of the end-user or dealer (as far as possible) either in case of misunderstanding of the defect declared by the end-user or in case of the non observation of the defect. (see the appendix “Additional information about the No Fault Found –NFF-> at the end of this document allowing according to the case to understand the return of the product)

If any doubts occurred concerning out of warranty products received, the Repair Centre shall send to Sagem Montauban (with knowledge to the Area Manager and Support Engineer) the photo of the defect.

N.B :

- The handsets shall not be dismantled (by using screwdrivers) except previous request from Sagem.
- The Repair Centre will not make any Repair (such as spare parts exchange or software upgrade) except previous communication of Sagem. The exchanges of handsets or accessories are the only intervention authorised.

4. Exchange by the Repair Centre

- The Repair Centre will use the products delivered for swap to the Repair Centre for exchanging the products to the end-users (except particular process defined by Sagem).
- The under- warranty handsets and accessories received shall be exchanged to the end-user.
- The under- warranty handsets and accessories declared No Fault Found (NFF) shall be exchanged to the end-users except previous communication of Sagem.
- The Out of warranty handsets and accessories (oxidation, shocks, …) will be repaired by the Repair Centre after acceptation by the customer of an estimate according to the Sagem out of warranty repair prices communicated.
- The under- warranty and out of warranty handsets shall be sent to Sagem Montauban.
- In the frame of the Short loop process, there is no level 1 (L1) intervention

5. Reports

An exchange of an handset and its accessories shall be codified Level 3 (L3)
An accessory exchange shall be codified Level 0 (L0).

The Repair Centre shall capture all the information required for issuing and sending the Repair Reports and Status reports according to the Contractual frequency defined. The Reports shall includes the products treated by the Repair Centre under- warranty or out of warranty.

6. Procedure

From the beginning date of the Short loop process application and minimum each week, the Repair Centre shall ship the products (handsets and accessories) to Sagem Montauban.

6.1. Handsets :

- MRA Procedure for the after-Sales products (one MRA number for the products concerned by the short loop).
- MRA Procedure for DOA products (one MRA DOA number for the products concerned by the short loop) if the Repair Centre is authorised to treat the DOA products.

The MRA request shall be sent to Sagem Montauban (with knowledge to the Area Manager and Support Engineer).
The shipment of products to Sagem Montauban shall comply with the MRA procedure. Furthermore each products shall be sent with the Return Product Sheet filled in indicating the defect declared by the end-user and the defect observed by the Repair Centre (Sagem Defect codes).
The NFF products sent to Sagem Montauban shall be identified by using separate package. Furthermore this products shall be sent with the complete description of the defect declared by the end-user (not codified).
The accessories received by the Repair Centre shall be sent to Sagem Montauban sent back

attached with the handset (not connected to the handset).

6.2. Accessories :

For the accessories received without the handsets, the procedure is the following:

Accessories return procedure to Sagem Montauban to be used. The Repair Centre shall indicate on the parcel Accessories + model (ex : myC 3-2) for the accessories received in the Repair Centre without the handsets.

7. Sagem Montauban

Sagem Montauban will ship back to the Repair Centre the same quantity of handsets and accessories as the quantity received.

8 Additional information about the no fault found

In any case: Ask to the end-user the frequency of the defect and the circumstances of its apparition (during an incoming or out-going call, while playing, while downloading, etc.). Try to answer the questions: Where? When? How?

· If the customer complains about a “Power supply / charging” failure : (shutting down of the mobile, problem of booting, etc.);
o During which operation ? In which circumstances ?
o What is the state of the battery and the charger before shipment to the repair centre ?
If the mobile shuts down by itself, must he enter his code pin, adjust the date and the hour when rebooting the phone?

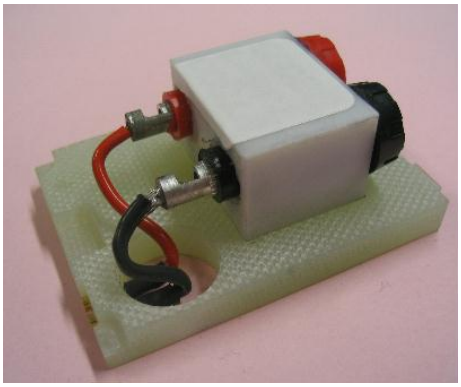
· If the customer complains about a communication problem:
o What are his residence zone and the reception level of the mobile (Number of receipt bar);
o What is the state of the battery when the defect appears?
o In case of loss of communication :
§ With or without total extinction of the mobile?
§ Does the loss of communication occur always in the same place and with the same person?
§ Does the loss of communication occur while browsing in the menus, during the communication, or during playing or downloading?

· If the customer complains about a problem of blockage of key of the keyboard:
o In which circumstances does the problem occur?
o Did he activate the keypad locking ?
o Did he change or remove the upper cover ?
o Which are the non functioning keys ?

5.3 MAINTENANCE TOOLS

The following tools are necessary to carry out maintenance operations :

- Artificial battery B2005
  Artificial battery permitting to do different current measure.
  Code : 252627947



- D2005 my401X CALIBRATION TOOL
  Calibration Tool.
TriBande 900/1800/1900
  Code : 252633859

- D2005 my401L CALIBRATION TOOL
  CALIBRATION TOOL.
Tribande 850/1800/1900.
  Code : 252633776

LEVEL 0 MAINTENANCE

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Nota : This procédure must be performed by a technician provided with gloves, to avoid any risk of pollution.

Tools :

Not applicable.

Preliminary operation :

Switch of the mobile phone.

Removal procedure :

1. Remove the back cover (Proc sheet 1 01).
2. Take out the battery (1) by first extracting the stop pins (2).

Placement procedure :

1. Place the battery by first inserting the upper section.
2. Place the back cover (Fiche proc 1 01).

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

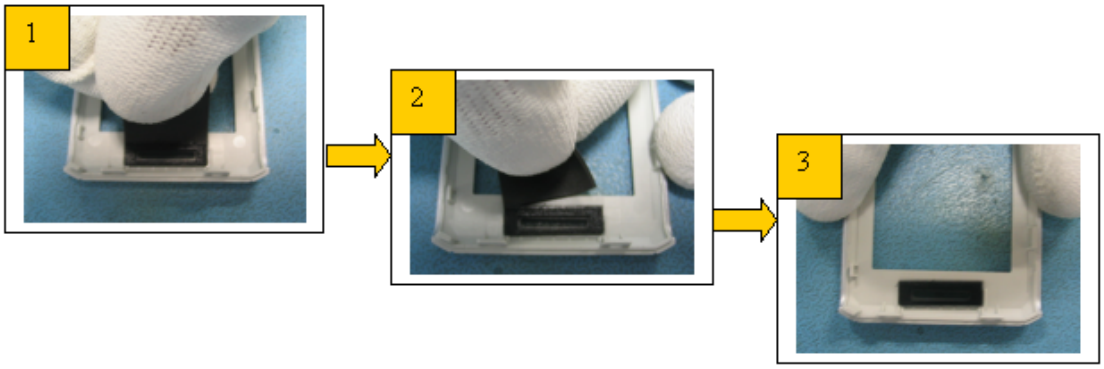
Nota : This procedure must be performed by a technician provided with gloves, to avoid any risk of pollution.

Tools :

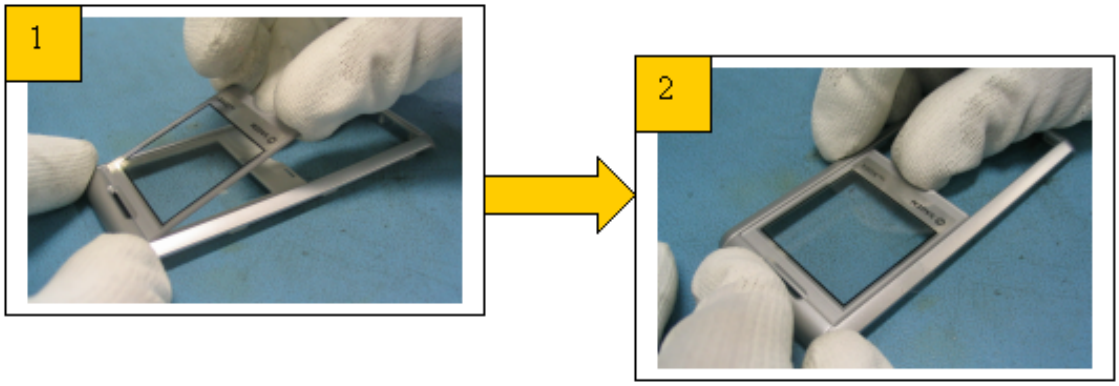
Not applicable.

Procedure to assembly the front cover:

1. Etamine Audio stick.



2. Window stick.



LEVEL 1 MAINTENANCE

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

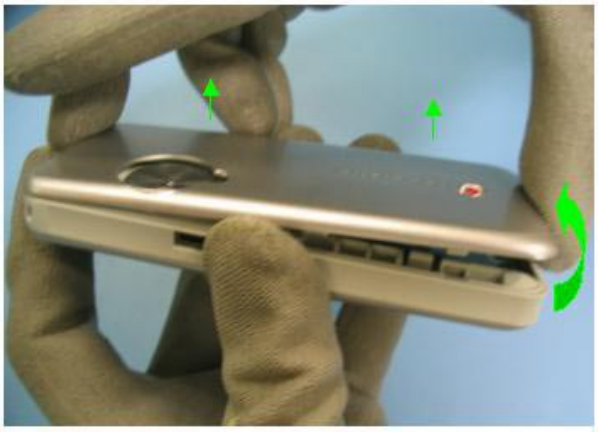
Nota : This procedure must be performed by a technician provided with gloves, to avoid any risk of pollution.

Tools :

Not applicable.

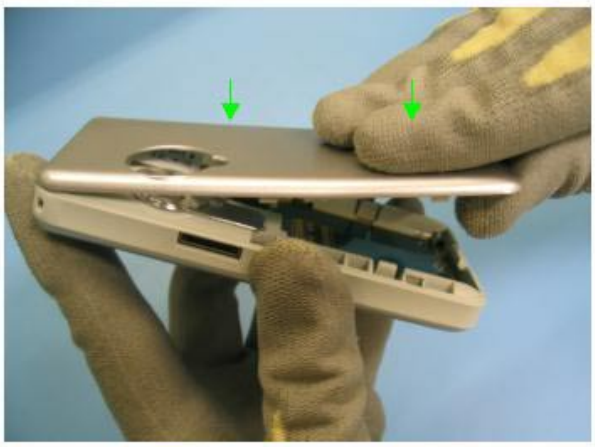
Removal procedure :

1. Unclip the back cover.
2. Pull up the back cover, beginning by the lower part.
3. Remove the back cover.



Placement procedure :

1. Place the back cover, positioning the upper part.
2. Then clip the back cover on the equipped module.

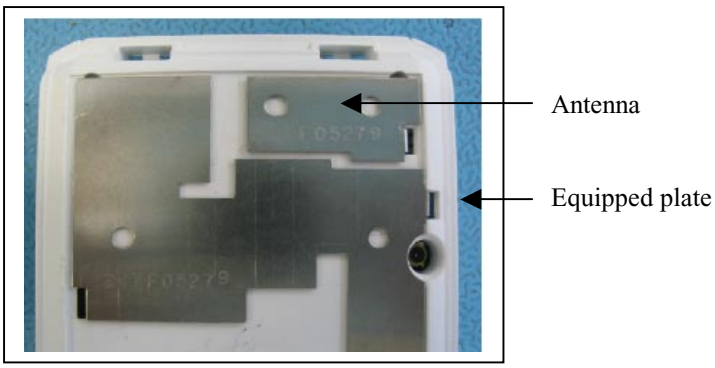


Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

This operation must be performed with gloves.

FOR THIS TYPE OF MOBILE APPLY PROCEDURE : Proc sheet 1 15

Never separate the equipped plate from its antenna.



Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

This procedure must be applied with gloves.

Tools:

None.

Preliminary operations:

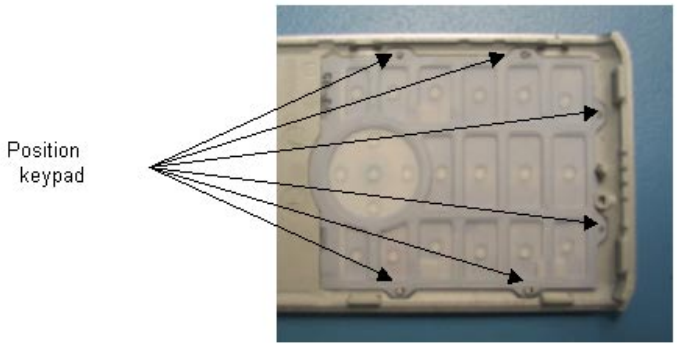
1. Remove lower housing (Proc sheet 1 01).
2. Remove the battery (Proc sheet 0 01).
3. Remove the upper housing (Proc sheet 1 13).

Removal procedure:

1. Remove the keypad from the upper housing.

Placement procedure:

1. Clean the keypad with compressed air.
2. Place the keypad in the centring pegs of upper housing.



Opération complémentaire :

1. Place upper housing (Proc sheet 1 13).
2. Place the battery (Proc sheet 0 01).
3. Place lower housing (Proc sheet 1 01).

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

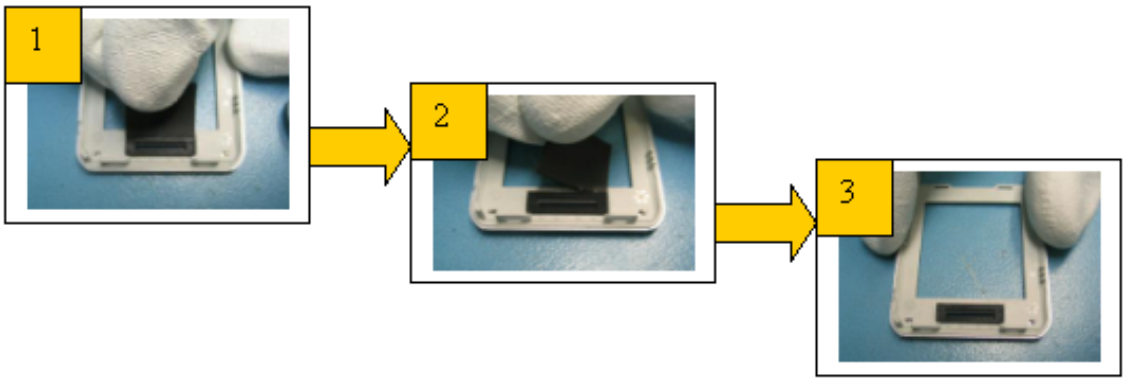
This procedure must be carried out with gloves.

Tools :

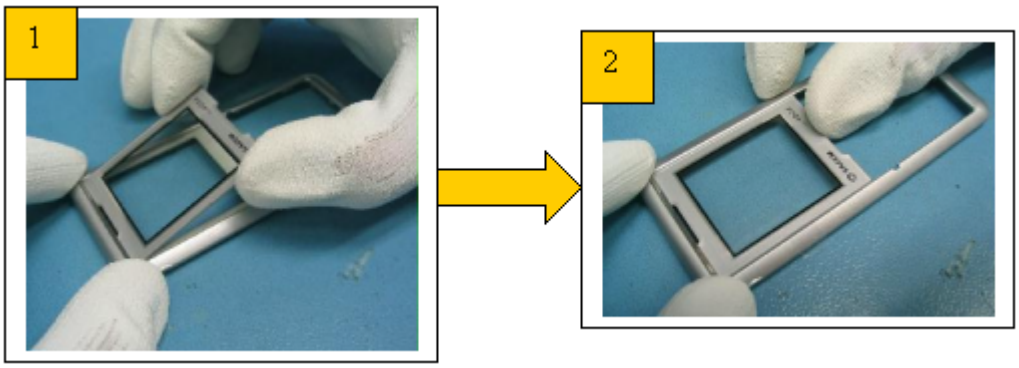
Plectrum.

Upper housing assembly procedure:

1. Sticking of the muslin.



2. Sticking of the window.



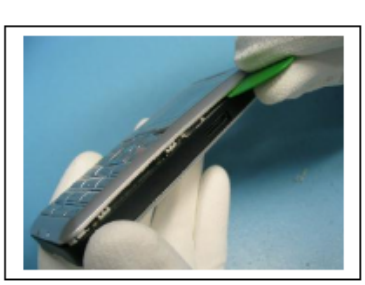
Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Preliminary operations:

1. Remove lower housing (Proc sheet 1 01).
2. Remove the battery (Proc sheet 0 01).

Removal procedure:

1. Unclip upper housing as shown by the arrow bellow.
2. Remove keypad (Proc sheet 1 04).



Placement procedure:

1. Place the keypad (Proc sheet 1 04) on the upper housing.
2. Clip the central unit on the upper housing (starting with upper part).

Further operations:

1. Place the battery (Proc sheet 0 01).
2. Place lower housing (Proc sheet 1 01).

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Tools:

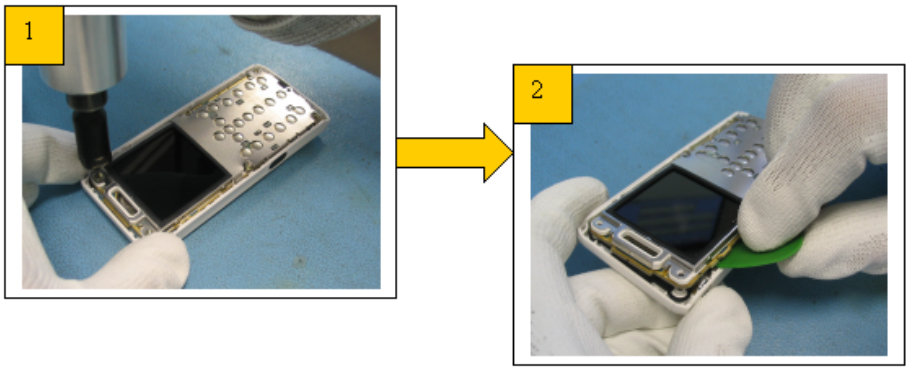
Screwdriver Torx 0.6 mm. Plectrum: 

Preliminary operations:

1. Remove lower housing (Proc sheet 1 01).
2. Remove battery (Proc sheet 0 01).
3. Remove upper housing (Proc sheet 1 13).
4. Remove keypad (Proc sheet 1 04).

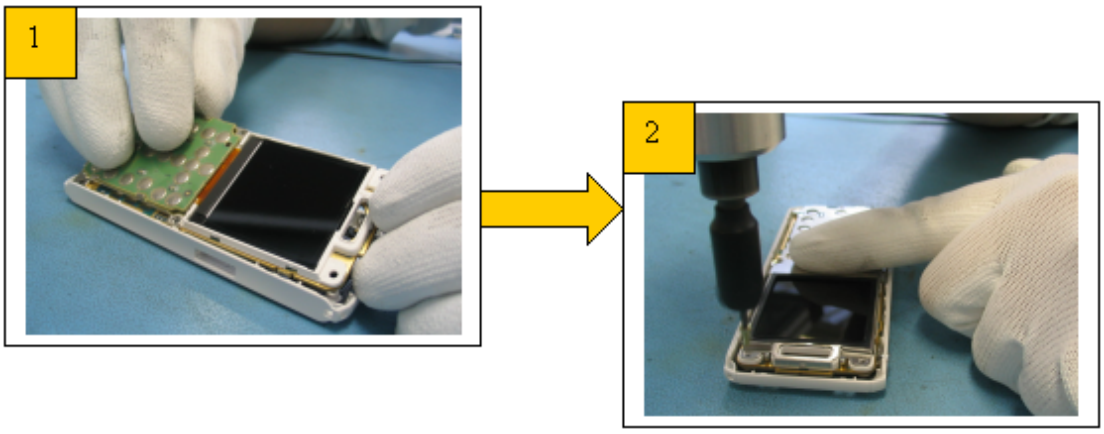
Removal procedure:

1. Take off the six fixing screws.
2. Separate the EIC from the plate.



Placement procedure:

1. Position the EIC on the plate (inserting the connector first).
2. Position and Clip the frame (Proc sheet 1 23).
3. Screw the radio central unit (torque of 0.23 N.m).



Further operations:

1. Place keypad (Proc sheet 1 04).
2. Place upper housing (Proc sheet 1 13).
3. Place the battery (Proc sheet 0 01).
4. Place lower housing (Proc sheet 1 01).
5. Proceed to the Wavetek test (Test sheet 06).

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Tools:

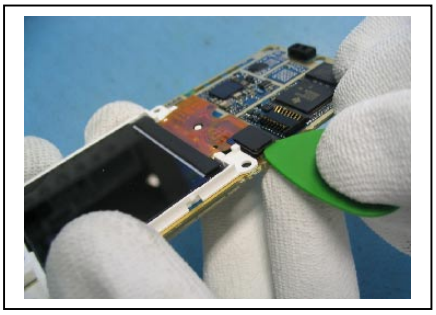
Plectrum.

Preliminary operations:

1. Remove lower housing (Proc sheet 1 01).
2. Remove the battery (Proc sheet 0 01).
3. Remove upper housing (Proc sheet 1 13).
4. Remove the keypad (Proc sheet 1 04).
5. Remove the equipped module (Proc sheet 1 15).
6. Remove the frame (Proc sheet 1 23).
7. Remove the keypad board unit / shield (Proc sheet 1 33).

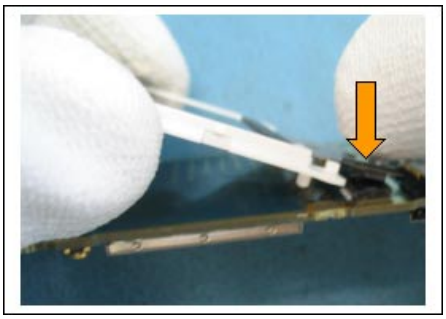
Removal procedure:

1. Unclip the LCD.
2. Put a window protection.



Placement procedure:

1. Take off window protection.
2. Clip LCD on EIC.



Further operations:

1. Place the keypad board unit / Shield (Proc sheet 1 33).
2. Place the frame (Proc sheet 1 23).
3. Place the equipped module (Proc sheet 1 15).
4. Poser le clavier (Fiche proc 1 04).
5. Place upper housing (Proc sheet 1 13).
6. Place battery (Proc sheet 0 01).
7. Place the battery (Proc sheet 0 01).
8. Place lower housing (Proc sheet 1 01).

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Tools:

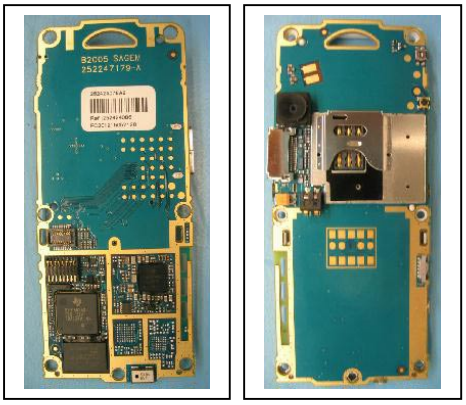
None.

Preliminary operations:

1. Remove lower housing (Proc sheet 1 01).
2. Remove battery (Proc sheet 0 01).
3. Remove upper housing (Proc sheet 1 13).
4. Remove keypad (Proc sheet 1 04).

Removal procedure:

1. Unscrew central unit.
2. Remove equipped module (Proc sheet 1 15).
3. Remove frame (Proc sheet 1 23).
4. Remove the keypad board / shield set (Proc sheet 1 33).
5. Remove LCD (Proc sheet 1 16).
6. Remove the micro rubber (Proc sheet 1 34).
7. Remove electronic board.



Placement procedure:

1. Place the micro rubber (Proc sheet 1 34).
2. Place LCD (Proc sheet 1 16).
3. Place the kaypad board / shield set (Proc sheet 1 33).
4. Place the frame (Proc sheet 1 23).
5. Place equipped module (Proc sheet 1 15).
6. Screw central unit.

Preliminary operations:

1. Place keypad (Proc sheet 1 04).
2. Place upper housing (Proc sheet 1 13).
3. Place the battery (Proc sheet 0 01).
4. Pace lower housing (Proc sheet 1 01).

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Tools:

Tweezers.

Preliminary operations:

1. Remove lower housing (Proc sheet 1 01).
2. Remove battery (Proc sheet 0 01).
3. Remove upper housing (Proc sheet 1 13).
4. Remove keypad (Proc sheet 1 04).
5. Remove equipped module (Proc sheet 1 15).
6. Remove frame (Proc sheet 1 23).
7. Remove the keypad board / shielding set (Proc sheet 1 33).
8. Remove LCD (Proc sheet 1 16).

Removal procedure:

1. Take off the side key with the tweezers.

Placement procedure:

Same as removal procedure.

Complementary operations:

1. Place the LCD (Proc sheet 1 16).
2. Place the keypad board / shield set (Proc sheet 1 33).
3. Place the frame (Proc sheet 1 23).
4. Place equipped module (Proc sheet 1 15).
5. Place the keypad (Proc sheet 1 04).
6. Place upper housing (Proc sheet 1 13).
7. Place the battery (Proc sheet 0 01).
8. Place lower housing (Proc sheet 1 01).

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Preliminary operation

1. Control of the IMEI label integrity
2. Remove the equipped electronic board (**Proc sheet 1 18**)
3. Control of any oxidation marks (on the equipped electronic board and under the metal dome)

Return procedure :

(a) The equipped electronic boards are packaged in individual electrostatic envelopes. They must be stocked in their original package of reception , to insure a good protection against external attacks (see enclosed photos)
(b) During the equipped electronic boards manipulation , gloves and electrostatic strap must be worn at all times.
(c) The defective equipped electronic boards have to be returned to SAGEM factory, packaged individually, in the original package (see enclosed photos) , in the appropriate ESD box : One box per Sagem reference (check reference written on the box).
(d) The defective board should display the defect code written on a sticker (placed on the shielding) and written on the ESD bag label too (printed with SMT).

Note :

- **On the defective boards , it is necessary to check visually under the metal dome to discover if it shows oxidation marks. The defective boards should be returned with their original metal dome**
- **Boards with oxidation should not to set in conformance with the warranty**
- **The defective boards must never be mixed with the complete mobiles**

Placement procedure :

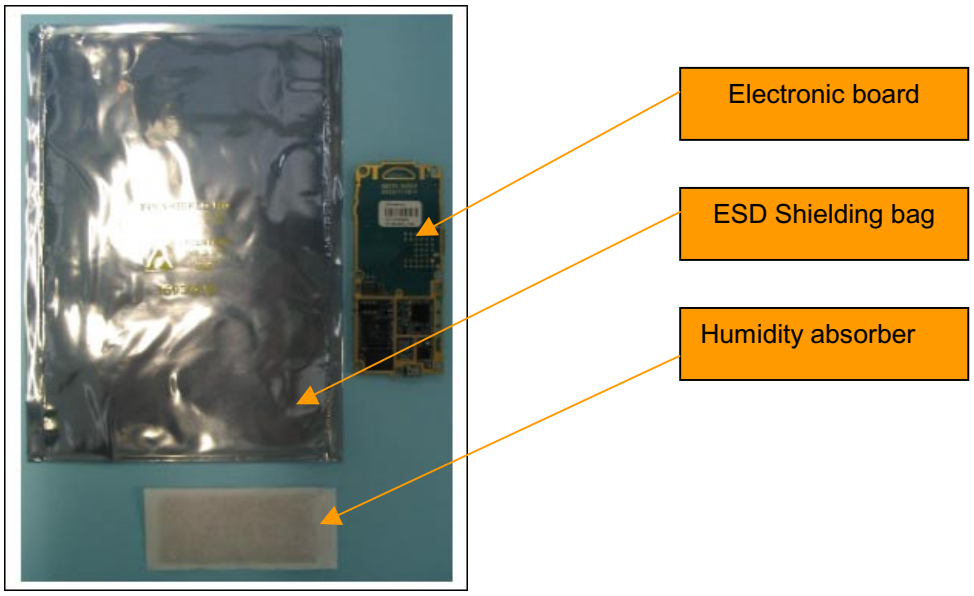
1. Take a board in the stock of swap boards from the same Sagem reference.

Further operations :

1. Place the new equipped electronic board on the assembly plate. .(**Proc sheet 1 18**)
2. Follow stages (see enclosed photos)

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

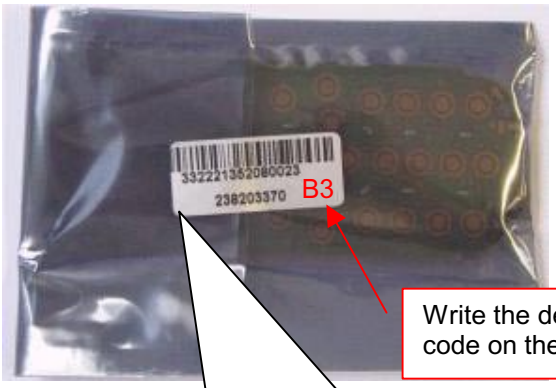
Example of equipped electronic boards packaging :



Boards packaging SAGEM -> ARC

ESD shielding bag closed by the product label

Boards packaging ARC -> SAGEM



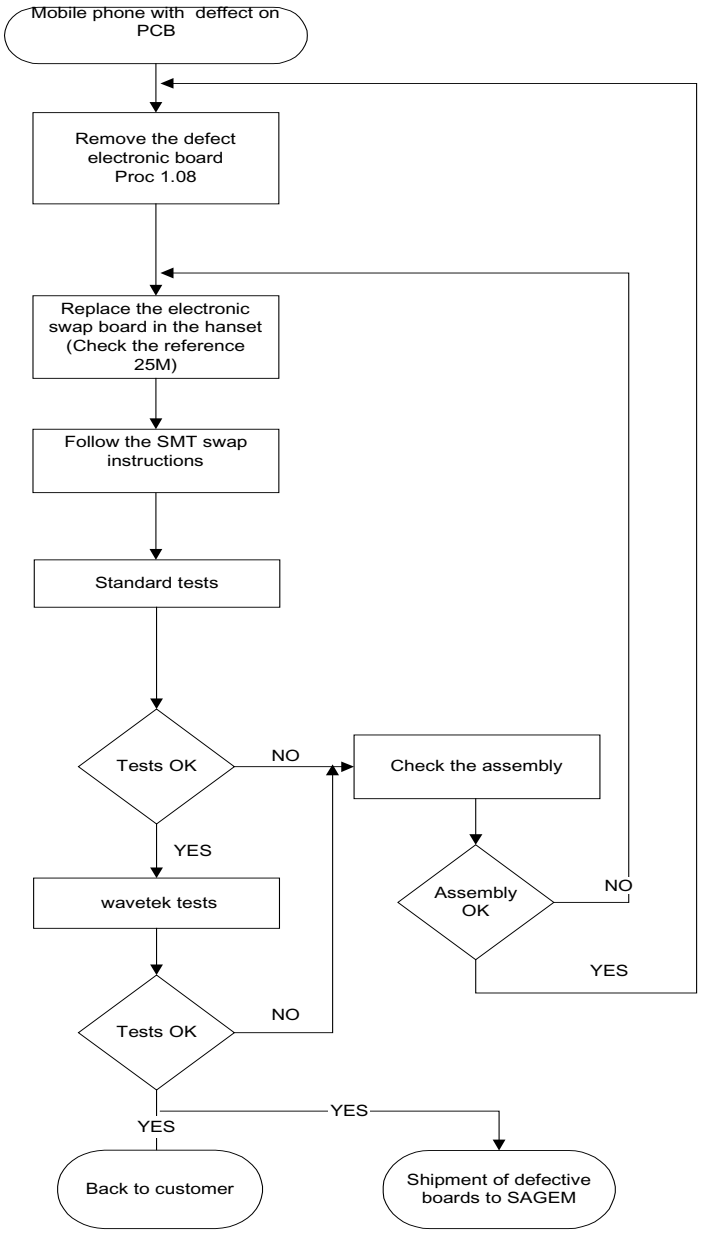
Write the defect code on the label

ESD shielding bag closed by the IMEI label

SAGEM electrostatic shielding box
Reference 20 boards: 25 141059-6
Reference 100 boards: 25 141060-3

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Electronic board exchange process



Detection of N3 defect : See the Technical documentation

-Check oxidation under the metal dome .

- Audio parameters written on the new swap board

- Display test : Hot Line Menu
- Keypad test
- Vibrating device test

- See Technical documentation (test sheet 05)

- Follow return instructions page 5-31

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Tools:

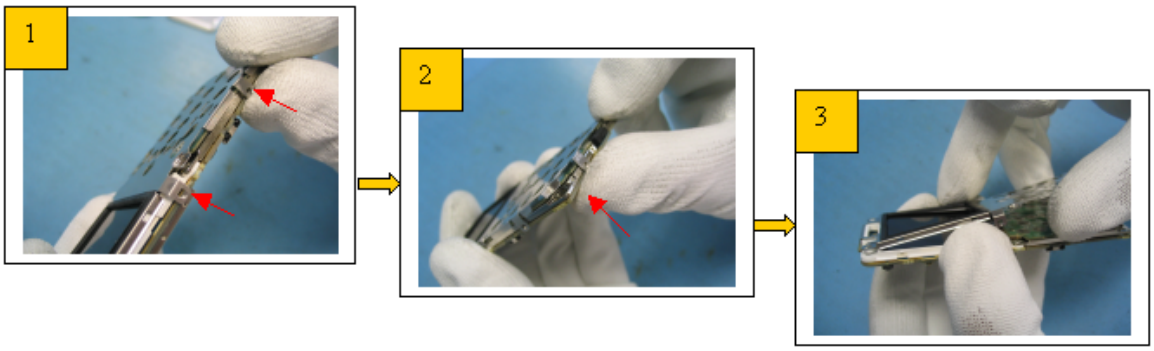
None.

Preliminary operations:

1. Remove lower housing (Proc sheet 1 01).
2. Remove battery (Proc sheet 0 01).
3. Remove upper housing (Proc sheet 1 13).
4. Remove keypad (Proc sheet 1 04).
5. Remove equipped module (Proc sheet 1 15).

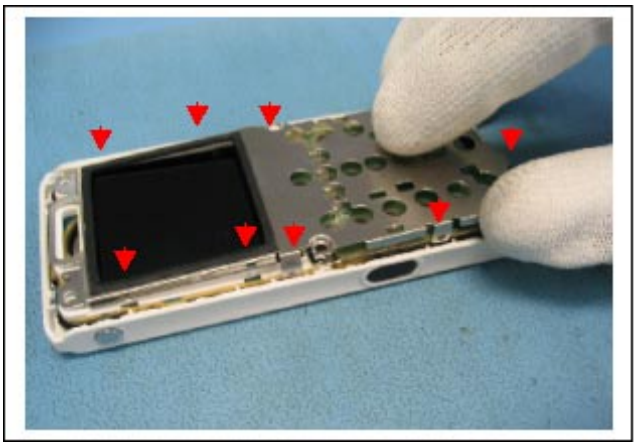
Remove procedure:

1. Unclip frame.



Placement procedure:

1. Position frame on equipped module.
2. Clip frame on equipped module (Arrows).



Further operations:

1. Place equipped module (Proc sheet 1 15).
2. Place keypad (Proc sheet 1 04).
3. Place upper housing (Proc sheet 1 13).
4. Place battery (Proc sheet 0 01).
5. Place lower housing (Proc sheet 1 01).

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Tools :

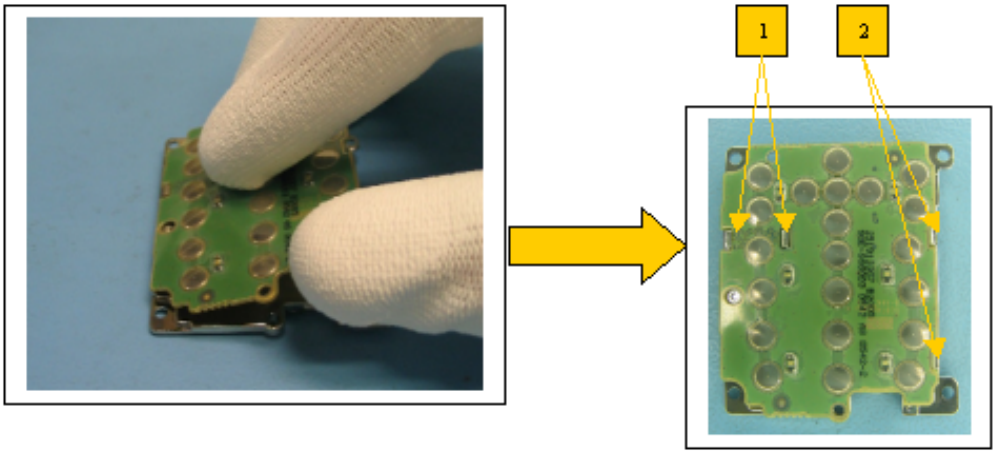
None

Preliminary operations :

1. Remove lower housing (Proc sheet 1 01).
2. Remove battery (Proc sheet 0 01).
3. Remove upper housing (Proc sheet 1 13).
4. Remove keypad (Proc sheet 1 04).
5. Remove equipped module (Proc sheet 1 15).
6. Remove frame (Proc sheet 1 23).

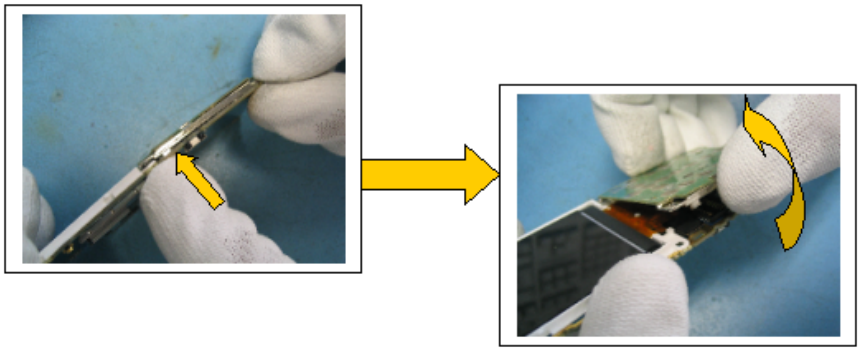
Keypad board assembly procedure:

1. Position & clip the keypad board on the shield on the side of the keypad connector (1).
2. Shut down and clip again (2).



Removal procedure:

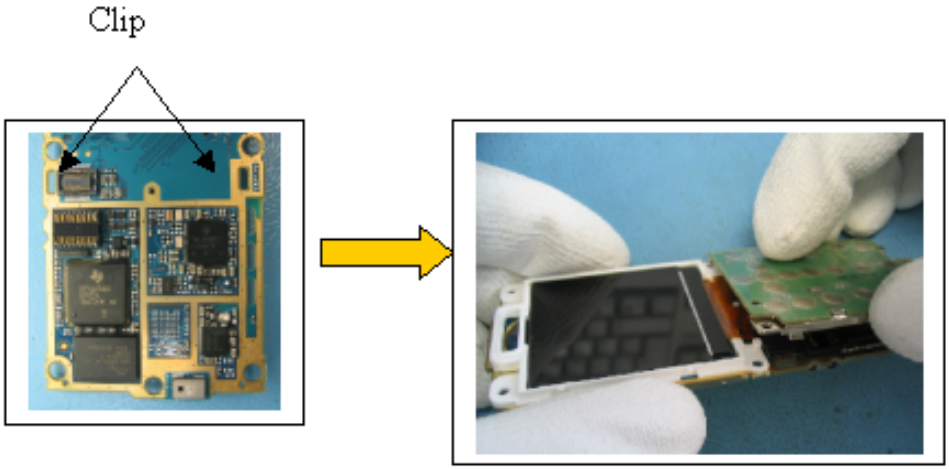
1. Unclip the keypad board unit / EIC shield on the IRDA side.



Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Placement procedure:

1. Clip the keypad board unit / EIC shieldE.



Further operations :

1. Place the frame (Proc sheet 1 23).
2. Place equipped module (Proc sheet 1 15).
3. Place the keypad (Proc sheet 1 04).
4. Place upper housing (Proc sheet 1 13).
5. Place the battery (Proc sheet 0 01).
6. Place lower housing (Proc sheet 1 01).

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Tools:

None.

Preliminary operations:

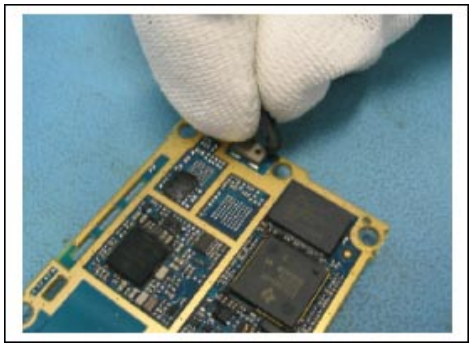
1. Remove lower housing (Proc sheet 1 01).
2. Remove battery (Proc sheet 0 01).
3. Remove lower housing (Proc sheet 1 13).
4. Remove keypad (Proc sheet 1 04).
5. Remove equipped module (Proc sheet 1 15).
6. Remove frame (Proc sheet 1 23).
7. Remove keypad board / shield set (Proc sheet 1 33).
8. Remove LCD (Proc sheet 1 16).

Removal procedure:

1. Take off the micro rubber.

Placement procedure:

1. Place the micro rubber.



Further operations:

1. Place LCD (Proc sheet 1 16).
2. Place keypad board / shield set (Proc sheet 1 33).
3. Place frame (Proc sheet 1 23).
4. Place equipped module (Proc sheet 1 15).
5. Place keypad (Proc sheet 1 04).
6. Place upper housing (Proc sheet 1 13).
7. Place battery (Proc sheet 0 01).
8. Place lower housing (Proc sheet 1 01).

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

Tools:

None.

Preliminary operations:

1. Remove lower housing (Proc sheet 1 01).
2. Remove battery (Proc sheet 0 01).
3. Remove upper housing (Proc sheet 1 13).
4. Remove keypad (Proc sheet 1 04).
5. Remove equipped module (Proc sheet 1 15).

Removal procedure:

1. Take off the speaker / rubber set.

Placement procedure:

1. Position and place the speaker / rubber set.

Further operations:

1. Place equipped module (Proc sheet 1 15).
2. Place keypad (Proc sheet 1 04).
3. Place upper housing (Proc sheet 1 13).
4. Place the battery (Proc sheet 0 01).
5. Place lower housing (Proc sheet 1 01).

LEVEL 3 MAINTENANCE

IMPORTANT

Mobile packaging sent to SAGEM COMMUNICATION GROUPE SAFRAN :

Follow the Proc Sheet 1 20

Packaging for swap or mobile components storage :

The swap and the mobile components must be stored with a particular care especially for the most sensible component (Display, loudspeaker etc …..)

Procedure
Proc 0 01
Proc 0 03
Proc 1 01
Proc 1 02
Proc 1 04
Proc 1 13
Proc 1 15
Proc 1 16
Proc 1 18
Proc 1 19
Proc 1 20
Proc 1 23
Proc 1 33
Proc 1 34
Proc 1 35
Proc 3 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Test 07
Test 08
TestSheet

This document must be returned with the mobile or put in the ESD bag with the electronic board.

To refer to the procedure document SAGEM SYMPTOMS & DEFECT CODES LISTS to indicate the code defect.

ARC INFORMATION	
ARC Name …… ARC Adress…… ARC Country…… ARC Phone nr……	
PRODUCT INFORMATION	
Warranty…… Product name…… Product reference…… IMEI…… Date of purchase…… Incoming date in ARC…… Last swap date (if applicable, <3 month) Defect code found by ARC…… Second NFF Return ……	☐ YES ☐ NO _____ _____ * 3 5 1 2 3 1 2 3 1 2 3 0 0 0 0 * …../…../…… …../…../…… …../…../…… ☐ ☐ ☐ YES ☐ NO

CHAPTER 6 - ACCESSORIES

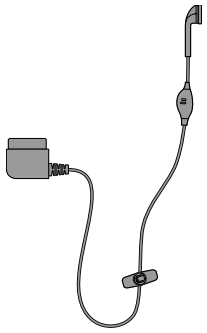
6.1 PEDESTRIAN HANDSFREE KIT

6.1.1 Description

Ear support with microphone on the cable for handsfree conversation

6.1.2 Caractéristiques

Comment :
Length: 1.25 m Dist. micro/loudspeaker: 25 cm



6.2 DATA CABLE PC USB

6.2.1 Description

Data cables are used for transferring data through standard equipment.

6.2.2 Caractéristiques

Packaging :
Blister

6.3

6.3.1 Description

CHAPTER 7 - TECHNICAL INFORMATION BULLETIN

7.1 PURPOSE

The purpose of the Technical Information Bulletin (TIB) is to complete the maintenance operations described in this document. They give to the repair centers the complementary technical informations and the corrective procedures to be applied to maintain the product following it's evolution.

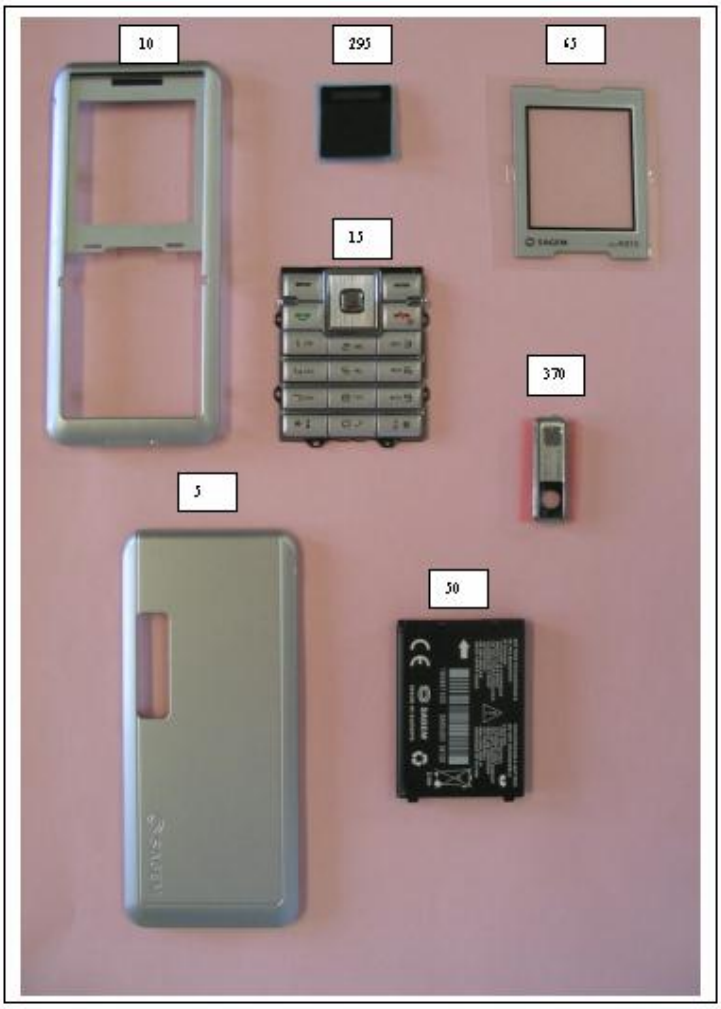
7.2 APPLICATION

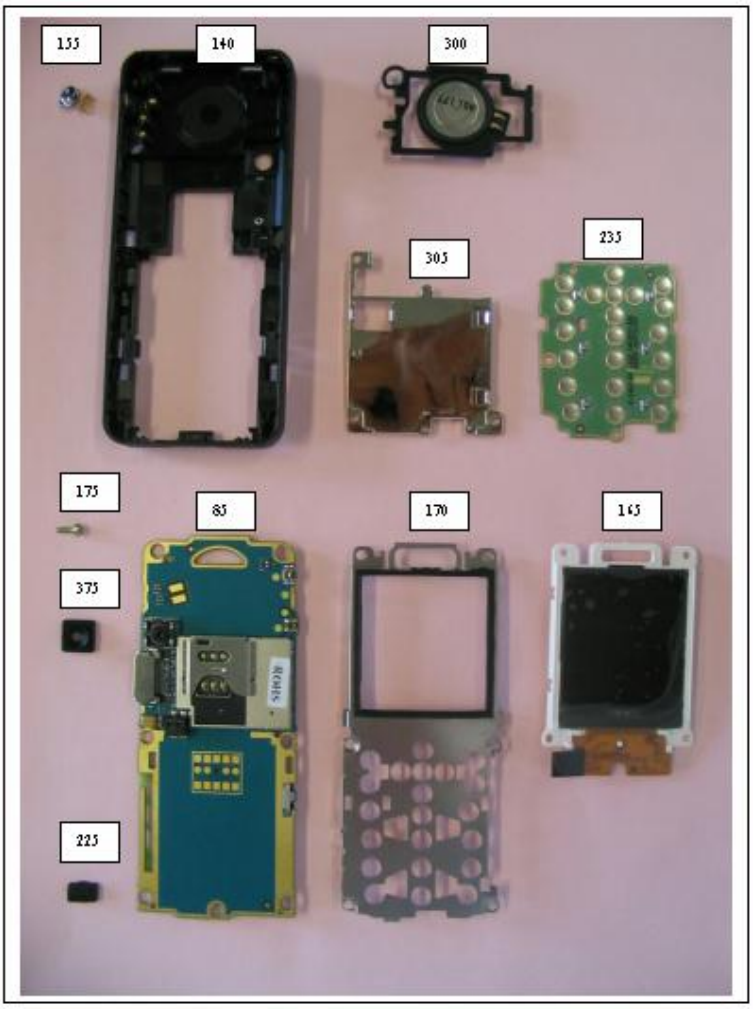
The Technical Information Bulletin (TIB) are reference and must be applied by the repair centers.
The Technical Information Bulletin (TIB) will be sent only to the concerned repair centers. The Technical Data Bulletin will not be received by the repair centers with a reference number in sequence.
The follow up of the Technical Information Bulletin (TIB) and the action being to be performed are under the responsibility of the repair centers.

CHAPTER 8 - ILLUSTRATED PARTS CATALOG

8-1 SPARE PARTS D2005

ASSEMBLY	Quantity	Designation
5	1	Lower cover
10	1	Upper cover
15	1	Keypad
50	1	Battery
65	1	LCD pane
85	1	Main board
140	1	Assembled antena plate
155	1	Side key
165	1	Color display
170	1	Display flange
175	1	Screw
190	1	Drill plate
235	1	Keypad board
375	1	Camera Foam


10
295
65
15
370
5
50


155
140
300
305
235
175
85
170
145
375
225

Index

CHAPTER 3 - SYMPTOMS

CHAPTER 4 - TESTS AND CHECKS