SITE TECHNICAL DOCUMENTATION
Vodafone Simply

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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

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SAGEM
Montauban, France

vodafone
19:30
Normal
Battery Full
Good Signal
+411242526252
Settings
Tips
vodafone
19:30
Normal
Battery Full
Good Signal
+411242526252
Settings
Tips

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Contents

CHAPTER 1 - FOREWORD

1-1 HOW TO USE THE SITE TECHNICAL DOCUMENTATION
1-1-1 Use
1-2 ABREVIATIONS
1-3 COMMENTS SHEET

CHAPTER 2 - DESCRIPTION - OPERATION

2-1 REMINDERS ABOUT THE GENERAL CHARACTERISTICS OF GSM AND PCS NETWORKS
2-2 REMINDERS ABOUT THE HAND SET CHARACTERISTICS
2-3 IN & OUT CONNECTOR
2-3-1 Connector description
2-3-2 Signal description
2-4 IDENTIFICATION
2-4-1 Illustration
2-4-2 Description
2-4-3 Description after reparation
2-5 PHONE BLOCK DIAGRAMS
2-5-1 Block diagram
2-5-2 Standards and environment
2-6 EQUIPMENTS
2-6-1 Battery packs
2-6-1-1 Charactéristics
2-6-1-2 Description
2-6-1-3 Charging time
2-6-2 Mains modules
2-6-2-1 Description
2-6-2-2 Travel mains modules
2-6-2-3 Simple mains modules

CHAPTER 3 - SYMPTOMS

3-1 GENERAL
3-2 LIST OF REPORTED DEFECTS
3-3 ERROR MESSAGES DURING START UP
3-4 OTHER ERROR MESSAGES
3-5 LIST OF OBSERVED DEFECTS
3-6 INFORMATION ABOUT NEW NOTICED FAULTS
SYMPTOM SHEETS

CHAPTER 4 - TESTS AND CHECKS

4-1 GENERAL ABOUT TESTS
4-2 TEST TOOLS
4-3 INSTALLING ON A WORKSTATION (SMT STATION)
4-3-1 Minimum required configuration
4-3-2 Installing the cra downloading kit
4-3-3 Smt functions

TEST SHEETS

CHAPTER 5 - MAINTENANCE PROCEDURES

5-1 TECHNICAL WORK LEVELS
5-2 SHORT LOOP PROCESS
5-3 MAINTENANCE TOOLS
PROCEDURE SHEETS

CHAPTER 6 - ACCESSORIES

6-1 CIGAR LIGHTER CHARGERAC1
6-1-1 Description
6-1-2 Charactéristics
6-2 FULL DUPLEX CAR HANDSFREE KIT
6-2-1 Description
6-2-2 Charactéristics

CHAPTER 7 - TECHNICAL INFORMATION BULLETIN

7-1 PURPOSE
7-2 APPLICATION

CHAPTER 8 - ILLUSTRATED PARTS CATALOG

8-1 SPARE PARTS

INDEX

CHAPTER 1 - FOREWORD

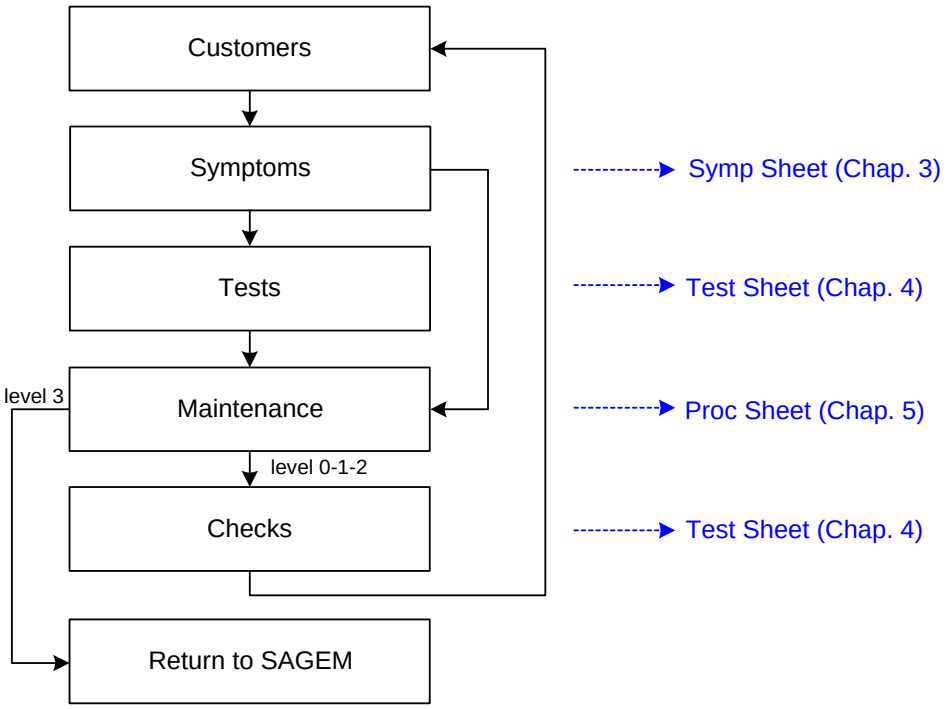
This document is common to all Vodafone Simply phones in the SAGEM. It is composed of independent sheets:

- 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 Vodafone Simply.

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 Vodafone Simply 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 Absorption 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 : _____
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_____

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	Vodafone Simply

Size

Dimensions	Curvy: 123,5x52,5x24,8 Straight: 118,7x47,5x20,3
Weight	>125g
Volume	Curvy: 117 cm3 Straight: 106 cm3

Power management

Battery type	Li Ion 920 mAh
Connector type	Barphone
Charging time	3h30
Talk time	4h20
Standby time	330h00

User interface

Screen type	TFT
Colours	65k
Number of lines	9
Screen size	31,9x39,8
Screen resolution	128x160
Backlight	Green

Customisation

Handset colours	Chrome Alu Satin
Interchangeable covers	Yes

Radio

Type GSM	triband
GSM Band	Tri-band 900/
Voice codecs	AMR,EFR,FR,HR

Operating system

Operating System	Proprietary

Connectivity

Radio

GPRS	Multislot class8 MS class B
EDGE	no

Internet

Push	no
Fax modem	no

Data transfer

Serial	no
IrDA	no
Bluetooth	no
USB	USB 1.1, full speed without charge
Wifi	NO
PC synchronisation	no

Multimedia

Messaging

SMS	yes
EMS	Reception only
MMS	Reception and forward only
E mail	no
IMPS	no

Predictive text input	T9

Video & images

Camera	NO
Image features	no
Video Player	NO
Image Format	JPEG, GIF, WBMP, BMP, PNG

Audio

Audio player	NO
Audio Recorder	NO
FM radio	no
Polyphonic ringtones	Yes
Audio formats	Imelody, Midi (16 tones - 8 instr.max.simultaneously),
	Wave(PCM,ADPCM), AMR-NB

Entertainement

Wallpaper	NO
Screensaver	NO
Clock display	Digital clock only
Icons	Yes
Skins	NO
Ringtone	Yes
Boot up and shut down sequences	Yes
Bookmarks inserted in Games menu	no
Embedded Games	NO
Downloaded application	NO

JAVA

JAVA	NO

OTA dowload

Protocol supported	MMS only
Wallpapers	NO
Animation	NO
Menu icon	NO
Download skins	NO
Games	NO
Ringtones	NO
Java application	NO
Reproduction dossier	NO

Call management

Voice features

Mute mode	no
Numerotation vocale	no
Integrated handsfree mode	no

Adress book features

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

Advanced features

Conference call	no
Anonymus mode	no
Call wait	no
Call forwarding	no
Automatic redial	no
SIM toolkit	no
Vibrate mode	no
Speed dialing	Yes (voicemail only=long press on 1)
Call list	no

Caller ID	no
Any key answer	no
Automatic hang up	no

Special features

Keyboard features

Scroll key	Yes 2 ways
Programable key	NO
Side key	YES 3 key
Direct access key	Home, Contacts, Log
Keypad lock	no
Silent key	Yes
International access key	NO
Menu key	no

Personnal management features

Calculator	no
Alarm Clock	no
Timer	no
Organizer	no
To do	no
Voice recorder	NO
Currency converter	no
Languages	10 languages

Memory

Memory

Internal phone book	4 MB
Memoire message	Determined by avaible user memory
Redial List	Sent calls in the LOG space or from Green Hook
	key: 20 positions

Additional multimedia memory	no
Embedded memory	Yes

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.

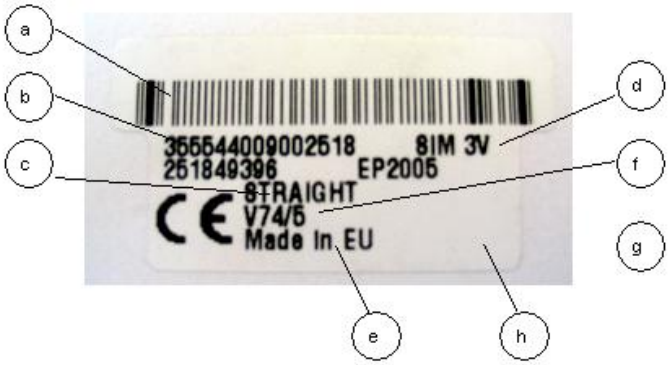
2.3.2 Signal description

Symbol	Pin connector	Signal fonction
Chargeur	1	Phone set power ON and power supply signal
VBAT	2	POWER SUPPLY IMAGE VOLTAGE, connect this signal to "CHARGER" (pin n°1) to switch the module on.
SDAI2C	3	Data signal reserved for sagem specific accessories
GND	4	ZERO VOLT
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
SCLI2C	7	Clock signal reserved for sagem specific accessories
SCLI2C	8	Clock signal reserved for sagem specific accessories
INTI2C	9	Interrupt signal reserved for sagem specific accessories
DCD	10	Complete V24 tie for data accessories
RXDG	11	SERIAL DATA TO BE TRANSMITTED
TXDG	12	SERIAL DATA RECEIVED.
ITDATA	13	Interruption signal keep for SAGEM accessories
TXDG	14	SERIAL DATA RECEIVED.
DCD	15	Complete V24 tie for data accessories
R1	16	Complete V24 tie for data accessories
GND	17	ZERO VOLT
DCD	18	Complete V24 tie for data accessories

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 characters)
c : Reference of product / aesthetic used .
d : Sim card Indication (Sim 3V…),
e : Production area Indication,
f : Production date (date code) + Production level,
Ex. F260/03 = (F) fabrication area (F : Fougères), (260) day of year, (03) last digit of year (03®2003).
g : Logo and agreement.
h : Product designation

2.4.3 Description after repair

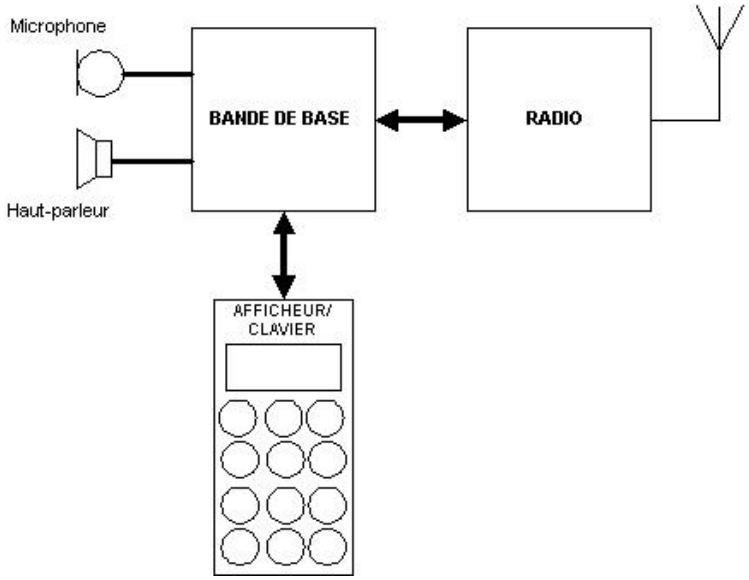
A new sticker is positioning by Repairing Centre on the antenna:

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 Vodafone Simply are given in the "User's handbook" supplied with the handset. This chapter only describes equipment that operates with the Vodafone Simply handset.

2.6.1 Battery packs

2.6.1.1 Charactéristics

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 920 mAh

Charger	simple unregulated chargers 230
Voltage	230 V (110V)
Charging times	4 h

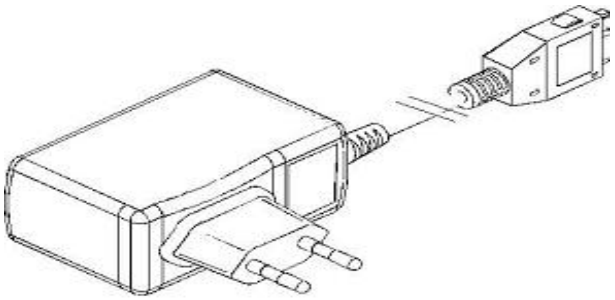
2.6.2 Mains modules

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:

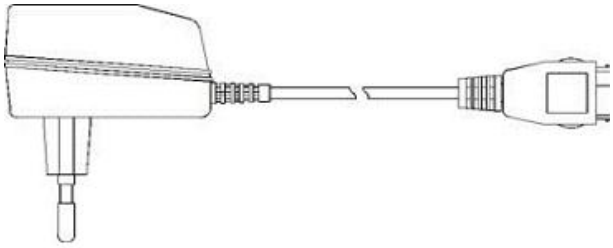
- E.E.C,
- United Kingdom
- United States,
- Australia.

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
UK Main module	180	120	230 V
US Main module	210	105	110 V

CHAPTER 3 - SYMPTOMS

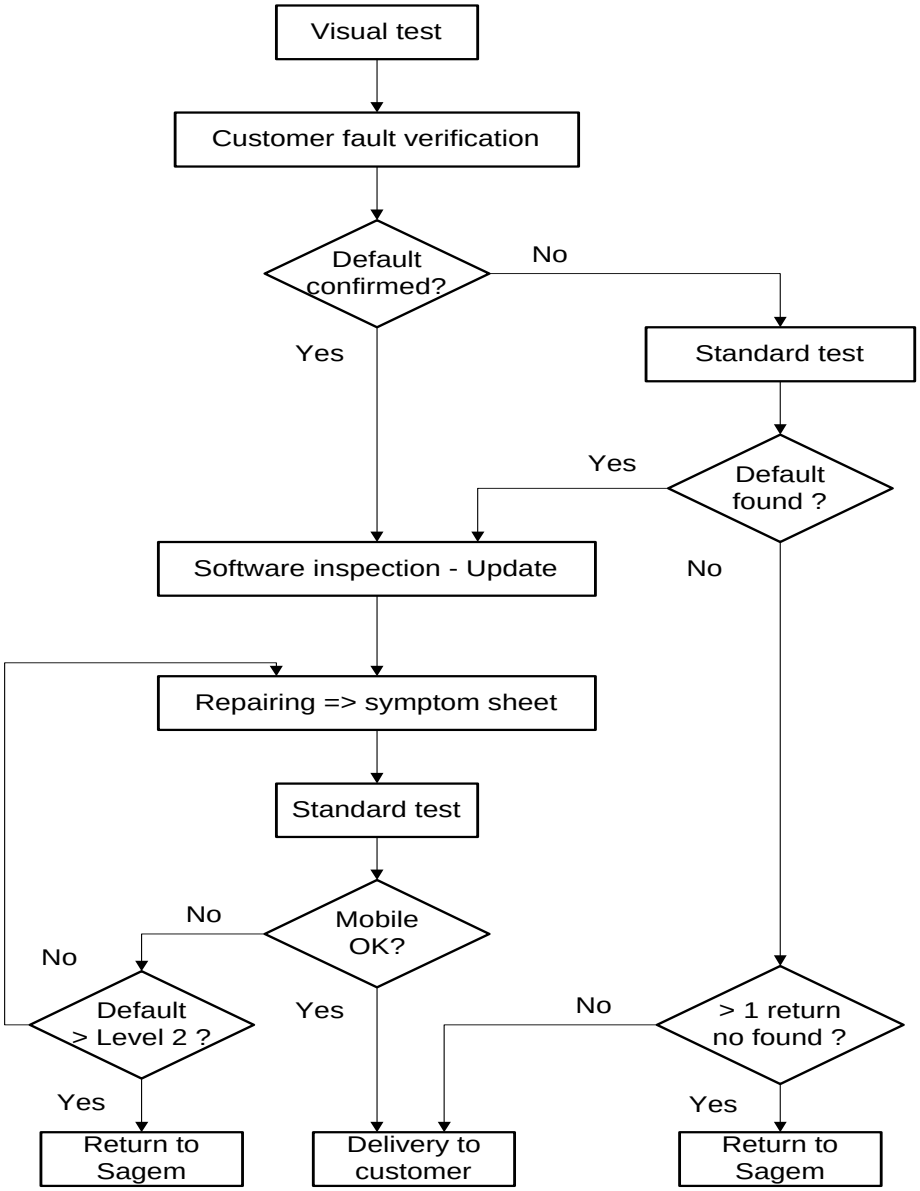
3.1 GENERAL

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
Yes
Default found ?
Software inspection - Update
No
Repairing => symptom sheet
Standard test
No
Mobile OK?
No
Default > Level 2 ?
Yes
No
> 1 return no found ?
Yes
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)
-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 01
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
A10	broken or missing antenna	Proc sheet 3 01
B1	Defective contact battery	Proc sheet 0 01
		Proc sheet 1 18
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)	Proc sheet 1 21
E2	Loudspeaker voice distortion	Symp sheet 08

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 1 13
G2	Broken or damaged cover	Proc sheet 1 20
		Proc sheet 3 01
G5	Broken or damaged keypad	Proc sheet 1 13
H1	Accessory problem	Proc sheet 1 20
		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 3 01
		Proc sheet 1 20
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.

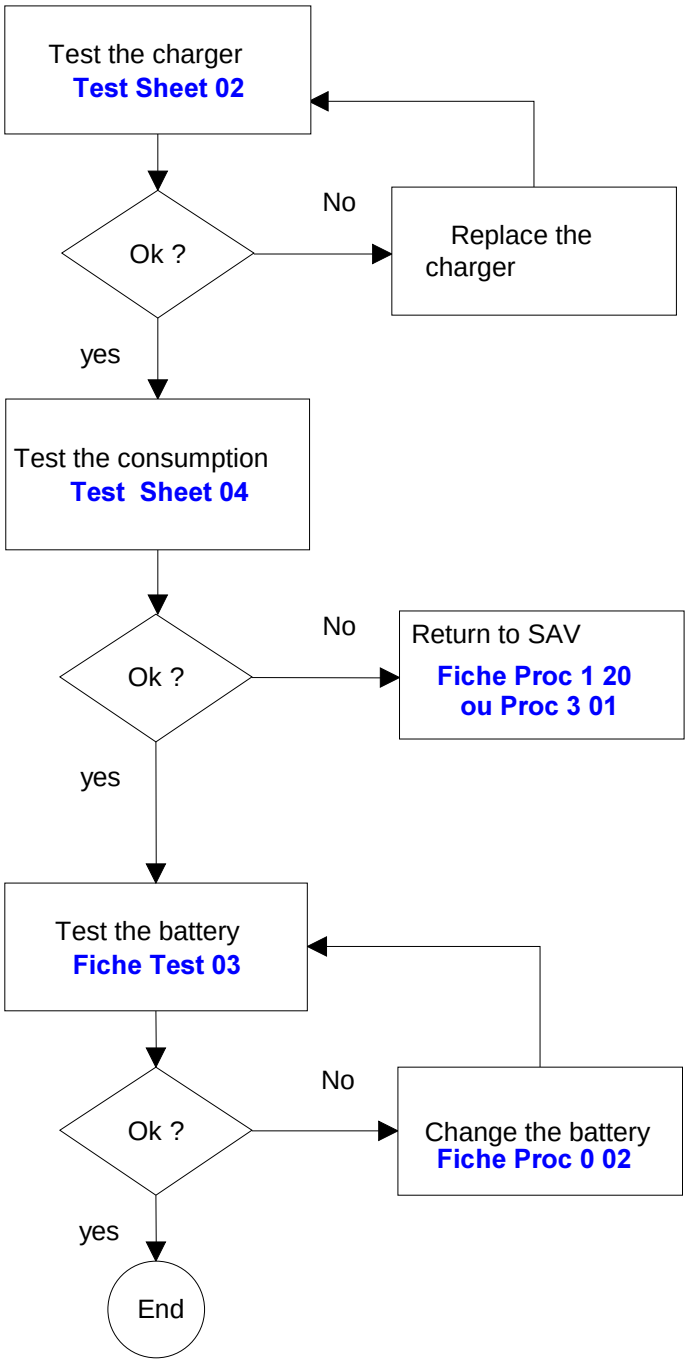
d) This mobile returned to SAGEM will be swapped following ARCs habitual process for MTB return but will be MANDATORY linked to a paper version of the document filled by the technician.

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

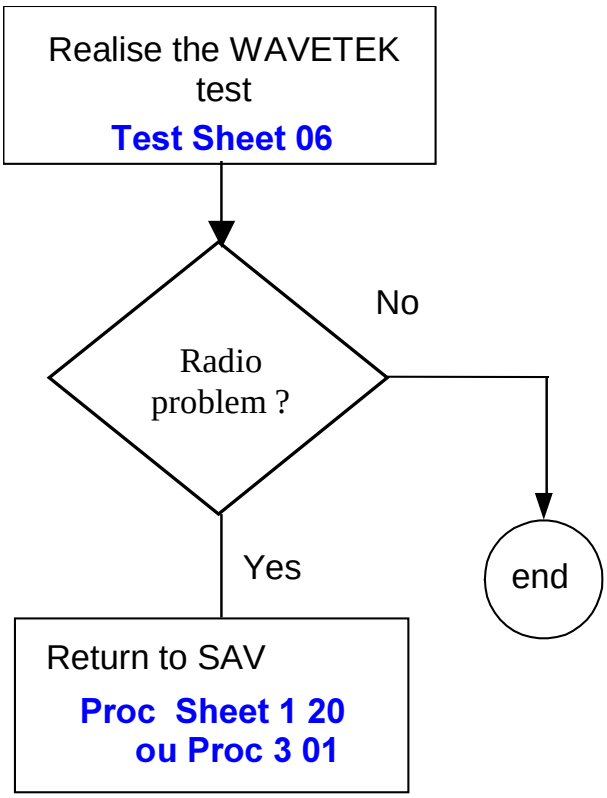
Sagem Communication Groupe SAFRAN	ENDURANCE BATTERY AND CHARGER PROBLEM	SYMP SHEET 01
Vodafone Simply		1/1

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 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06

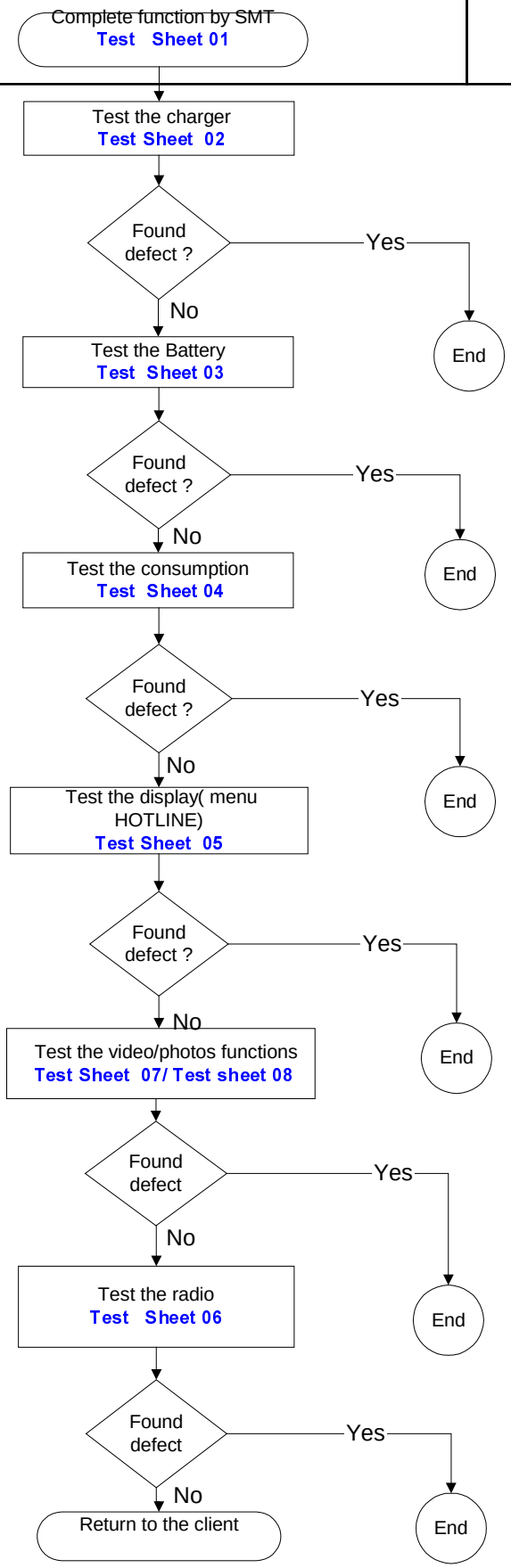


Sagem Communication Groupe SAFRAN	COMMUNICATION PROBLEM	SYMP SHEET 02
Vodafone Simply		1/1

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 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06

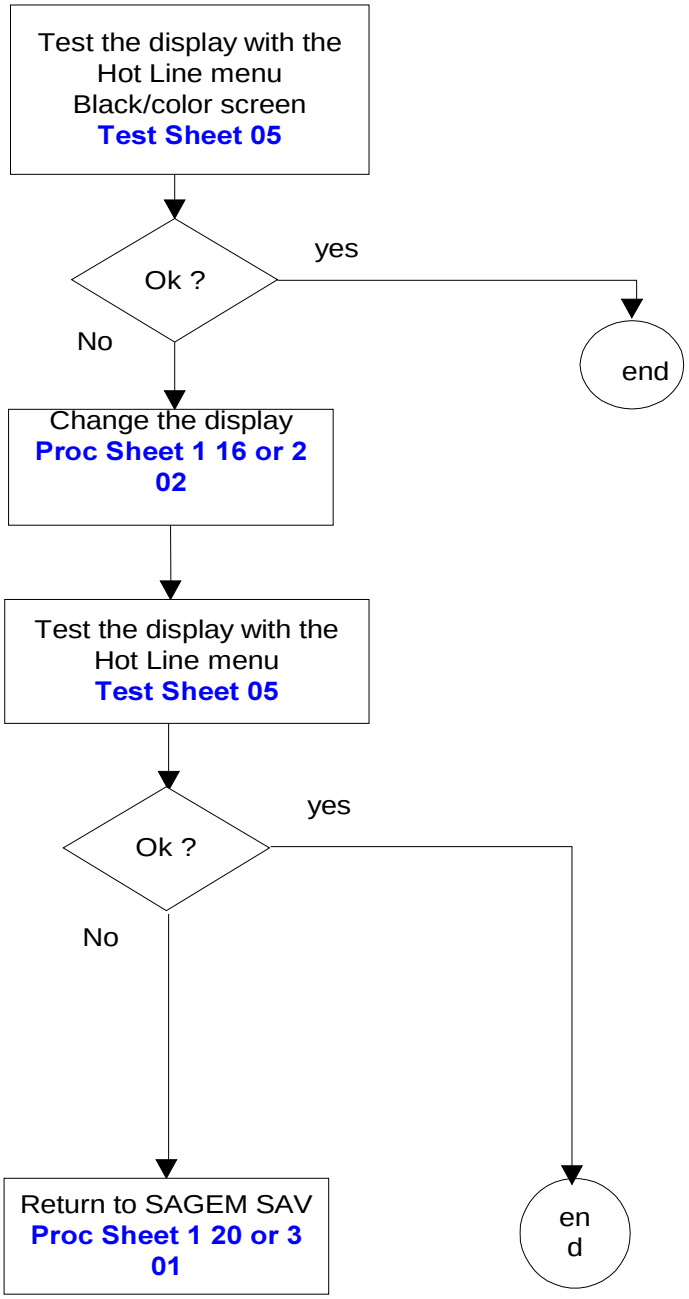


Sagem Communication Groupe SAFRAN	NO FAULT GIVEN	SYMP SHEET 03
Vodafone Simply		1/1



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 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06

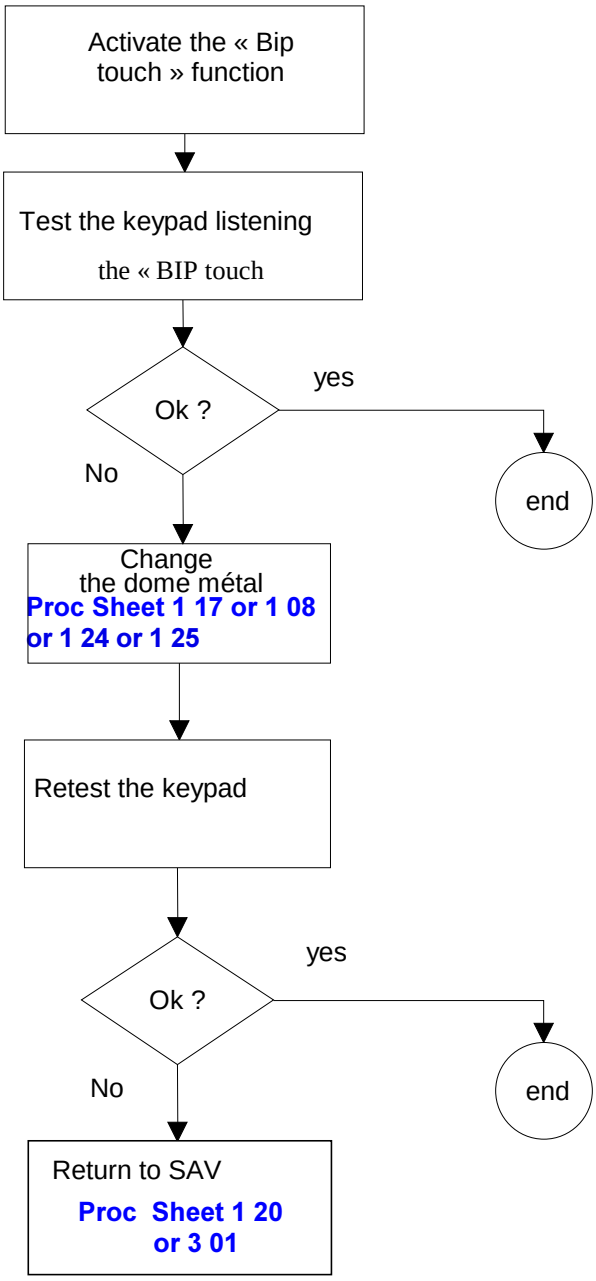
Sagem Communication Groupe SAFRAN	DISPLAY PROBLEM	SYMP SHEET 04
Vodafone Simply		1/1



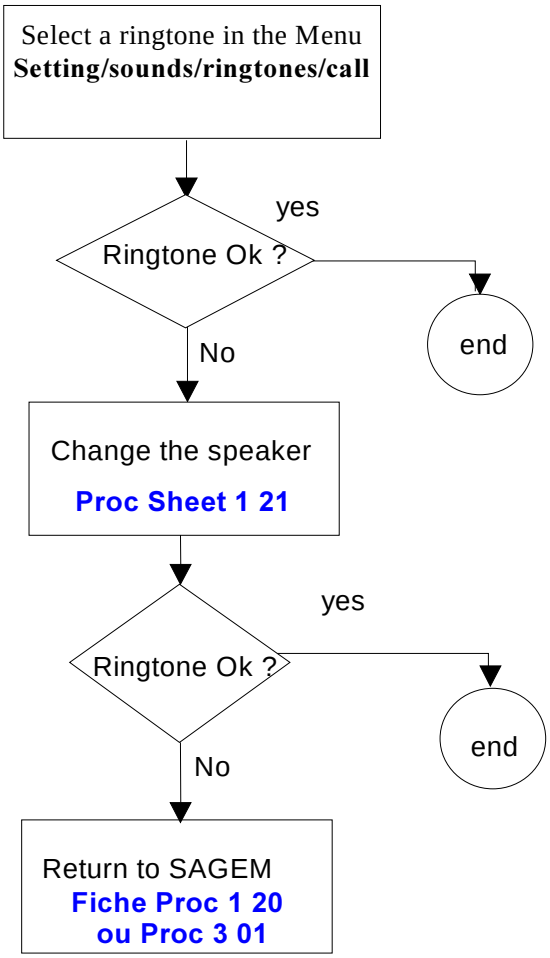
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Procédure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06

Sagem Communication Groupe SAFRAN	KEYPAD PROBLEM	SYMP SHEET 05
Vodafone Simply		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 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06

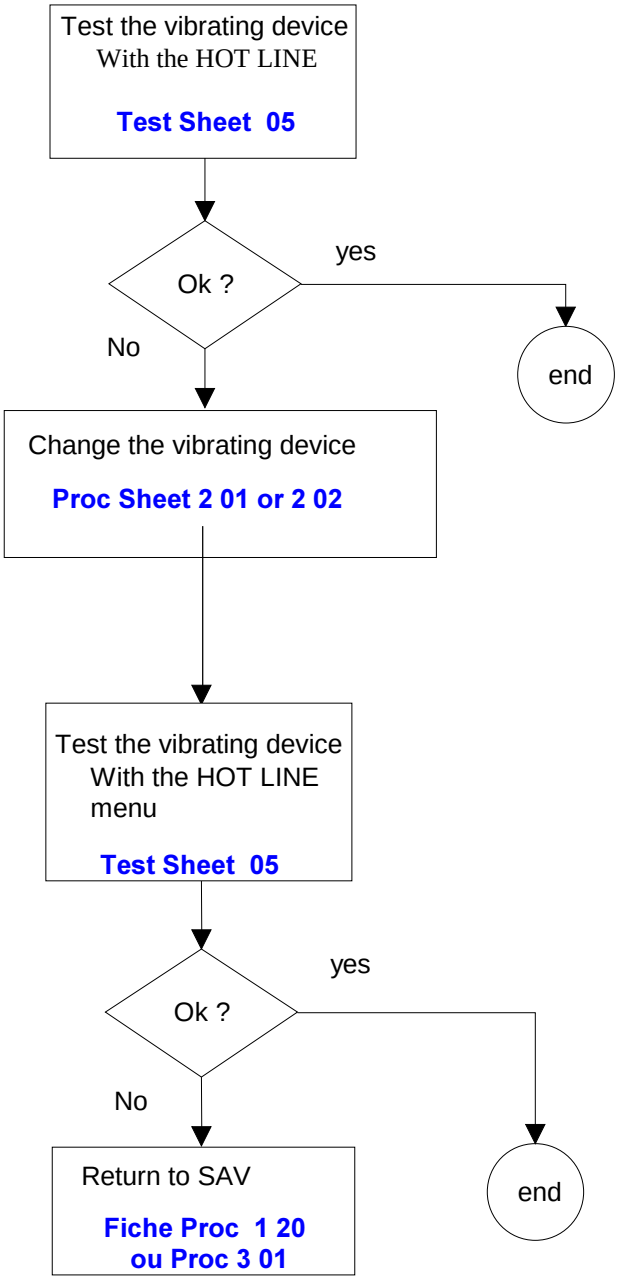


Sagem Communication Groupe SAFRAN	RING TONES PROBLEM	SYMP SHEET 06
Vodafone Simply		1/1



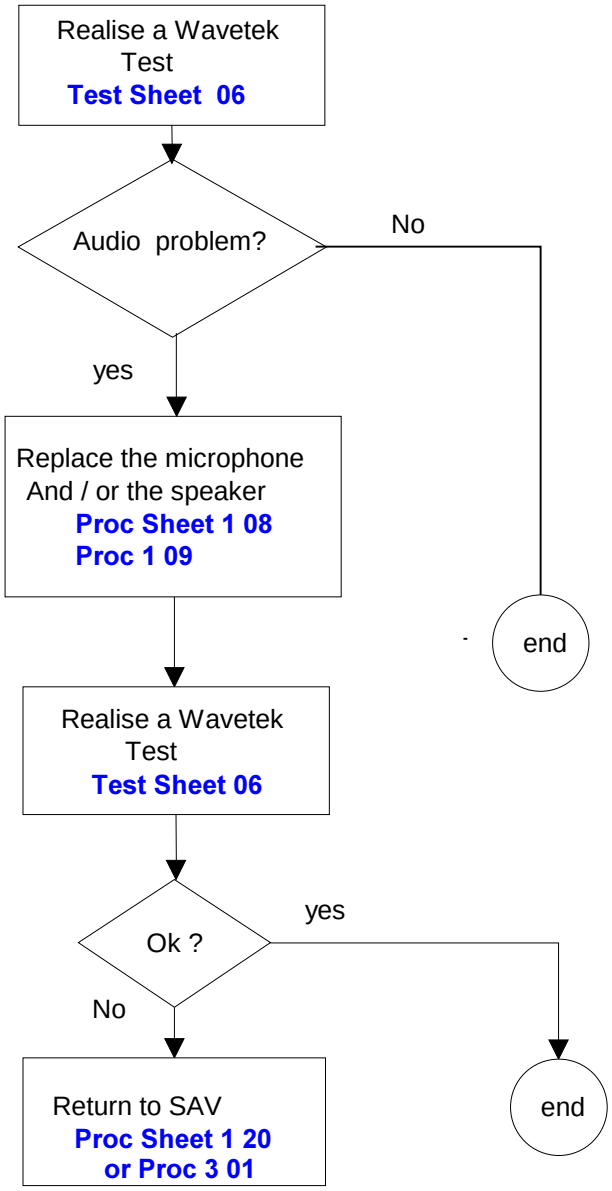
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Procédure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06

Sagem Communication Groupe SAFRAN	VIBRATING DEVICE PROBLEM	SYMP SHEET 07
Vodafone Simply		1/1



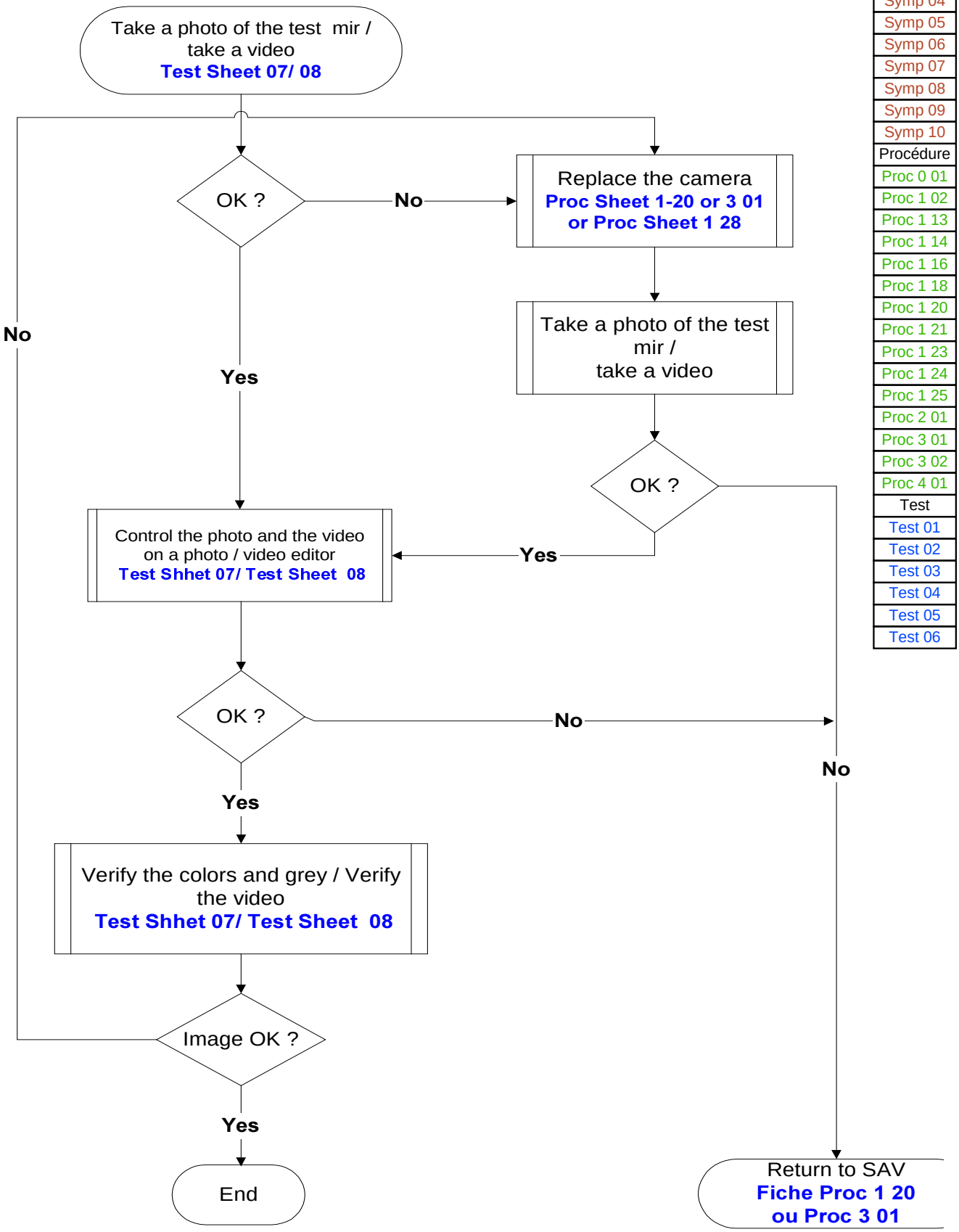
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Procédure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06

Sagem Communication Groupe SAFRAN	AUDIO PROBLEM	SYMP SHEET 08
Vodafone Simply		1/1



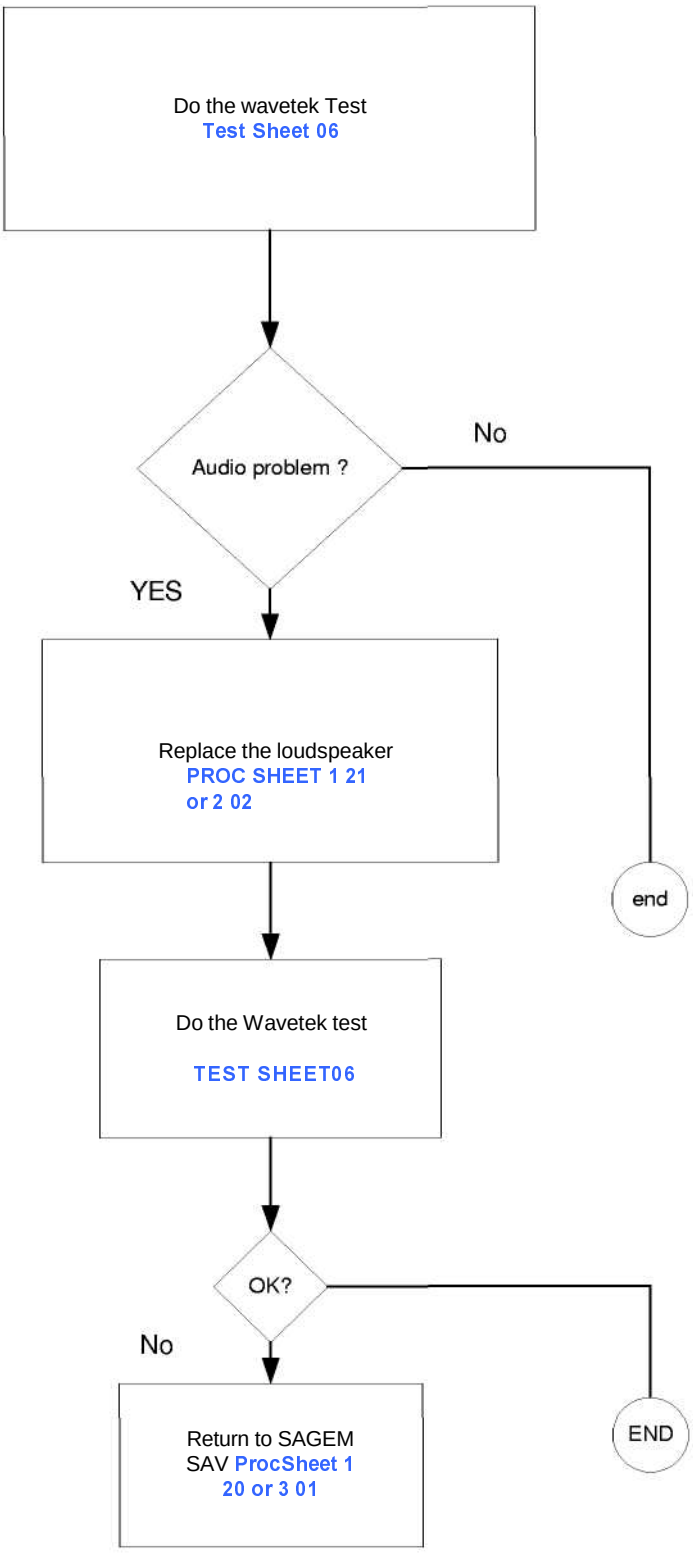
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Procédure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06

Sagem Communication Groupe SAFRAN	CAMERA PROBLEM	SYMP SHEET 09
Vodafone Simply		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 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06

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 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06



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.
  - ·Vodafone Simply 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
Procédure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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.

<u>Notice:</u> 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).

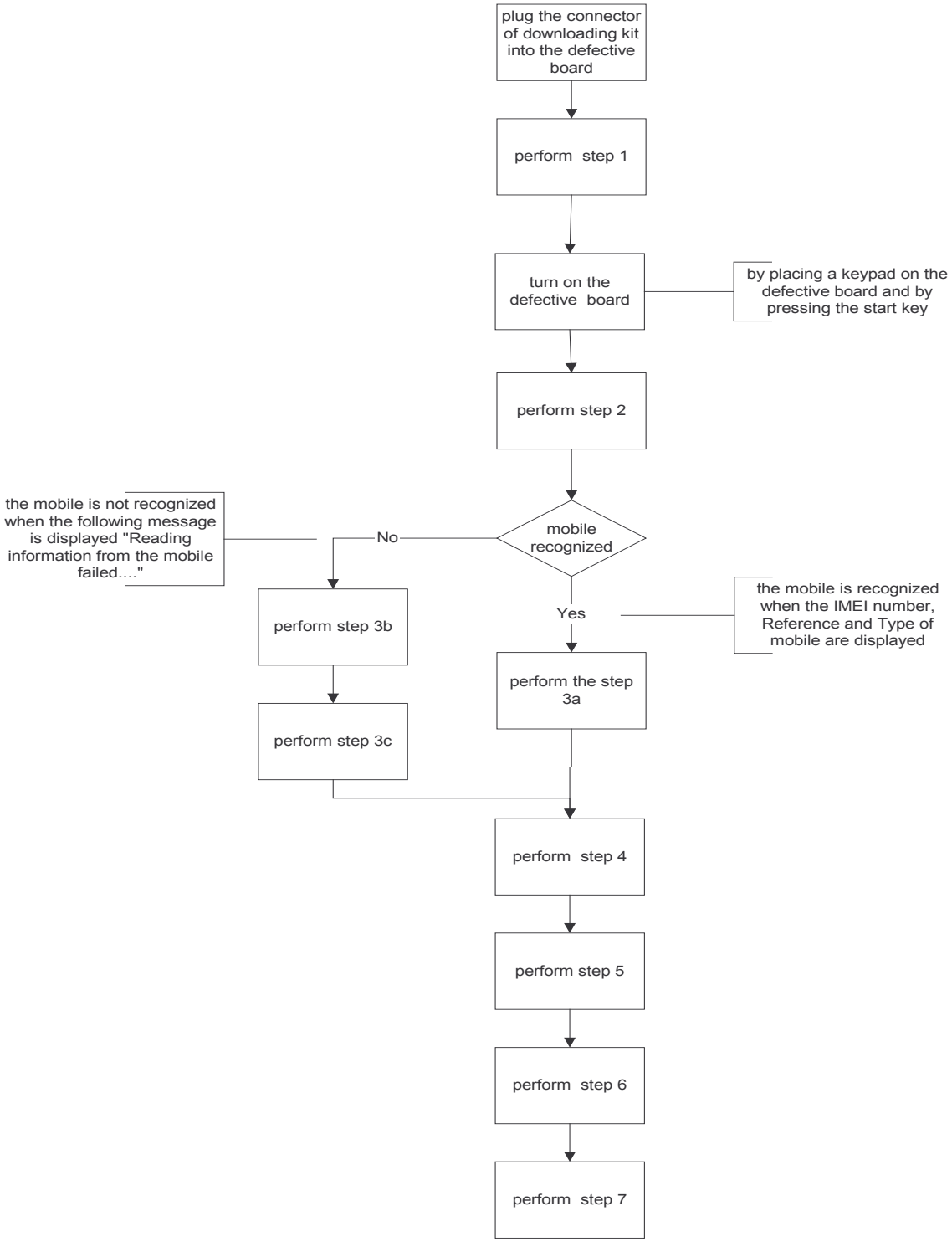
SMT SEQUENCE: Series of the different functions under SMT (sequence of tests)

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.

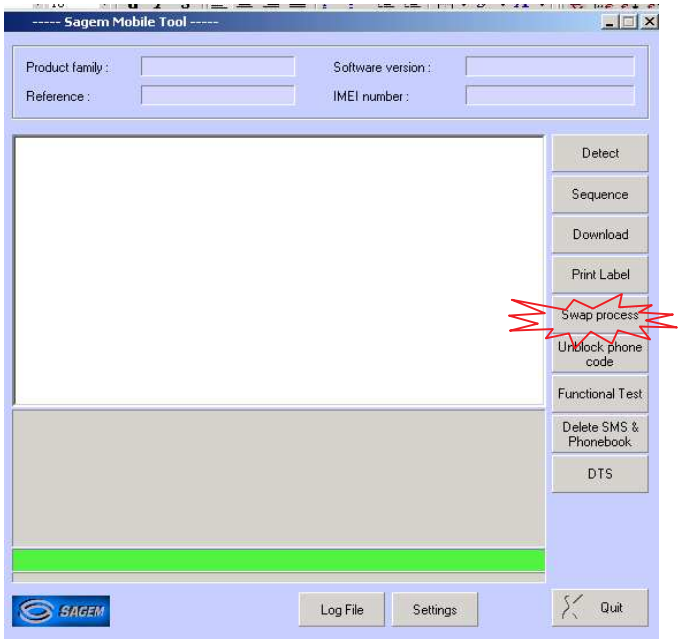
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

1. SWAP : Electronic board Configuration

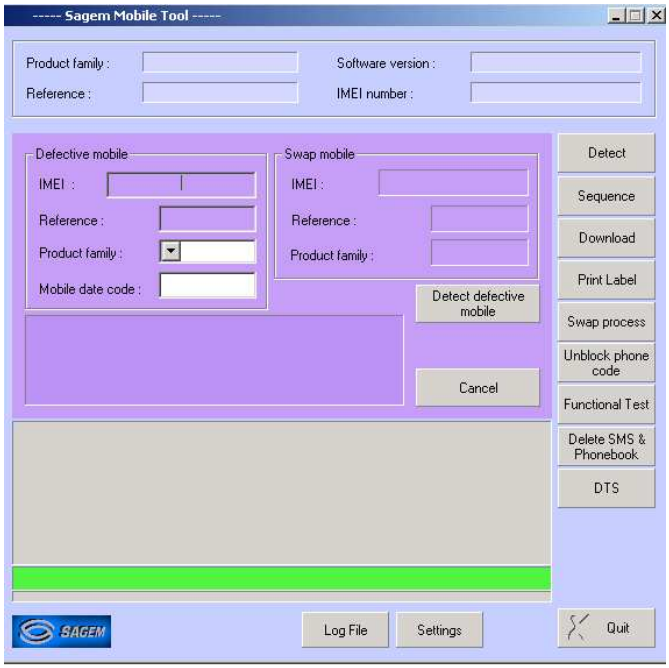


Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

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



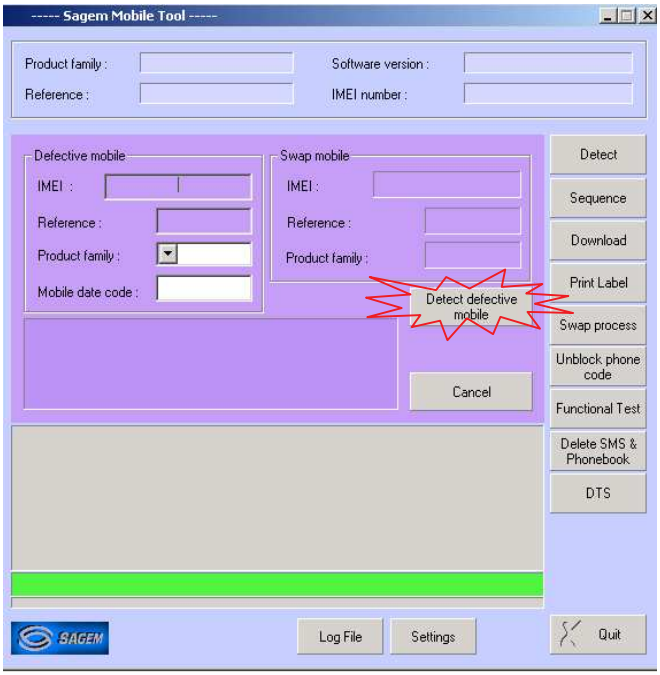
The following screen appears :



Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

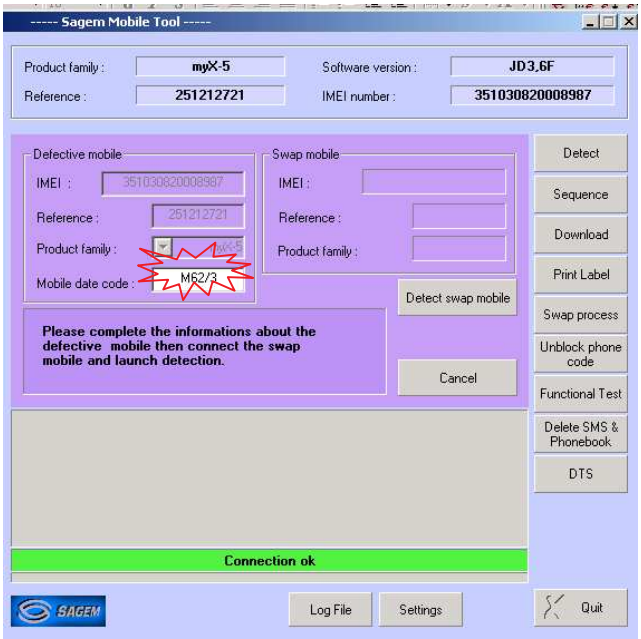
Step 2

Please click on « Detect defective mobile » button



Step 3a

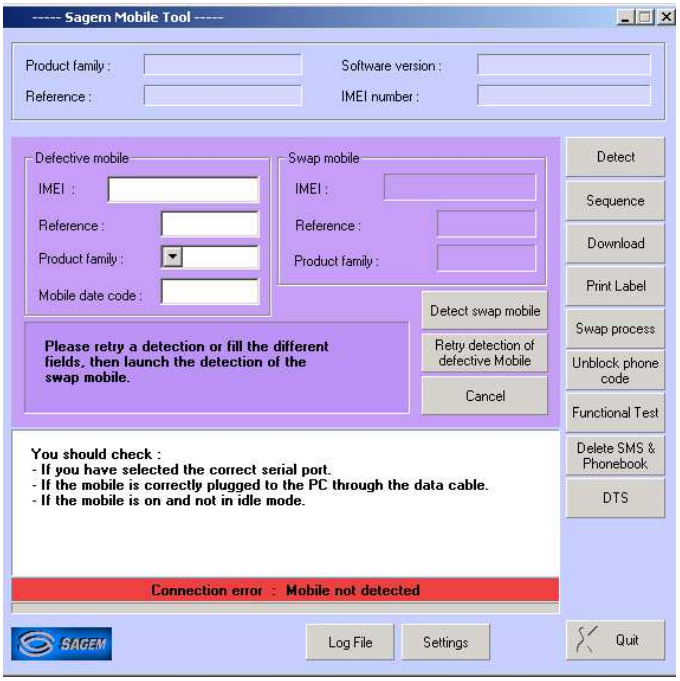
The following screen appears : the mobile is recognized. Then, enter the mobile date code



Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

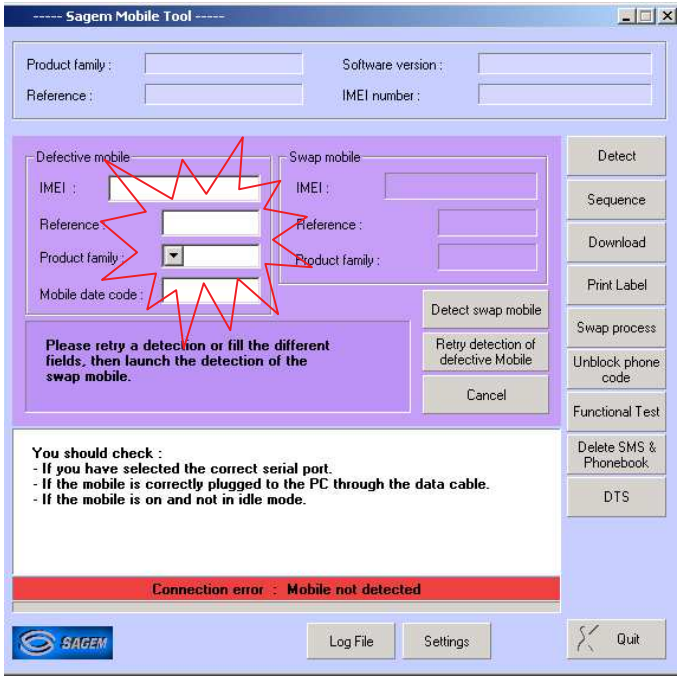
Step 3b

If this screen appears, the mobile is not recognized.



Step 3c

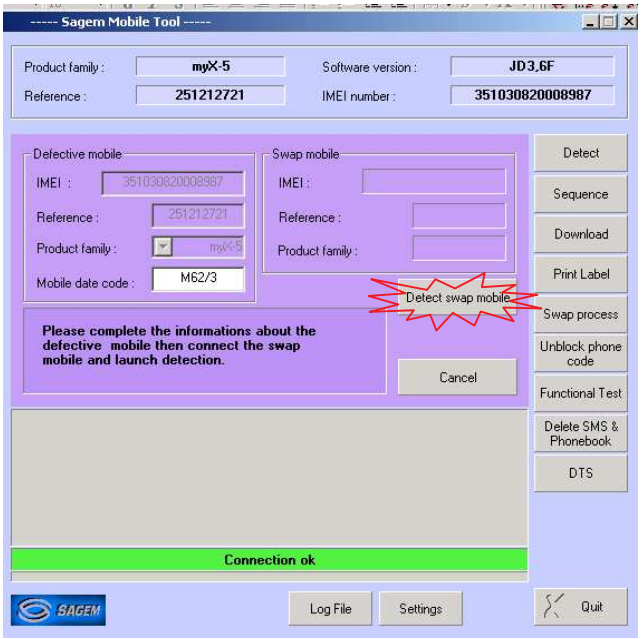
You must fill in the blanks requested according to the information written on the production label



Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

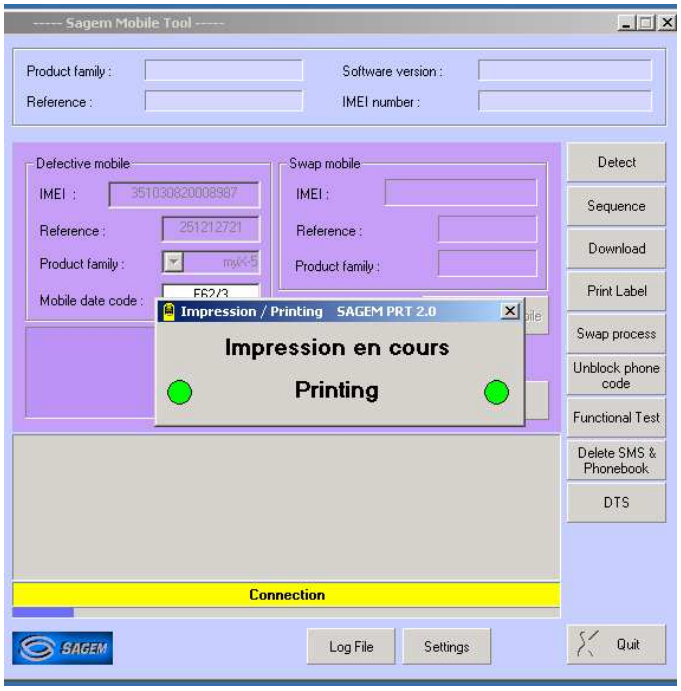
Step 4

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



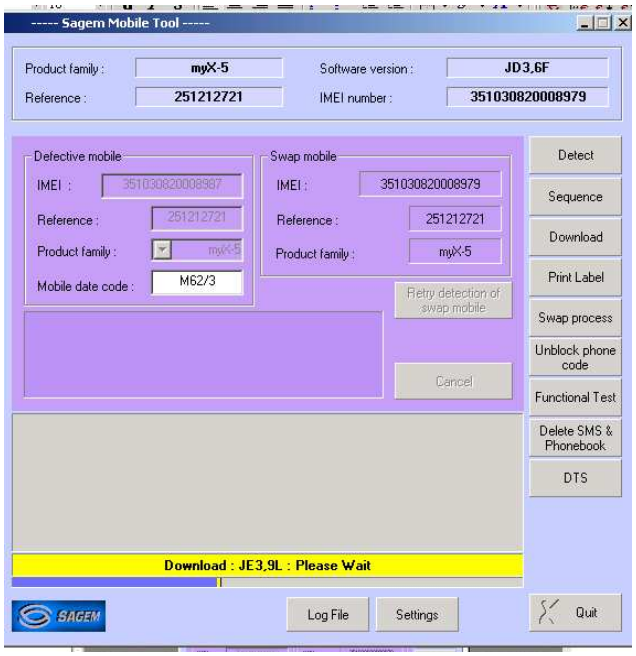
Step 5

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

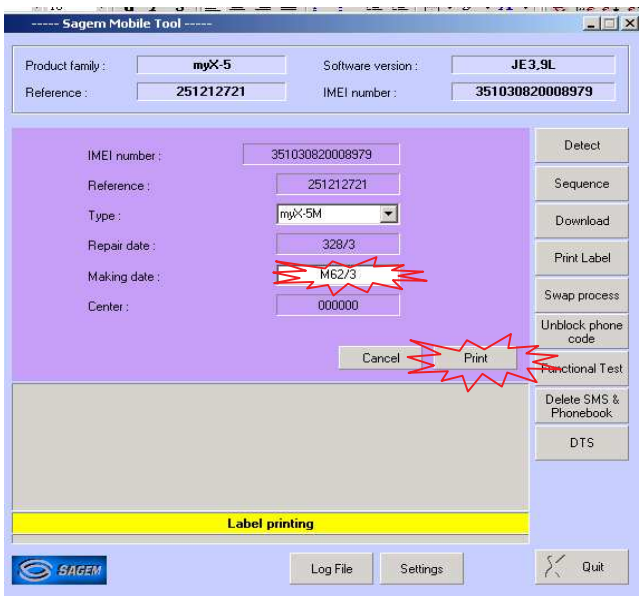


Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

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.

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Procédure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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 checks the various battery chargers.

Required tools

a voltmeter (minimum impedance 20 kΩ per Volt in DC),

two sockets for banana connectors for connection to the voltmeter,

the charger test kit.

Test procedure

Two terminals are used for measurements on the charger test kit

red (+),

black (-).

A pushbutton selects the measurement :

No charge (released position),

Under Charge (pushed in position).

1. Check the charger connector visually.
2. Connect the charger to be tested to the back of the tester.
3. Connect the voltmeter using the two banana connectors.
4. Before starting any other measurement, check that the charger is correctly powered (main voltage is in accordance with the charger specifications).
5. Make the two measurements.
6. Check the recorded values using the following board. If the values are not included in the min & max limits , then the charger is defective.

	NO Charge (released position)		Under Charge (Pushed in position)	
Charger	**Min.**	**Max.**	**Min.**	**Max.**
Travel 500 mA	**5,5 V**	**7,5 V**	**2V**	**4V**
Simple 300 mA	**9V**	**15V**	**1,5 V**	**4V**
cigar lighter	**5,5 V**	**7,5 V**	**2V**	**4V**

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Procédure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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 allows to test the various batteries.

Required tools

CADEX C7000 / C7200 / ASTRATEK

Battery adaptors,

Amperometer interface

a voltameter (minimum impedance 20 kΩ per Volt in DC).

Test procedure

1. Insert battery on ammeter interface
2. Measure the identification resistor between the Z poles :
1. Li-Ion batteries : **120kΩ (tolerance = 117kΩ - 123kΩ,** according to the surrounding temperature**)**
2. Measure the battery voltage between the V poles
   a) If the voltage < 2.5 Volts the battery is defective
   b) if the voltage < 4v ,load the battery for 30 minutes with a travel charger and measure the internal resistance with a CADEX or ASTRATEK battery tester
   c) If the voltage > 4V measure the internal resistance with a CADEX or ASTRATEK battery tester

   Notice: Choose on the battery tester ,the battery type (Li-ion) ,the nominal battery voltage (3,6V) and the battery capacity (1000 mA)

5 Read the result :If the internal resistance < 300 mOhms the battery is **OK**

>= 300 mOhms the battery is **defective**

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Procédure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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 tests the battery consumption.

Required tools

Universal Batteries Adapter FlexArm (for batteries all Sagem series)

An Ammeter.

Test procedure

Measurement when switched off

1. Insert the handset (switched off) onto the tool (customer phone and battery).
2. Connect the ammeter to the tool between A poles:

Red tool terminal on the ammeter "**COM**" or "**GND**" terminal.

Black tool terminal on the ammeter "**+**" terminal.

NOTE: The ammeter rating must be set to DC (DC or =), range 100 mA.

3. If the value indicated exceeds 1 mA ,the mobile is defective.

Measuring the charge

4. Insert the handset (switched off) onto the tool (customer phone and battery).

5. Connect the ammeter to the tool between A poles:

Black tool terminal on the ammeter "**COM**" or "**GND**" terminal.

Red tool terminal on the ammeter "**+**" terminal.

NOTE: The ammeter rating must be set to DC (DC or =), range 1 A.

6. Connect the customer's charger when energised (after connecting the charger to the mains power supply).
7. If the value indicated is lower than 150 mA ,the mobile is defective.

NOTE: When changing the ammeter rating (manual or automatic), the mobile can be disconnected.

Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06
Procédure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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
Procédure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10

Test description

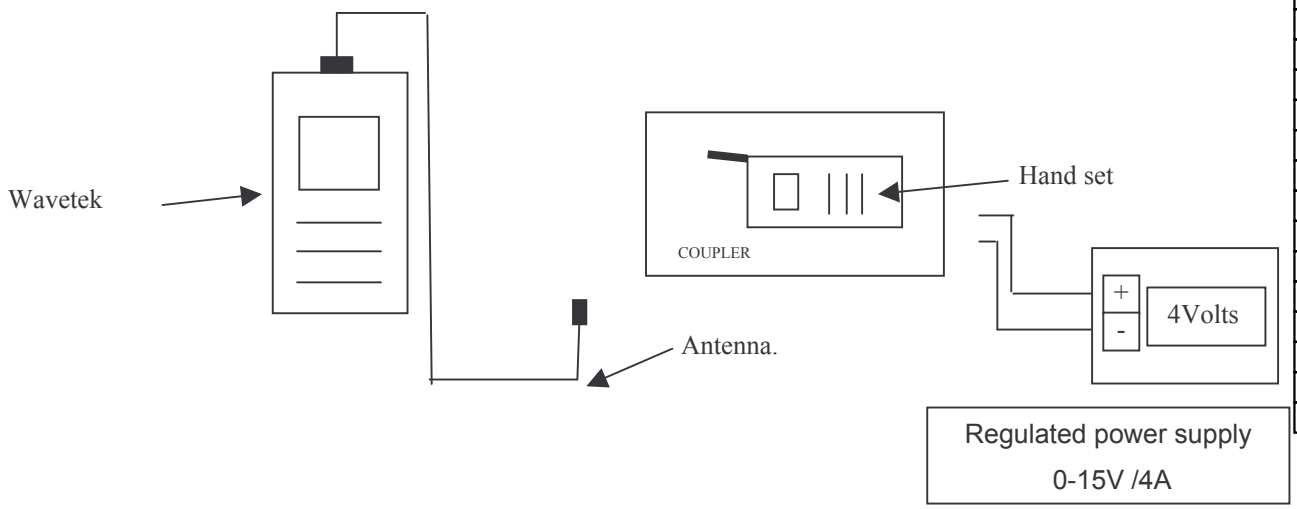
This test evaluates handset radio fonction during a call.

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
Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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).

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 :

- Gloves

- Tweezers

- Soldering iron

- Electrical screwdriver

- EP2005 Straight vs2 calibrat
  Code : 252243147

- EP2005 Curvy vs1 calibrat
  Code : 252243113

- Unclipping tool CIE EP 2005
  Code : 252077928

- Lower keypad board unclipping tool EP2005
  Code : 252077952

- FCP insert tool
  Code : 251318734

LEVEL 0 MAINTENANCE

Tools :

- Not applicable

Preliminary operation :

- Switch off the mobile phone

Removal procedure :

1. Remove the back cover (Proc sheet 1 02).
2. Take out the battery (1) by extracting before the stop pins (2).

Placement procedure :

1. Place the battery by inserting before the upper section .

Place the back cover (Proc sheet 1 02).

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

LEVEL 1 MAINTENANCE

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Tools :

Not applicable.

Preliminary operation

Turn the handset upside down

Removal procedure :

1 Unlock the back cover (1) , by pushing the lock button (2) upwards.

2 Remove rear cover (1) by lifting bottom end first

Placement procedure :

1. Replace the cover by engaging top hooks first .
2. Push down back of rear cover and push button back into locked position

Further operations :

1. Check the covers are assembled tightly

<u>Notice:</u> The Curvy back cover removing/ replacing procedure is the same as Straight.

Sagem Communication Groupe SAGEM	**REMOVING / REPLACING BACK COVER**	Proc sheet 1 02
Vodafone Simply		2/2

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Tools :

- Not applicable

Preliminary operation :

1. Remove the back cover (Proc sheet 1 02).
2. Remove the battery (Proc sheet 0 01).

Removal procedure :

1. Remove the side key
2. Separate the two front cover(2) fixing stop pins (3) to release the electronic module(1).
3. Remove the equipped front cover .

Placement procedure :

1. Place the module into the front cover, engaging firstly the module top, then press on the module top.
2. Replace the side key

Further operations

1. Place the battery (Proc sheet 0 01).
2. Place the back cover (Proc sheet 1 02).

<u>Notice:</u> The Curvy front cover removing/ replacing procedure is the same as Straight

NB: Don’t remove the side key to remove and replace the Straight front cover.

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Removing the front cover.

Replacing the front cover.

Tools :

- Tweezers

Preliminary operation

1. Remove the back cover (Proc sheet 1 02).

Removal procedure :

1. Push the knob lock (2) upward.
2. Pull out the knob lock (2) with tweezers.
3. In the internal cover side, slide the locker (3) upward, while lifting it.

Placement procedure :

1. Place the knob lock (2) into its housing, then slide it downward.
2. Turn the rear cover upside down and press the knob lock firmly.

Further operations :

1. Replace the back cover (Proc sheet 1 02).

<u>Notice:</u> The Curvy locker and knob lock removing/ replacing procedure is the same as Straight.

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

The knob lock

The locker

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Tools :

- Unclipping tool CIE EP2005.
- A 0.6mm torx screwdriver
- Flat screwdriver
- FCP insert tool.
- Lower keypad board unclipping tool EP2005 (252077952).

Preliminary operation

1. Remove the back cover (Proc sheet 1 02).
2. Remove the battery (Proc sheet 0 01).
3. Remove the front cover (Proc sheet 1 13).

Removal procedure :

1. Unscrew the six attachment screws on the assembly plate
2. Remove the assembly flange (Proc sheet 1 23)
3. Remove the upper keypad board (Proc sheet 1 24)
4. Remove the electronic board (Proc sheet 1 18)
5. Remove the lower keypad board (Proc sheet 1 25)
6. Turn the display round to the right of the electronic board.
7. Open Zif connector lock by means of the extract flex tool, by lifting lock up
8. Remove delicately the flex PCB.

Placement procedure :

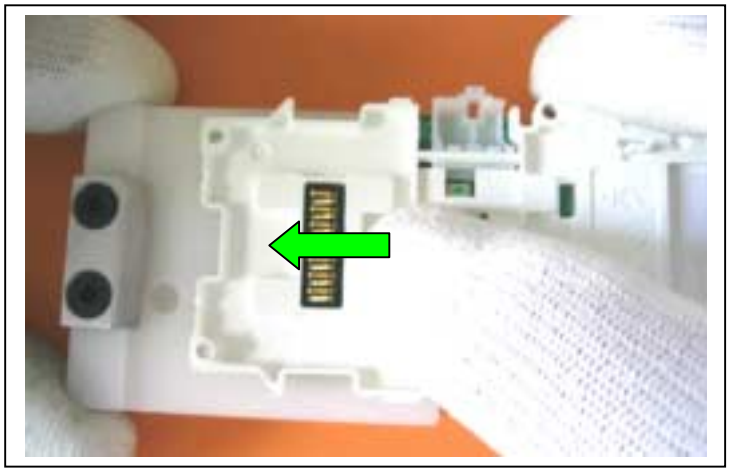
1. Check that the connector lock is lifted up
2. Introduce partially the flex PCB into the zif connector
3. Replace the lower keypad board (Proc sheet 1 25)
4. Replace the electronic board (Proc sheet 1 18)
5. Replace the upper keypad board (Proc sheet 1 24)
6. Replace the assembly flange (Proc sheet 1 23)
7. Position and tighten the six attachments screws with torx couple of **0,25 N.m.**

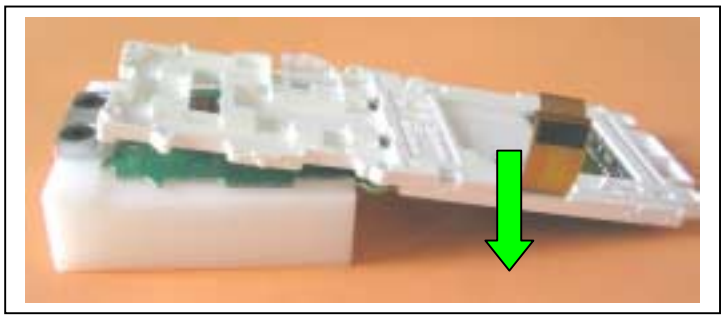
Further operations :

1. Replace the front cover (Proc sheet 1 13).
2. Replace the battery (Proc sheet 0 01).
3. Replace the back cover (Proc sheet 1 02).
4. Carry out the radio test (Test Sheet 06).

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Remove





Replace

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Tools :

- A 0.6mm torx screwdriver
- Tweezers.
- Unclipping tool CIE EP2005 (252077928)
- FPC insert tool (251318734).

Preliminary operation

1. Remove the back cover (Proc sheet 1 02).
2. Remove the battery (Proc sheet 0 01).
3. Remove the front cover (Proc sheet 1 13).

Removal procedure :

1. Unscrew the six attachment screws on the assembly plate.
2. Position the display and keypad board on the unclipping tool.
3. Press delicately and then push on the two lateral parts (1).

Placement procedure :

1. Position the electronic board on the equipped plate
2. Connect the display on the electronic board with the FPC insert tool.
3. Clip the assembly display, keypad board and the flange on the electronic board and then screw.

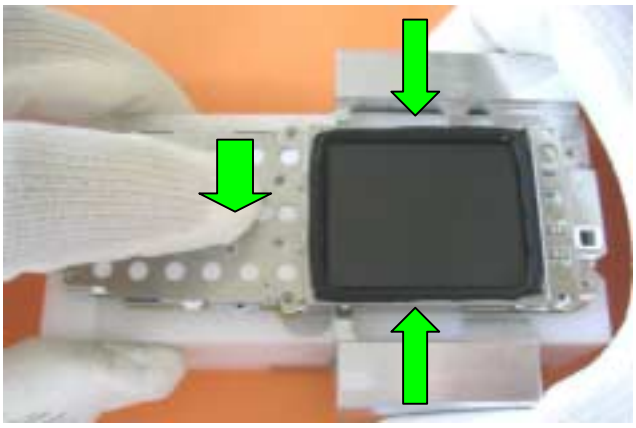
Further operations :

1. Replace the front cover (Proc sheet 1 13).
2. Replace the battery (Proc sheet 0 01).
3. Replace the back cover (Proc sheet 1 02).
4. Carry out the radio test (Test Sheet 06).

NB : Before clipping the assembly display, verify the position of the lock keyboard. Same side as the interface lock of the electronic board.

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Removal procedure :



Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

- Preliminary operation

1. Control of the IMEI label integrity
2. Remove the electronic board (Proc sheet 1 04)
3. Control of any oxidation marks (on the electronic board and under the metal dome)

Return procedure :

(a) The 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 electronic boards manipulation , gloves and electrostatic strap must be worn at all times.

(c) The defective 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 OMM).

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. Exchange the defective board with a functional board of the same Sagem reference (25M).

Further operations :

1. Place the new electronic board on the assembly plate. .(Proc sheet 1 18)
2. Replace the customer housing (Proc Sheet 1 02 et 1 13)
3. Follow stages (see enclosed photos) and the OMM instructions

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Example of electronic boards packaging

Electronic board with metal dome and camera

ESD shielding bag

Humidity absorber

Boards packaging SAGEM -> ARC

ESD shielding bag closed by the product label

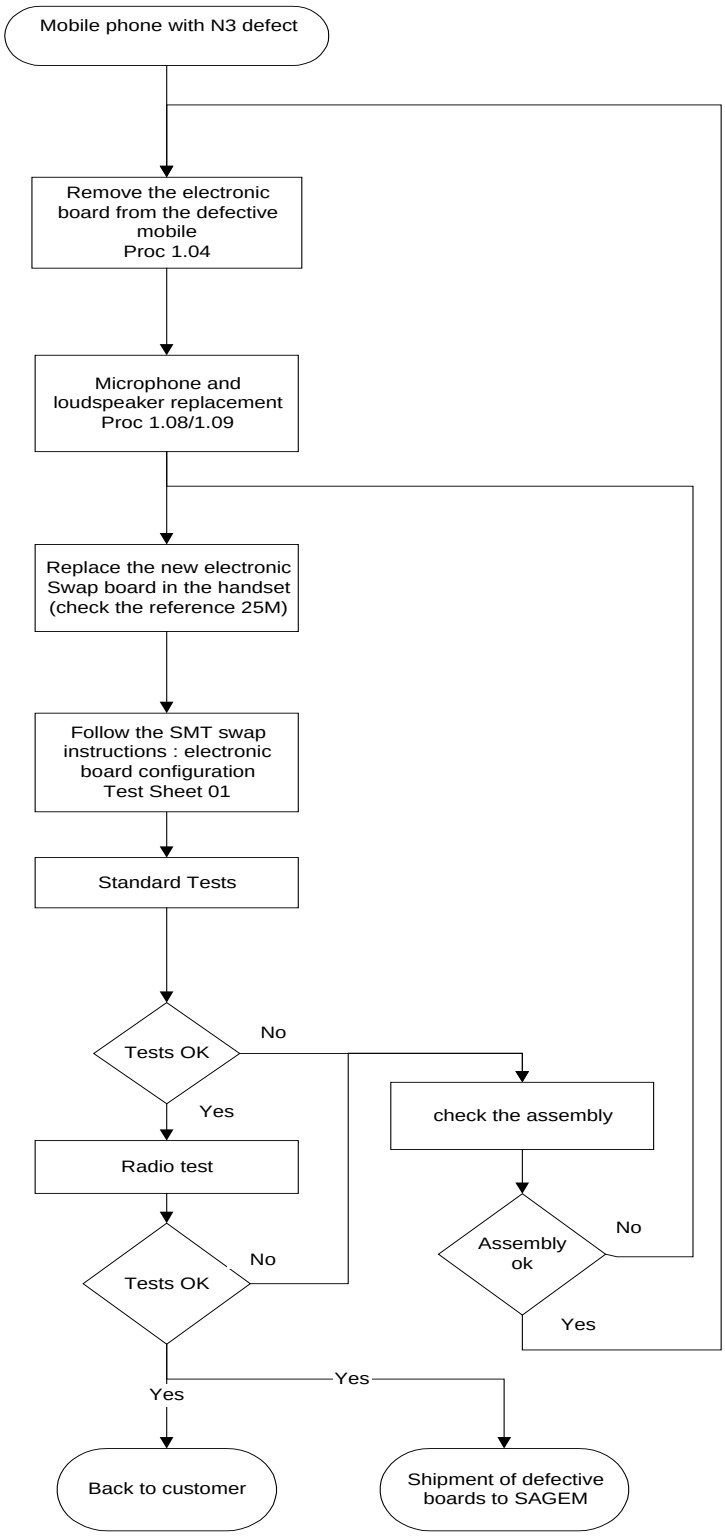
Boards packaging ARC -> SAGEM

ESD shielding bag closed by the IMEI label

Write the defect code on the label

SAGEM electrostatic shielding box
Reference 20 boards: 27441180-4
Reference 100 boards: 27 511110-6

Electronic board exchange process



Detection of N3 defect : See the Technical documentation

-check the metal dome . In case of damage or oxidation , replace it.

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

- See Technical Documentation (test sheet 06)

- Follow return instructions page 5-37

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Tools :

- A 0.6mm torx screwdriver
- Tweezers

Preliminary operation

1. Remove the back cover (Proc sheet 1 02).
2. Remove the battery (Proc sheet 0 01).
3. Remove the front cover (Proc sheet 1 13).
4. Unscrew the six attachment screws on the electronic board.
5. Remove the assembly flange, display, the keypad boards and the electronic board (Proc sheet 1 23 / 1 16 / 1 24 / 1 25 / 1 18)

Removal procedure :

Notice: do not touch the loudspeaker diaphragm

1. Remove, with the tweezers, the equipped loudspeaker in its housing.

Placement procedure :

1. Put the loudspeaker in its housing, respecting the foolproof device

Further operations :

6. Replace the assembly flange, the display, the keypad boards and the electronic board (Proc sheet 1 23 / 1 16 / 1 24 / 1 25 / 1 18)
1. Position and tighten the six attachments screws with torx settings of **0,25 N.m.**
2. Replace the front cover /battery / back cover (Proc sheet 1 13 / 1 02 / 0 01).
3. Carry out the radio test (Test Sheet 06).

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Remove

Replace

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Tools:

- A 0.6mm torx screwdriver
- Flat screwdriver

Preliminary operation

1. Remove the back cover (Proc sheet 1 02).
2. Remove the battery (Proc sheet 0 01).
3. Remove the front cover (Proc sheet 1 13).

Removal procedure :

1. Unscrew the six attachment screws(2) on the assembly plate (1)
2. With the flat screwdriver separate the eight stop pins to liberate the assembly flange.

Placement procedure :

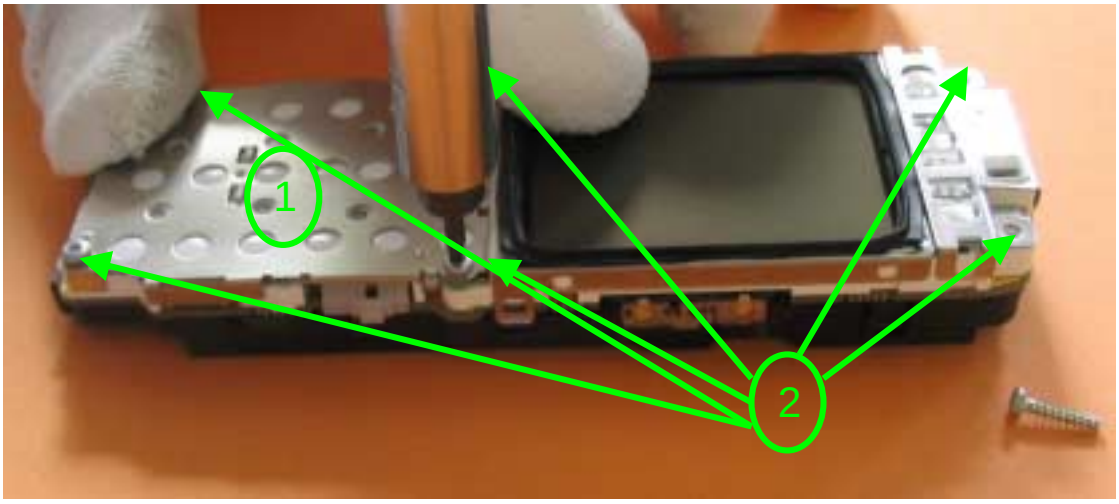
1. Replace the new assembly flange on its housing.
2. Position and tighten the six attachments screws with torx couple of **0,25 N.m.**

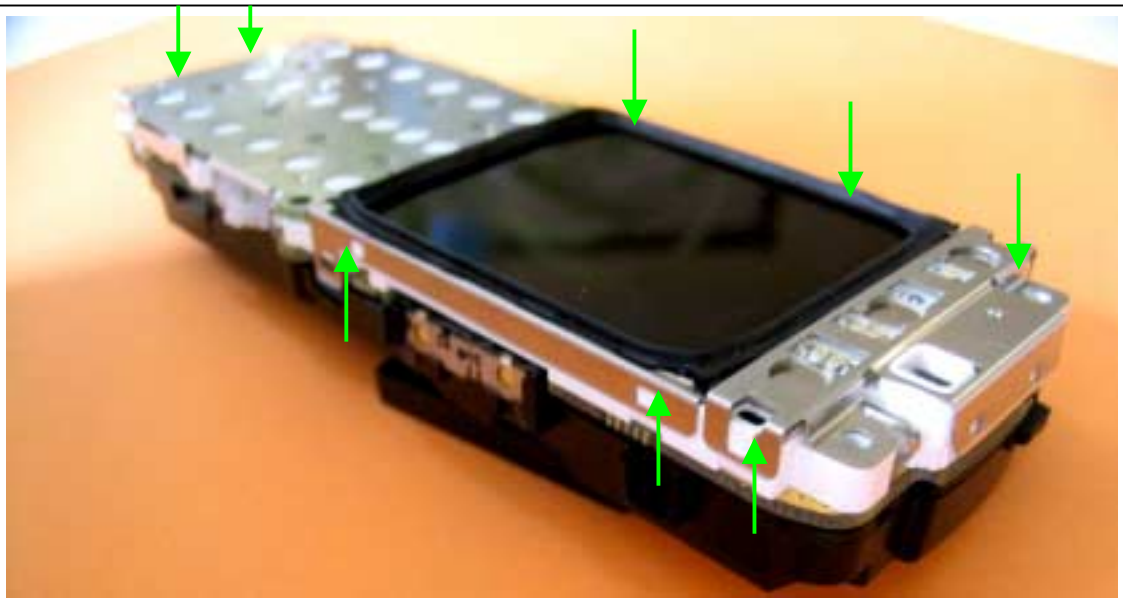
Further operations :

1. Replace the front cover (Proc sheet 1 13).
2. Replace the battery (Proc sheet 0 01).
3. Replace the back cover (Proc sheet 1 02).

Notice: All remove assembly flange must be rebuffed

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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





Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Tools

- Tweezers
- A 0.6mm torx screwdriver

Preliminary operation

1. Remove the back cover (Proc sheet 1 02).
2. Remove the battery (Proc sheet 0 01).
3. Remove the front cover (Proc sheet 1 13).
4. Remove the assembly flange (Proc sheet 1 23).

Procédure de dépose :

1. Push up with the tweezers on the grooved side of the upper keypad board (2) to take it from its site.
2. Removing the upper keypad board.

Procédure de pose :

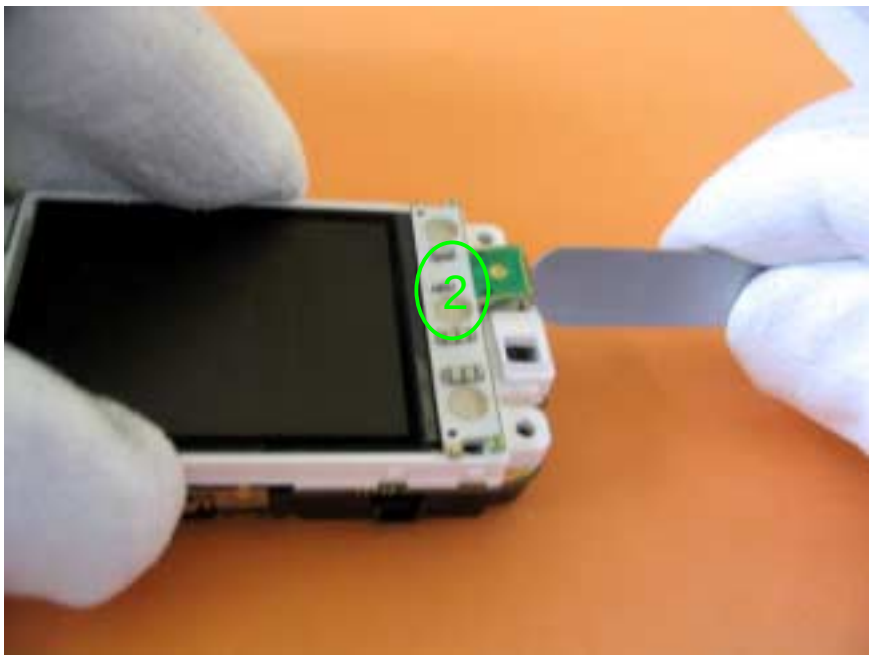
1. Press the upper keypad board into its site verifying the position until its clipping

Further operations :

1. Remove the assembly flange (Proc sheet 1 23).
2. Replace the front cover (Proc sheet 1 13).
3. Replace the battery (Proc sheet 0 01).
4. Replace the back cover (Proc sheet 1 02).
1. Carry out the radio test (Test Sheet 06).

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Removing upper keypad board



Replacing upper keypad board

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Tools :

- Unclipping tool CIE EP2005.
- A 0.6mm torx screwdriver
- Flat screwdriver
- FCP insert tool.
- Lower keypad board unclipping tool EP2005 (252077952).

Preliminary operation

1. Remove the back cover (Proc sheet 1 02).
2. Remove the battery (Proc sheet 0 01).
3. Remove the front cover (Proc sheet 1 13).

Removal procedure :

1. Unscrew the six attachment screws on the assembly plate
2. Remove the assembly flange (Proc sheet 1 23)
3. Remove the upper keypad board (Proc sheet 1 24)
4. Remove the electronic board (Proc sheet 1 18)
5. Remove the lower keypad board with the lower keypad board unclipping tool.

Placement procedure :

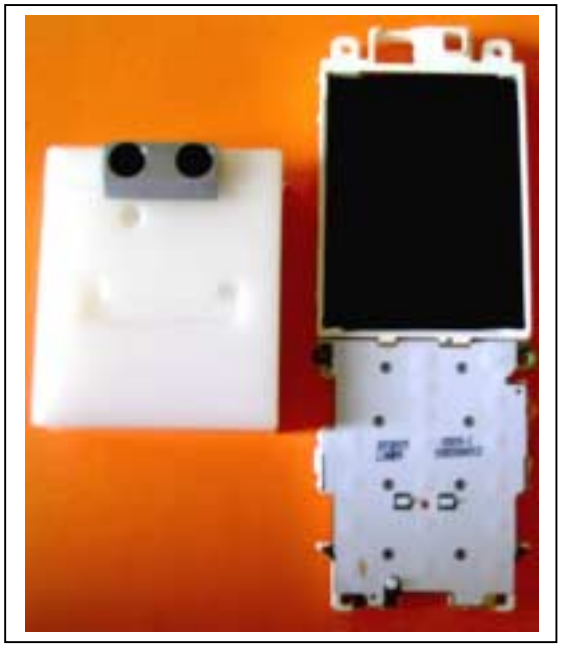
1. Replace the new lower keypad board.
2. Replace the electronic board (Proc sheet 1 03)
3. Replace the upper keypad board (Proc sheet 1 02)
4. Replace the assembly flange (Proc sheet 1 01)
5. Position and tighten the six attachments screws with torx couple of **0,25 N.m.**

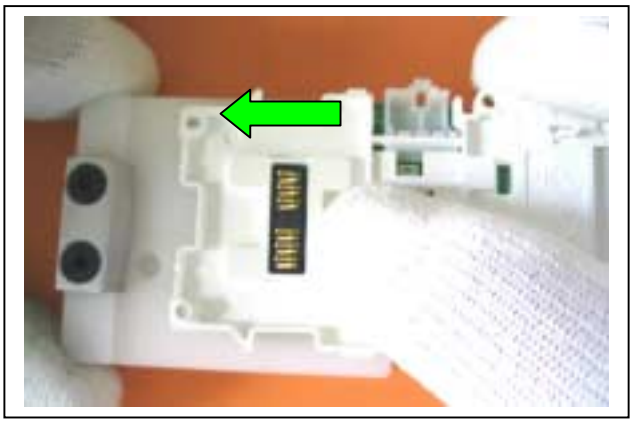
Further operations :

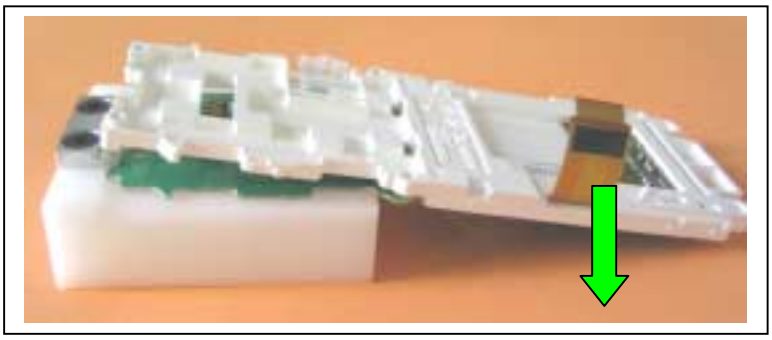
1. Replace the front cover (Proc sheet 1 13).
2. Replace the battery (Proc sheet 0 01).
3. Replace the back cover (Proc sheet 1 02).
4. Carry out the radio test (Test Sheet 06).

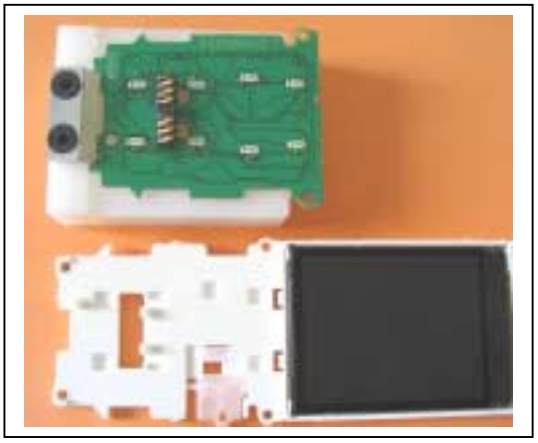
Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06

Remove.

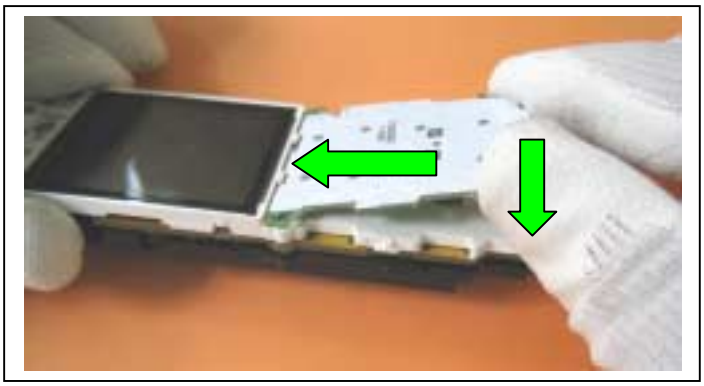








Replace.



LEVEL 2 MAINTENANCE

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Tools :

- A 0.6mm torx screwdriver
- Tweezers

Preliminary operation :

1. Remove the back cover (Proc sheet 1 02).
2. Remove the battery (Proc sheet 0 01).
3. Remove the front cover (Proc sheet 1 13).
4. Unscrew the six attachment screws on the electronic board.
5. Remove the assembly flange, the display, the keypad boards and the electronic board (Proc sheet 1 23 / 1 16 / 1 24 / 1 25 / 1 18)

Removal procedure :

1. With tweezers, remove the vibrating device(2).

Placement procedure :

1. Place the vibrating device (2) into position on the plate (1), respecting the foolproof device.

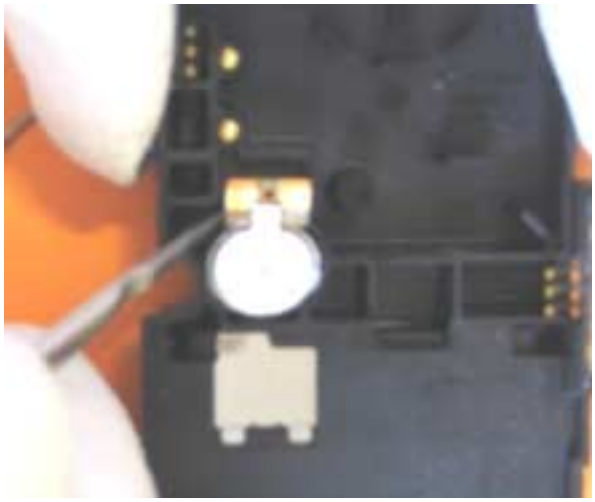
Further operations :

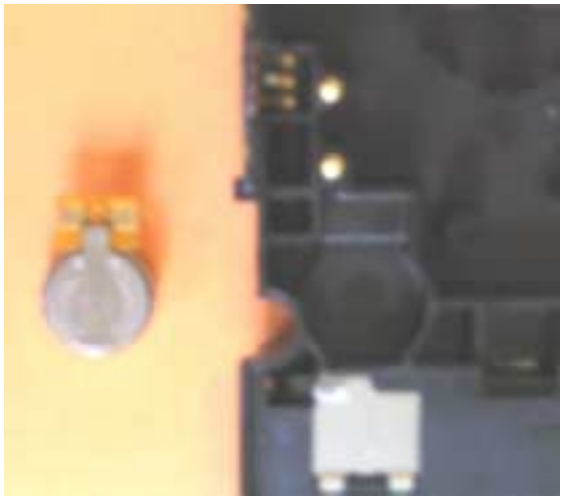
6. Replace the assembly flange, the display, the keypad boards and the electronic board (Proc sheet 1 23 / 1 16 / 1 24 / 1 25 / 1 18)

1. Position and tighten the six attachments screws with torx settings of **0,25 N.m.**
2. Replace the front cover /battery / back cover (Proc sheet 1 13 / 0 01 / 1 02).

Carry out the radio test (Test Sheet 06).

Remove the vibrating device.





Replace the vibrating device.

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

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 …..)

			PROBLEME D'AFFICHAGE	**DISPLAY PROBLEM**
A1			PAS D'AFFICHAGE - LCD INTERNE DEFECTUEUX	NO POWER UP - DEFECTIVE INTERNAL LCD
A3			BLOCAGE DE L AFFICHAGE LCD INTERNE	FREEZES UP INTERNAL LCD
A5			AFFICHEUR CASSE LCD INTERNE	BROKEN INTERNAL LCD
A6			LIGNE, DIGIT OU PIXEL MANQUANT, CONTRASTE, COULEUR LCD INTERNE	MISSING LINE, DIGIT or PIXEL, CONTRAST, COLOR INTERNAL LCD
A7			PB RETROECLAIRAGE LCD INTERNE	BACKLIGHTS PROBLEM INTERNAL LCD
A11			PAS D AFFICHAGE LCD EXTERNE DEFECTUEUX	NO POWER UP - DEFECTIVE EXTERNAL LCD
A13			BLOCAGE DE L AFFICHAGE LCD EXTERNE	FREEZES UP EXTERNAL LCD
A14			AFFICHEUR CASSE LCD EXTERNE	BROKEN EXTERNAL
A15			LIGNE, DIGIT OU PIXEL MANQUANT, CONTRASTE, COULEUR LCD EXTERNE	MISSING LINE, DIGIT or PIXEL, CONTRAST, COLOR EXTERNAL LCD
A16			PB RETROECLAIRAGE LCD EXTERNE	BACKLIGHTS PROBLEM EXTERNAL LCD
			PROBLEME D'ANTENNE	**ANTENNA PROBLEM**
A10			ANTENNE CASSEE / ABSENTE	BROKEN / MISSING ANTENNA
			PROBLEME D'ALIMENTATION / CHARGEUR	**POWER SUPPLY / CHARGING PROBLEM**
B1			CONTACT BATTERIE DU MOBILE DEFECTUEUX	DEFECTIVE MOBILE BATTERY CONTACT
B2			CONNECTEUR DE CHARGE DU MOBILE DEFECTUEUX	DEFECTIVE MOBILE CHARGER CONNECTOR
B3			ALIMENTATION CARTE DEFECTUEUSE	DEFECTIVE POWER SUPPLY OF THE BOARD
B4			AFFICHAGE CHARGE DEFECTUEUX	DEFECTIVE CHARGE ICON DISPLAY
B5			CONSOMMATION MODE ETEINT	CURRENT CONSUMPTION WITH PHONE OFF
B7			PROBLEME D'AUTONOMIE	INSUFFICIENT BATTERY DURATION
B8			BATTERIE DEFECTUEUSE	ELECTRICALLY DEFECTIVE BATTERY
B9			TENUE MECANIQUE BATTERIE	MECHANICAL LOCK PROBLEM ON BATTERY
B10			BATTERIE CASSEE	BROKEN BATTERY
B11			CHARGEUR DEFECTUEUX	DEFECTIVE CHARGER
B12			CHARGEUR CASSE	BROKEN CHARGER
B13			COUPURE INTERMITTENTE AVEC REDEMARRAGE	INTERMITTENT SWITCH OFF WITH REBOOT
B14			COUPURE INTERMITTENTE SANS REDEMARRAGE	INTERMITTENT SWITCH OFF WITHOUT REBOOT
			PROBLEME DE CLAVIER	**KEYBOARD PROBLEM**
C1			CLAVIER INOPERANT CORPS PRINCIPAL	NOT FUNCTIONING BODY KEYBOARD
C2			PROBLEME TOUCHE LATERALE	SIDE KEY PROBLEM
C3			CLAVIER INOPERANT FLAP/SLIDE	NOT FUNCTIONING FLIP OR SLIDE KEYBOARD
			MESSAGE D'ERREUR	**ERROR MESSAGE**
D1			SIM ABSENTE	SIM MISSING
D2			AUTRES MESSAGES	OTHER MESSAGES
D4			MOBILE NON REGLE	UNTUNED MOBILE
D6			SIM VERROU	SIM VERROU
D7			CODE POSTE	POST CODE BLOCKED
D8			RETOUR SAV	SAV RETURN
			PROBLEME AUDIO	**AUDIO PROBLEM**
E1			HP DEFECTUEUX	DEFECTIVE LOUDSPEAKER (hails)
E3			MICRO DEFECTUEUX	DEFECTIVE MICROPHONE
E5			PROBLEME DE VIBREUR	VIBRATING DEVICE PROBLEM
E6			CONNECTEUR AUDIO DEFECTUEUX	DEFECTIVE AUDIO CONNECTOR
			PROBLEME DE COMMUNICATION	**COMMUNICATION PROBLEM**
F1			PAS DE LOCALISATION RESEAU	NO NETWORK RETRIEVAL
F2			COUPURE DE COMMUNICATION	INTERMITTENT CALLS DROP
F4			TEST RADIO NON OK	TEST RADIO NO OK
F5			ECHEC APPEL SORTANT	OUTGOING CALL FAILURE
F6			ECHEC APPEL ENTRANT	INCOMING CALL FAILURE
F7			PERTE TEMPORAIRE DE RESEAU	NETWORK TEMPORARY DROP
			PROBLEME COSMETIQUE / DEFAUT VISUEL	**COSMETIC PROBLEM**
G1			VITRE CASSEE OU ABIMEE CORPS PRINCIPAL	BROKEN OR DAMAGED BODY GLASS
G2			COQUE CASSEE OU ABIMEE	BROKEN OR DAMAGED COVER
G3			FLAP CASSE OU ABIME	BROKEN OR DAMAGED FLIP
G5			CLAVIER CASSE OU ABIME CORPS PRINCIPAL	BROKEN OR DAMAGED BODY KEYBOARD
G6			BOUTON VERROU DEFECTUEUX	DEFECTIVE LOCK BUTTON
G7			VITRE CASSEE OU ABIMEE FLAP/SLIDE	BROKEN OR DAMAGED GLASS FLIP/SLIDE
G8			CLAVIER CASSE OU ABIME FLAP/SLIDE	BROKEN OR DAMAGED FLIP/SLIDE KEYBOARD
			AUTRES PROBLEMES	**OTHER PROBLEM**
H1			KIT ACCESSOIRES HS (KIT PIETON CLASSIQUE, KITS BLUETOOTH…)	BROKEN OR DAMAGED ACCESSORY (PEDESTRIAN HEADSET, BLUETOOTH KITS…)
H2			FONCTION FM (MOBILE) OU MP3	FM OR MP3 FUNCTION (Mobile)
I1			TRACE D OXYDATION	OXYDATION MARKS
I3			PAS DE DEFAUT CONSTATE	NO FAULT FOUND
I10			PAS DE DEFAUT CONSTATE SECOND RETOUR (sauf pendant la boucle courte)	NO FAULT FOUND SECOND RETURN (excepted during short loop process)
I5			MANQUE FONCTION DANS MENU	LACK FUNCTION IN THE MENU
I6			CONNECTEUR SIM DEFECTUEUX	DEFECTIVE SIM CONNECTOR
I7			DYSFONCTIONNEMENT D'UNE FONCTION DU MENU	MALFUNCTION OF THE MENU
I8			RECONFIGURATION DU MOBILE	MOBILE RETROFIT
I9			BLACK LISTE	BLACK LIST
			PROBLEME MULTIMEDIA	**MULTIMEDIA PROBLEM**
K2			FONCTION VIDEO	VIDEO FUNCTION
K4			FONCTION WAP	WAP FUNCTION
K5			FONCTION GPRS	GPRS FUNCTION
K6			FONCTION SMS, EMS, MMS.	SMS, EMS, MMS FUNCTION
K7			NE COMMUNIQUE PAS AVEC UN PC	NO COMMUNICATION WITH A PC
K8			NE COMMUNIQUE PAS AVEC UN POCKET PC OU PALM	NO COMMUNICATION WITH A POCKET PC or PALM
K9			LIAISON DATA (MESSAGE "AUCUNE PORTEUSE DETECTEE")	DATA (MESSAGE "NO CARRIER DETECTED")
K10			TELECHARGEMENT JEUX	DOWNLOADING GAME
K11			TELECHARGEMENT IMAGE / SON / ECONOMISEUR D'ECRAN	DOWNLOADING PICTURE / RINGTONE / SCREEN SAVER
K12			PB DATA SANS FIL (IRDA, BLUETOOTH…)	WIRELESS DATA FUNCTION PB (IRDA, BLUETOOTH…)

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

MANDATORY

This form must be attached around the defective mobile or the ESD bag containing the defective board:
It must not be put inside the ESD bag.

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

Sagem Communication Groupe SAFRAN	RETURN TO THE CLIENT	Proc Sheet 3 02
		1/1

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

Cachet du Vendeur/Dealer's Stamp :	***Informations Client /Information :***
	Nom/Name :
	Rue /Street :
	Ville / City :
	Code postal /Postcode :
	Pays/Country
	Telephone /Phone :
Nom du produit/product :	N° Série/Sérial n° :
Date d'achat/Date of purchase	N° IMEI :
Garantie/Warranty :	***Hors garantie/Out of warranty :***
Garantie standard/Standard warranty :	Garantie expirée /Expired warranty :
Déjà réparé/préviously repaired :	Mauvaise utilisation / Missuse

Code SAGEM			Type de défaut	Kind of fault
A0			AFFICHAGE DEFECTUEUX	DISPLAY MALFUNCTION
A10			ANTENNE CASSEE / ABSENTE	ANTENNA BROKEN / MISSING
B0			ALIMENTATION/CHARGE	POWER SUPPLY / NO CHARGE
B7			PROBLEME D'AUTONOMIE	AUTONOMY
B8			BATTERIE DEFECTUEUSE	BROKENBATTERY
B11			CHARGEUR DEFECTUEUX	CHARGER MALFUNCTION
C0			PROBLEME CLAVIER	KEYBOARD MALFUNCTION
C2			PROBLEME TOUCHE LATERALE	LATERAL TOUCH PROBLEM
D0			MESSAGE D'ERREUR	ERROR MESSAGE
D1			SIM ABSENTE	SIM MISSING
D7			CODE POSTE	POST CODE BLOCKED
E0			PROBLEME AUDIO	AUDIO PROBLEM
E3			MICRO DEFECTUEUX	MICROPHONE MALFUNCTION
E5			PROBLEME DE VIBREUR	VIBRATING DEVICE MALFUNCTION
F0			PROBLEME DE COMMUNICATION	COMMUNICATION MALFUNCTION
G1			VITRE CASSEE OU ABIMEE	BROCKEN GLASS
G2			COQUE CASSEE OU ABIMEE	BROCKEN COVER
G3			FLAP CASSE OU ABIME	BROKEN FLIP
G5			CLAVIER CASSE OU ABIME	BROCKEN KEYBOARD
G6			BOUTON VERROU DEFECTUEUX	DEFECTIVE LOCK BUTTON
K2			FONCTION VIDEO	VIDEO FUNCTION
K3			FONCTION INFRAROUGE (IRDA)	INFRARED FUNCTION (IRDA)
K4			FONCTION WAP	WAP FUNCTION
K5			FONCTION GPRS	GPRS FUNCTION
K6			FONCTION SMS, EMS, MMS.	SMS, EMS, MMS FUNCTION
K7			NE COMMUNIQUE PAS AVEC UN PC	NO COMMUNICATION WITH A PC
K8			NE COMMUNIQUE PAS AVEC UN POCKET PC OU PALM	NO COMMUNICATION WITH A POCKET PC or PALM
K9			LIAISON DATA (MESSAGE "AUCUNE PORTEUSE DETECTEE")	DATA (MESSAGE "NO CARRIER DETECTED")
K10			TELECHARGEMENT JEUX	DOWNLOADING GAME
K11			TELECHARGEMENT IMAGE / SON / ECONOMISEUR D'ECRAN	DOWNLOADING PICTURE / RINGTONE / SCREEN SAVE
H1			KIT ACCESSOIRES HS	BROCKEN ACCESSORIES
H2			FONCTION FM (MOBILE)	FM FUNCTION
H3			FONCTION MONETIQUE	MONETIC FUNCTION
I5			MANQUE FONCTION DANS MENU	LACK FUNCTION IN THE MENU
I7			DYSFONCTIONNEMENT D'UNE FONCTION DU MENU	MALFUNCTION OF THE MENU
I8			RECONFIGURATION DU MOBILE	MOBILE RETROFIT
I0			AUTRES DEFAUTS A PRESICER	OTHERS / TO BE PRECISED

OUT OF WARRANTY INTERVENTION

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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

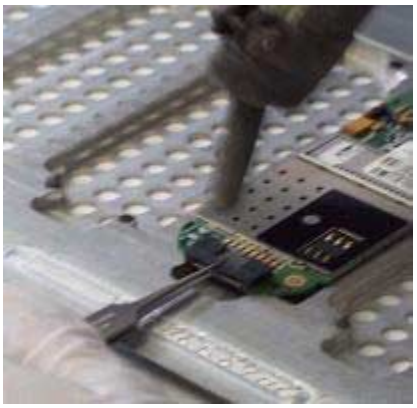
Notice: The handsets requiring the replacement of system connectors cannot be repaired under Sagem warranty.

The eventual deterioration of the board due to a bad replacement of the connector falls under the Repair Centre responsibility.

- Replacement procedure of DATA/ AUDIO/ CHARGE connector

1-Disassemble the handset
2-Replace the defective connector (see below) **Ref 18 598 906-8**
3 - Replace the electronic board in the mobile phone (Proc 1 18)
4 -To test the replacement of the connector, it is necessary to:
a) Connect the mobile phone on SMT maintenance software (test Sheet 01)
b) Make real calls with a pedestrian handsfree Kit **Reference: 18 851 296-8**
c) Test the charge of mobile phone
5 - Standard test after repair

Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 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



- Maintain the electronic board
- flux Correctly the pins of the connector.
- Reference of the flux to be used:
- LITTON flux -Supplier reference 952-D6
  -SAGEM reference18 775 103-7
- With tweezers, hold the connector and heat the pins up.

ATTENTION:
-Do not pull the connector but let it come , in order to avoid destroying the pads

After having removed the connector, uncork rather quickly the four holes of the connector while the tin is still

Flux and heat the pads in place of the connector to equalise the foot prints

In order to tin the pins of the DATA/ AUDIO/ CHARGE connector, load the solder wick with tin on approximately 1 inch.

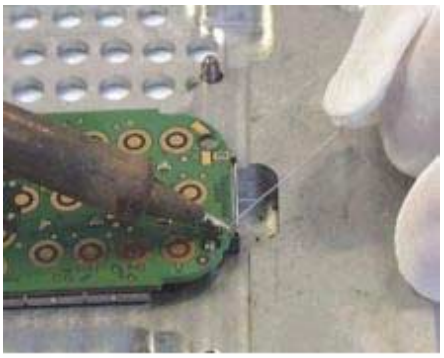
Procedure
Proc 0 01
Proc 1 02
Proc 1 13
Proc 1 14
Proc 1 16
Proc 1 18
Proc 1 20
Proc 1 21
Proc 1 23
Proc 1 24
Proc 1 25
Proc 2 01
Proc 3 01
Proc 3 02
Proc 4 01
Symptom
Symp 01
Symp 02
Symp 03
Symp 04
Symp 05
Symp 06
Symp 07
Symp 08
Symp 09
Symp 10
Test
Test 01
Test 02
Test 03
Test 04
Test 05
Test 06

Before any operation,
-flux correctly the pins of the connector.
-with the solder wick loaded with tin , tin the pins of the DATA/ AUDIO/ CHARGE connector by positioning it straight ahead (pads upward), and by heating the solder wick which is in touch with pins.

Attention:

- At the end of the operation , verify that there is no short circuit between pads.

-Start soldering the connector pins.
-Flux the place of the connector and position the DATA/ AUDIO/ CHARGE connector.
-Verify that the pins of the DATA/ AUDIO/ CHARGE connector are well centred on pads.
-Heat pins with an air blow device while maintaining the connector with tweezers
-Verify that there is no short-circuit, that solders are shiny and that they cover well the pins



At last, solder the 4 pins crossing the

CHAPTER 6 - ACCESSORIES

6.1 CIGAR LIGHTER CHARGERAC1

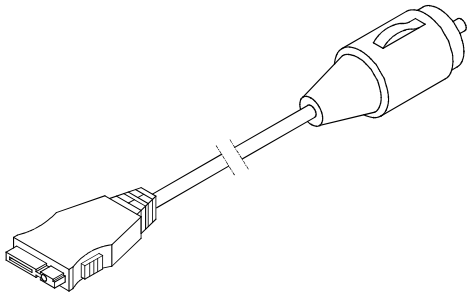
6.1.1 Description

This charger is for use in a car (or truck) only. The adapter is fitted with a cigar lighter type connector. AC1 is used to charge a mobile on a cigar lighter connector.

6.1.2 Caractéristiques

Packaging :
Blister

Comment :
Input voltage : 10.8 to 30 V
No load voltage : 6.5 V
Output current : 500 mA



6.2 FULL DUPLEX CAR HANDSFREE KIT

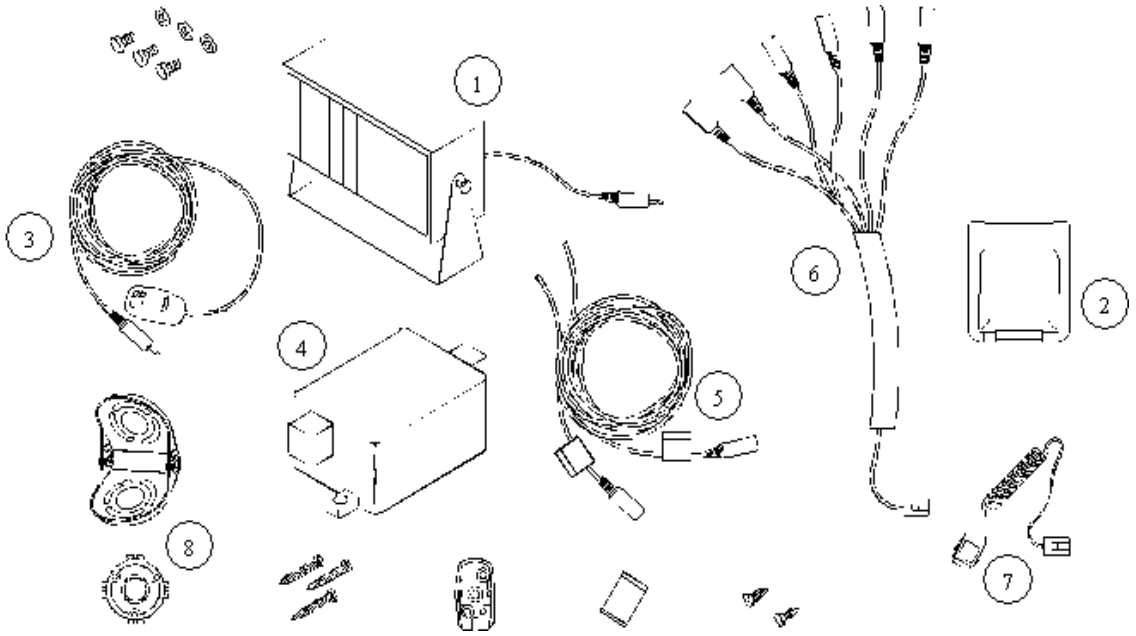
6.2.1 Description

Rapido Kit : "compact" kit on cigar lighter,
Kit K3 : "confort" kit for integration in car with phone equipment.
Rapido Kit : "compact" kit on cigar lighter,
Kit K3 : "confort" kit for integration in car with phone equipment

6.2.2 Caractéristiques

Packaging :
Box

Comment :
No antenna



1 : Haut-parleur.

2 : Support du mobile.

3 : Microphone.

4 : Boîtier d'interconnexion.

5 : Câble d'alimentation.

6 : Câble de connexion micro, haut-parleur, voiture ⇔ boîtier d'interconnexion.

7 : Câble de connexion mobile ⇔ boîtier d'interconnexion.

8 : Kit de fixation.

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.

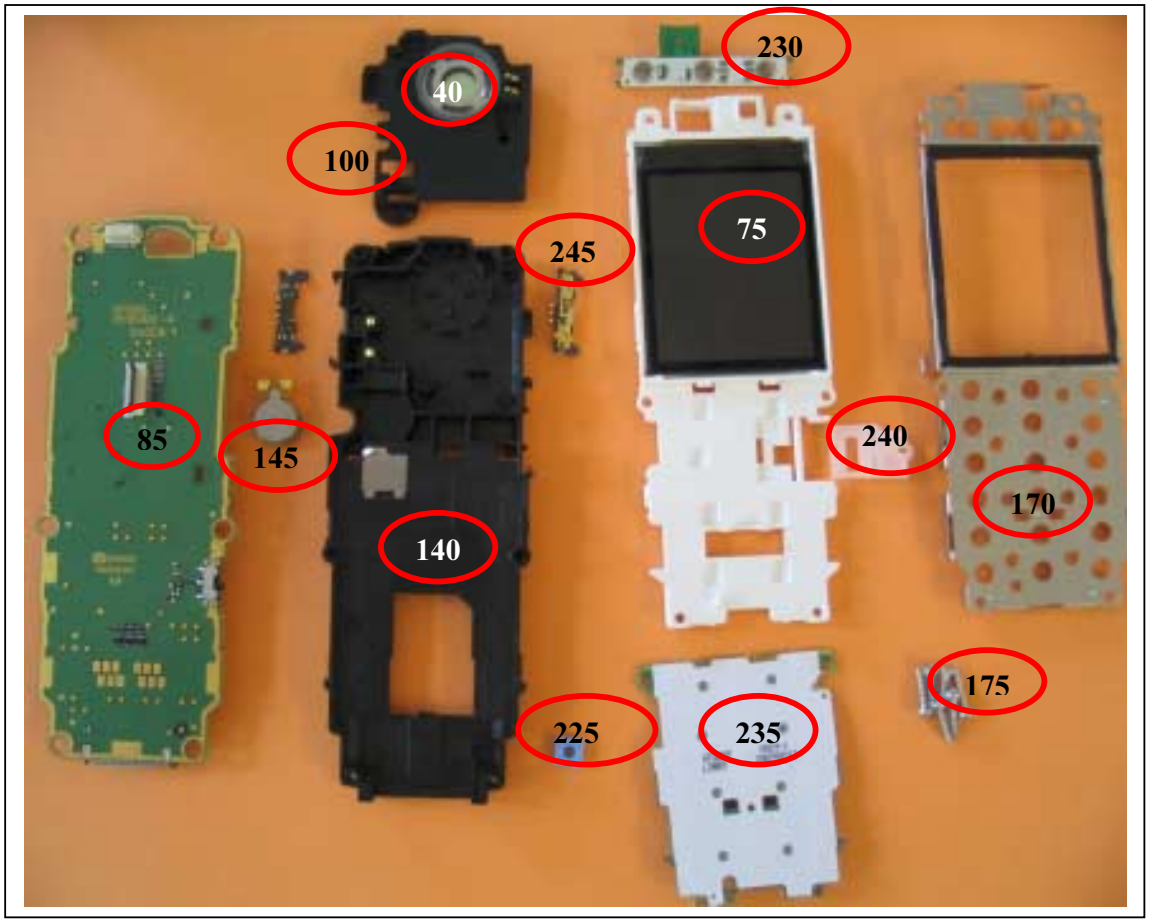
CHAPTER 8 - ILLUSTRATED PARTS CATALOG

8-1 SPARE PARTS Vodafone Simply

ASSEMBLY	Quantity	Designation
5	1	Lower cover
10	1	Upper cover
15	1	Keypad
40	1	Assembled loudspeaker
50	1	Battery
65	1	LCD pane
75	1	LCD
85	1	Main board
100	1	Microphone rubber
140	1	Assembled antena plate
145	1	Vibrating device
170	1	Display flange
175	6	Screw
180	1	Battery lock
185	1	Lock
190	1	Drill plate
195	1	Upper keypad
200	1	Volume side key
205	1	On/Off button
210	1	Regulation side key
220	1	Sticker gout
230	1	Upper keypad board
235	1	Keypad board
240	1	Locking interface
245	2	Contact side key

STRAIGHT Cover

Electronic module



Index

CHAPTER 1 - FOREWORD

1-1 HOW TO USE THE SITE TECHNICAL DOCUMENTATION 1-1
1-1-1 USE 1-2
1-2 ABREVIATIONS 1-2
1-3 COMMENTS SHEET 1-3

CHAPTER 2 - DESCRIPTION - OPERATION

2-1 REMINDERS ABOUT THE GENERAL CHARACTERISTICS OF GSM AND PCS NETWORKS 2-1
2-2 REMINDERS ABOUT THE HAND SET CHARACTERISTICS 2-2
2-3 IN & OUT CONNECTOR 2-8
2-3-1 CONNECTOR DESCRIPTION 2-8
2-3-2 SIGNAL DESCRIPTION 2-8
2-4 IDENTIFICATION 2-9
2-4-1 ILLUSTRATION 2-9
2-4-2 DESCRIPTION 2-9
2-4-3 DESCRIPTION AFTER REPARATION 2-9
2-5 PHONE BLOCK DIAGRAMS 2-10
2-5-1 BLOCK DIAGRAM 2-10
2-5-2 STANDARDS AND ENVIRONMENT 2-10
2-6 EQUIPMENTS 2-10
2-6-1 BATTERY PACKS 2-11
2-6-1-1 CHARACTÉRISTICS 2-11
2-6-1-2 DESCRIPTION 2-11
2-6-1-3 CHARGING TIME 2-12
2-6-2 MAINS MODULES 2-12
2-6-2-1 DESCRIPTION 2-12
2-6-2-2 TRAVEL MAINS MODULES 2-12
2-6-2-3 SIMPLE MAINS MODULES 2-13

CHAPTER 3 - SYMPTOMS

3-1 GENERAL	3-1
3-2 LIST OF REPORTED DEFECTS	3-4
3-3 ERROR MESSAGES DURING START UP	3-7
3-4 OTHER ERROR MESSAGES	3-7
3-5 LIST OF OBSERVED DEFECTS	3-9
3-6 INFORMATION ABOUT NEW NOTICED FAULTS	3-9
SYMPTOM SHEETS	3-10
Symp sheet 01 - Endurance battery and charger problem	3-11
Symp sheet 02 - communication problem	3-12
Symp Sheet 03 - no fault given	3-13
Symp Sheet 04 - DISPLAY PROBLEM	3-14
Symp Sheet 05 - Keypad problem	3-15
Symp Sheet 06 - Ring tones problem	3-16
Symp Sheet 07 - vibrating device problem	3-17
Symp Sheet 08 - Audio problem	3-18
Symp Sheet 09 - Camera problem	3-19
Symp Sheet 10 - LOUDSPEAKER PROBLEM	3-20

CHAPTER 4 - TESTS AND CHECKS

4-1 GENERAL ABOUT TESTS	4-1
4-2 TEST TOOLS	4-1
4-3 INSTALLING ON A WORKSTATION (SMT STATION)	4-1
4-3-1 MINIMUM REQUIRED CONFIGURATION	4-1
4-3-2 INSTALLING THE CRA DOWNLOADING KIT	4-1
4-3-3 SMT FUNCTIONS	4-2
TEST SHEETS	4-3
Test Sheet 01 - TEST AND CHECK BY SMT	4-4
Test Sheet 02 - CHARGER TEST	4-11

Test Sheet 03 - BATTERY TEST 4-12
Test Sheet 04 - CONSUMPTION TEST 4-13
Test Sheet 05 - HOTLINE MENU 4-14
Test Sheet 06 - RADIO TEST 4-15

CHAPTER 5 - MAINTENANCE PROCEDURES

5-2 SHORT LOOP PROCESS 5-1
5-1 TECHNICAL WORK LEVELS 5-3
5-2 SHORT LOOP PROCESS 5-3
5-3 MAINTENANCE TOOLS 5-3
LEVEL 0 MAINTENANCE 5-5
Proc sheet 0 01 - RR BATTERY 5-6
LEVEL 1 MAINTENANCE 5-8
Proc sheet 1 02 - RR BACK COVER 5-9
Proc sheet 1 13 - RR FRONT COVER 5-11
Proc sheet 1 14 - RR THE KNOB LOCK AND THE LOCKER 5-13
Proc sheet 1 16 - RR THE DISPLAY 5-15
Proc sheet 1 18 - RR THE ELECTRONIC BOARD 5-17
Proc Sheet 1 20 - ELECTRONIC BOARD EXCHANGE 5-19
Proc sheet 1 21 - RR THE LOUDSPEAKER 5-22
Proc sheet 1 23 - RR THE ASSEMBLY FLANGE 5-24
Proc sheet 1 24 - RR THE UPPER KEYPAD BOARD 5-26
Proc sheet 1 25 - RR THE LOWER KEYPAD BOARD 5-28
LEVEL 2 MAINTENANCE 5-30
Proc sheet 2 01 - RR THE VIBRATING DEVICE 5-31
LEVEL 3 MAINTENANCE 5-34
Proc Sheet 3 01 - return to SAGEM 5-35
Proc Sheet 3 02 - return to the client 5-37
OUT OF WARRANTY INTERVENTION 5-38
Proc Sheet 4 01 - REMOVING REPLACING THE DATA AUDIO CHARGE CONNECTOR 5-39

CHAPTER 6 - ACCESSORIES

6-1 CIGAR LIGHTER CHARGERAC1 6-1
6-1-1 DESCRIPTION 6-1
6-1-2 CHARACTÉRISTICS 6-1
6-2 FULL DUPLEX CAR HANDSFREE KIT 6-2
6-2-1 DESCRIPTION 6-2
6-2-2 CHARACTÉRISTICS 6-2

CHAPTER 7 - TECHNICAL INFORMATION BULLETIN

7-1 PURPOSE 7-1
7-2 APPLICATION 7-1

CHAPTER 8 - ILLUSTRATED PARTS CATALOG

8-1 SPARE PARTS 8-1