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# SITE TECHNICAL DOCUMENTATION

**myX-8**

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## **APPENDIX 1 – COMPOSITION TABLE**

## CHAPTER 1 - FOREWORD

This document is common to all myX-8 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.

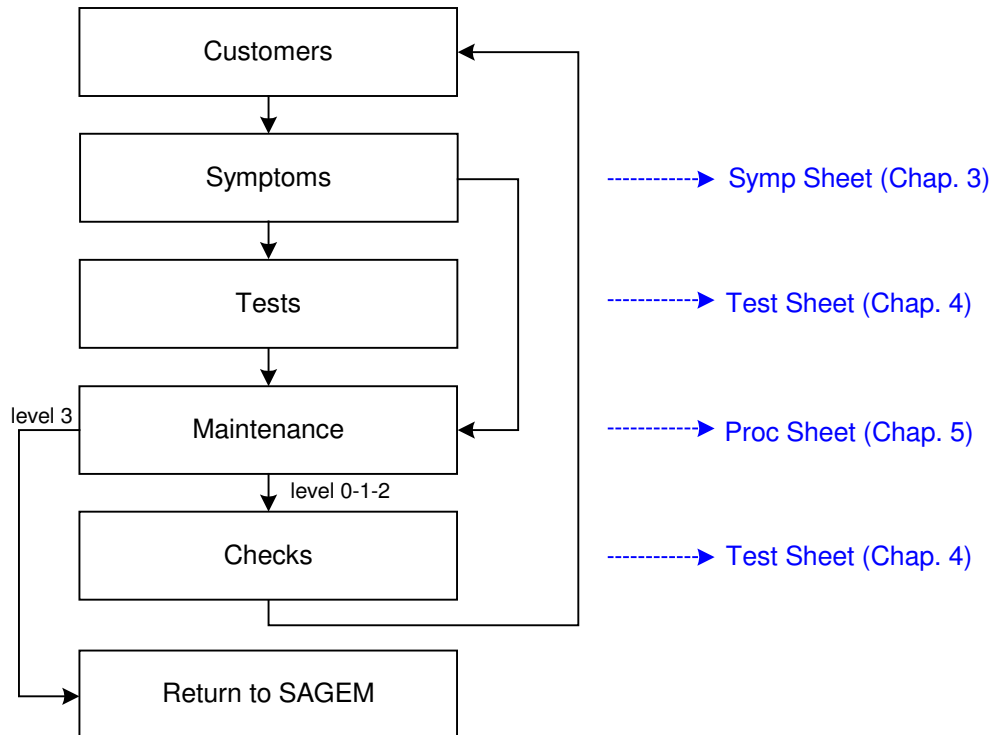
Phones are managed based on *SAGEM* handset codes; any order for spare parts must refer to these codes (typical code 25 xxx xxx-x).

### 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).



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 myX-8.
- **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 myX-8 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.
- **Appendix 1: Composition table**, contains the various Sagem references codes for equipment described in this document.

## 1.2 ABREVIATIONS

AAC	Advanced Audio Coder
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	Fix Dial Number
GPRS	General Packet Radio Service
GSM	Global System for Mobile
IMEI	International Mobile Equipment Identity
ISO	International Standard Organisation
LCD	Liquid Crystal Display
LU	Livret d'Utilisation (User's guide)
MMS	Multimedia Message Service
SMT	Outil de Maintenance des Mobiles (Mobile Maintenance Tools)
PIN	Personal Identity Number
PUK	PIN Unlocking Key
RF	Radio Frequency



SAR	Specific Absortion Rate
SIM	Subscriber Identify Module
SMS	Short Message Service
SMS CB	Short Service Message Cell Broadcast
TFT	Thin Film Transistors
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 for myX-8**

Reference :

Date :

Please fill in the following table :

	<b>Excellent</b>	<b>Good</b>	<b>Fairly good</b>	<b>Passable</b>
Easy to find the required information				
Clarity of information provided				
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Document presentation and appearance				
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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 :

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**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.**

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## CHAPTER 2 - DESCRIPTION - OPERATION

### 2.1 REMINDERS ABOUT THE GENERAL CHARACTERISTICS OF GSM 900, DCS 1800 AND PCS (GSM 1900) NETWORKS

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

	<b>GSM 900</b>	<b>DCS 1800</b>	<b>PCS 1900</b>
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
<b>Table 1 : Radio Interface</b>			

Table 2 shows powers as a function of the network:

Class number	<b>GSM 900</b>		<b>DCS 1800</b>		<b>PCS 1900</b>	
	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]				
<b>Table 2: Terminals power class</b>						

Table 3 shows power classes :

	Class 1	Class 2	Class 3	Class 4	Class 5
900	43 dBm	39 dBm	37 dBm	33 dBm	29 dBm
1800	30 dBm	24 dBm	36 dBm	-	-
1900	30 dBm	24 dBm	33 dBm	-	-
<b>Table 3: RF power classes</b>					

**2.2 REMINDERS ABOUT THE CHARACTERISTICS AND OPTIONS OF myX-8**

<b>GENERAL CHARACTERISTICS</b>	
<b>Size</b>	
Dimension (LxWxH, mm)	20,8x47x115
Weight (g)	121 g
Volume (cm3)	107
<b>Power Management</b>	
Battery type	Li-ion
Charging time	3 h
Talk time (TW.09)	up to 4h
Data Mode time	N.C
Standby time (TW.09)	up to 300 h
<b>Display and User Interface</b>	
Screen type	<b>TFT, large viewing angle with exclusive technology</b>
Colours	<b>256k</b>
Number of lines	up to 11 lines
Screen size (mm)	2,2"
Screen resolution (pixels)	<b>QVGA 240x320 pixels</b>
Backlight	yes
Soft keys / navigation	Two
Sub LCD (clam design)	No
<b>Customisation</b>	
Handset colours	2 colours + Aluminium
Interchangeable covers	No, aluminium covers
<b>Radio</b>	
GSM Band	900 - 1800 - 1900 MHz (850 -1800 - 1900 MHz for myX-8a)
Automatic switching between bands	Yes
Voice codecs	HR, FR, EFR, AMR
<b>Operating System</b>	
<b>CONNECTIVITY</b>	
<b>Radio</b>	
GPRS	Yes Class <b>10</b>
UMTS	No
<b>Internet</b>	
Browser	Wap 2.0
Push	Yes
Built-in data / fax Modem	Yes
<b>Data Transfer</b>	
Serial	External accessory cable in option
IrDA (Obex or other standard)	Yes
Bluetooth	Yes
USB	External accessory cable in option
WiFi (802.11b,a)	No
PC/MAC directory synchronisation	Wellphone software for PC

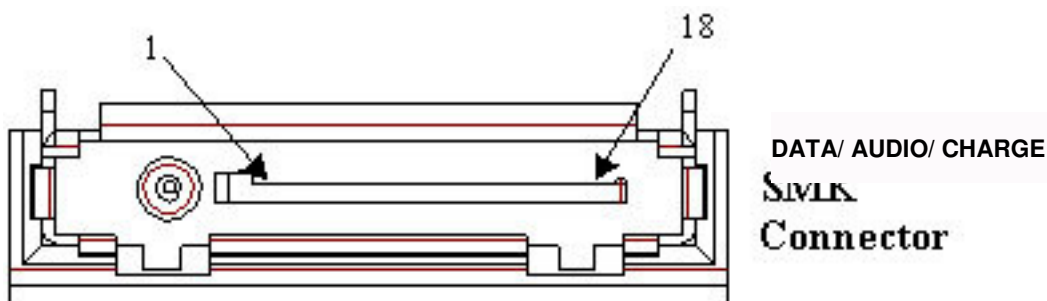
<b>MULTIMEDIA</b>	
<b>Messaging</b>	
SMS	MO/MT/CB
EMS	Yes Release 5
MMS	Yes (Nokia Ericsson conformance document v2.0)
Instant messaging (IMPS) - Chat	Yes (depending on network availability)
e-mail client	No
Notification	Yes
Predictive text input	T9
<b>Video &amp; Images</b>	
Camera	Yes, <b>1,3 M Pixels, CCD high sensitivity</b>
Image features	Yes
Flash	Yes
Zoom	digital <b>progressive zoom</b> x8
Video Player	H263, 3GP download & playback & streaming, mpeg4
Image Format	bmp, jpeg, png, gif
<b>Audio</b>	
Audio Recorder	Yes
Audio player	<b>MP3</b> , AAC, Wave
Polyphonic ringtones	up to 32 tones
Audio formats	iMelody 1.2, Midi, spMidi, Wave, AMR NB, PCM,
<b>Entertainment</b>	
Wallpaper	up to 15 default preset
Screensaver	animated, up to 5 default preset
Clock display	Yes, digital or analog
Icons	up to 50 default preset
Bookmarks inserted in wallpapers and ringtones menus	Yes
Boot up and shut down sequences	Yes, animated
Embedded Games	1 Java color game
Java	CLDC 1.0, MIDP 2.0 JTWI, WMA
Bookmarks inserted in Games menu	Yes
<b>OTA Downloads</b>	
Protocol supported	EMS, MMS, HTTP or WSP-Get, WAP save as
Wallpaper / screensaver	up to 40 MB of shared memory
Animation	up to 40 MB of shared memory
Menu icon	up to 40 MB of shared memory
Games	Java Games, up to 8 MB of shared memory
Ringtone	up to 40 MB of shared memory
Music	up to 40 MB of shared memory
Java application	up to 8 MB of shared memory
<b>CALL MANAGEMENT</b>	
<b>Voice features</b>	
Mute mode	Yes
Integrated handsfree mode	Yes
<b>Address book features</b>	
Call identification	user defined image + ringtone per contact
Personal information management (V-card)	Yes
Ringtone / Icon customisation	Yes

<b>CALL MANAGEMENT (cont'd)</b>	
<b>Advanced Features</b>	
Conference call	Yes
Call list (dialed, received and missed)	Yes
Caller ID	Yes
Anonymous mode	Yes
Call wait / call hold / call transfer	Yes
Call forwarding	Yes
Sim toolkit	Yes
Vibrate mode	Yes
Speed dialing	voice mail only
Automatic redial	Yes
Any key answer	Yes
Automatic hang up	Yes
<b>SPECIAL FEATURES</b>	
<b>Keyboard Features</b>	
Scroll key	5 ways Navigator (4 ways + Ok)
Direct access key (ADN, SMS, WAP, i-mode)	2 programmable keys
Keypad lock	Yes
Silent key	Yes
International access key	No
<b>Personal Management Features</b>	
Calculator	Yes
Alarm Clock	Yes
Stop watch	Yes
Organizer	Yes
To Do	Yes
Voice recorder	Yes
Currency converter	Yes
Languages	set of 8 languages (Factory settings)
<b>Compatible Accessories</b>	
Data cord	Serial, USB
Universal charger	Yes
Hands free kit	Yes mono and <b>stereo, bluetooth</b>
Bluetooth 1.2	<b>Yes</b>
CD-ROM	WellPhone, MyPicturesAndSounds, MySagemUpdate
<b>MEMORY</b>	
Internal phone book (positions)	up to 1 MB
Messaging memory SMS/EMS/MMS/Email (positions)	up to 100 MMS or 500 SMS
Redial list (positions)	20
Additional multimedia memory	Yes, mini SD card reader
Embedded memory (Max size for total user objects)	Yes, up to <b>40 MB</b> of shared memory

## 2.3 DATA/ AUDIO/ CHARGE 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 No.	SIGNAL FUNCTION	NATURE E/S, AI, Ana
CHARGEUR	1	Phone set power ON and power supply signal.	POWER SUPPLY
VBAT	2	POWER SUPPLY IMAGE VOLTAGE, connect this signal to «CHARGER» (pin n°1) to switch the module on.	POWER SUPPLY OUTPUT
ON*	3	SIGNAL RESERVED FOR USE BY SAGEM (car handsfree kit).	OPEN DRAIN OUTPUT
VPP	4	Flash programming voltage	POWER SUPPLY
SDAI2C	5	DATA SIGNAL RESERVED FOR SAGEM SPECIFIC ACCESSORIES.	LOGICAL INPUT/OUTPUT
GND	6	ZERO VOLT	SIGNAL GROUND
SCLI2C	7	CLOCK SIGNAL RESERVED FOR SAGEM SPECIFIC ACCESSORIES.	OPEN DRAIN INPUT/OUTPUT
INTI2C	8	INTERRUPT SIGNAL RESERVED FOR SAGEM SPECIFIC ACCESSORIES.	LOGICAL INPUT



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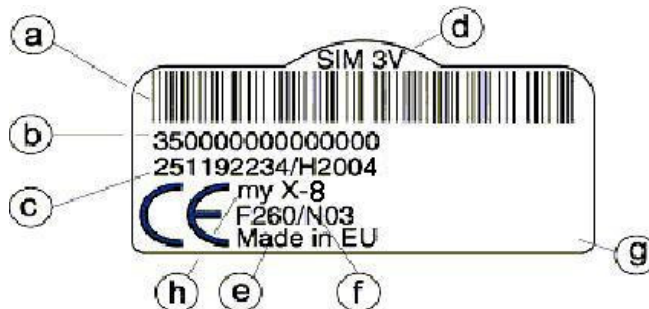
POLANT32 (RXD2)	9	APPLICATION INPUT SERIAL N°2	LOGICAL INPUT
RXDG	10	SERIAL DATA TO BE TRANSMITTED.	LOGICAL INPUT
TXDG	11	SERIAL DATA RECEIVED.	LOGICAL OUTPUT

<b>SYMBOL</b>	<b>PIN CONNECTOR No.</b>	<b>SIGNAL FUNCTION</b>	<b>NATURE E/S, AI; Ana</b>
DIN32	12	RESET	LOGICAL INPUT
ITDATA	13	Interruption signal keep for SAGEM accessories.	LOGICAL INPUT
GND	14	ZERO VOLT.	SIGNAL GROUND
BFRXP	15	Audio frequency signal received ( $\phi$ 0).	ANALOG OUTPUT
BFRXN	16	Complementary output to BFRXP ( $\phi$ 180).	ANALOG OUTPUT
BFTXN	17	AUDIO FREQUENCY SIGNAL TO BE TRANSMITTED $\phi$ 180. Complementary input to BFTXP.	ANALOG INPUT
BFTXP	18	AUDIO FREQUENCY SIGNAL TO BE TRANSMITTED $\phi$ 0. Acoustic L.F. signal to be transmitted.	ANALOG INPUT

**2.4 IDENTIFICATION**

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

**2.4.1 Illustration**

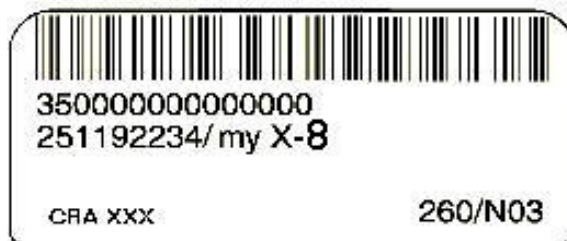


**2.4.2 Description**

- 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:

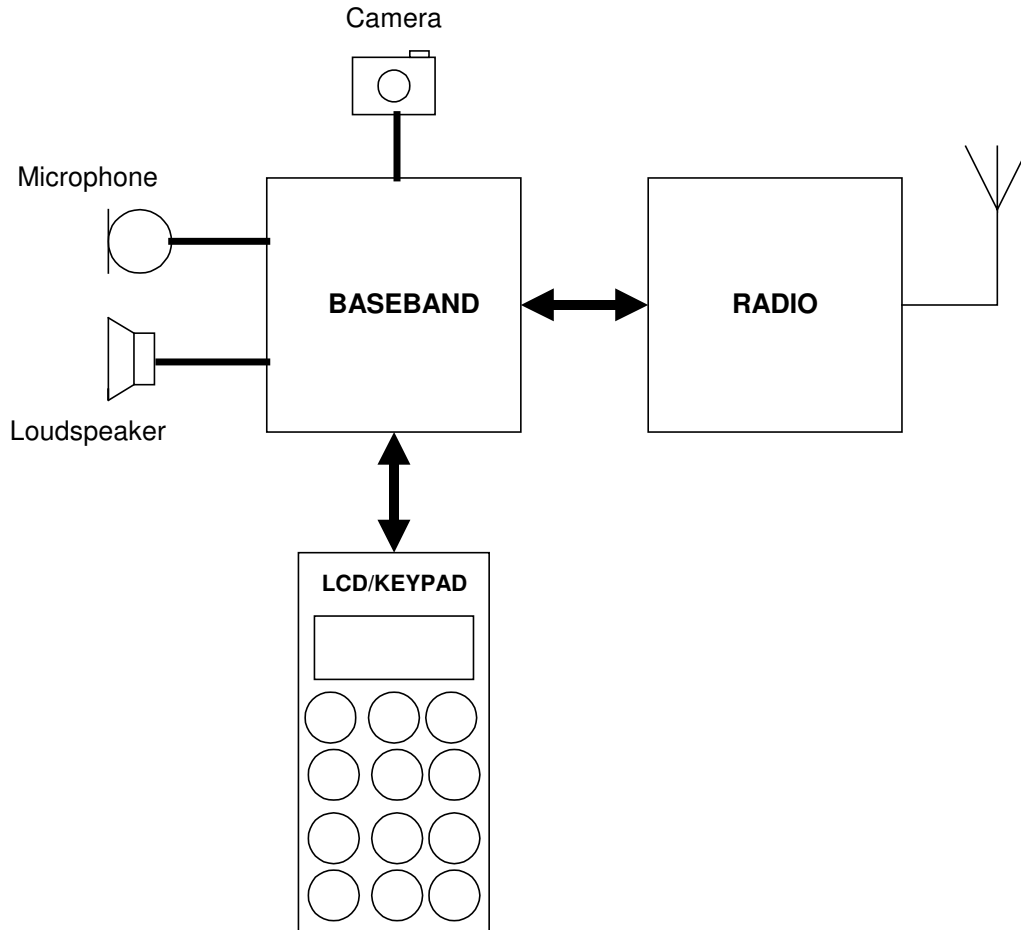


This extra line will appear if the mobile has already been repaired.

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

**2.5 PHONE BLOCK DIAGRAM**

**2.5.1 myX-8 block diagram**



**2.5.2 Standards and environment**

The phone complies with the following standards.

<b>Directive EEC</b>	1999 / 5 / CE
<b>Safety (security)</b>	EN 60950
<b>CEM</b>	EN 301 489-1 / EN 301 489-7
<b>Voltage</b>	73 / 23 / EEC
<b>Network</b>	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
<b>Health</b>	EN 50360 / EN 50361

## 2.6 EQUIPEMENTS

The description and operation of SAGEM myX-8 are given in the "User's handbook" supplied with the handset. This chapter only describes equipment that operates with the myX-8 handset.

### 2.6.1 Battery packs

#### 2.6.1.1 Characteristics

Type	Technology	Weight	Voltage capacity
L920	Li-Ion	24 g	3,6 V / 920 mA/H

#### 2.6.1.2 Description

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

- mains power supply modules,
- 12 V / 24 V, cigar lighter chargers,
- car hands free kits (compact and comfort),
- Power supply data.

**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	500 mA travel chargers	AC* and K** chargers	"Simple" unregulated chargers 230 V Nom. (110 V Nom.)	
			230 V (110 V)	254 V (121 V)
	94 V to 254 V			
L1000	3h30	3 h	3h45	3h20

\* : cigar lighter chargers (12 V et 24 V)

\*\* : car hands free kits (Values screen off).

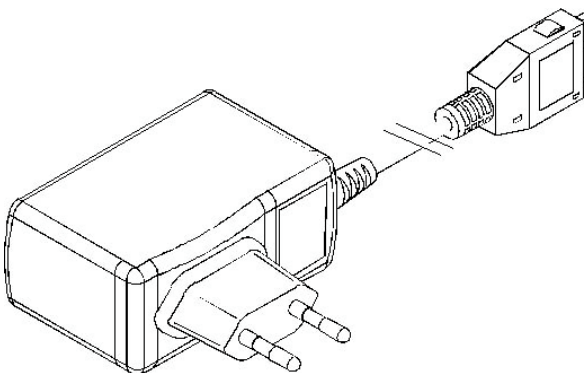
## 2.6.2 Mains modules

### 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:

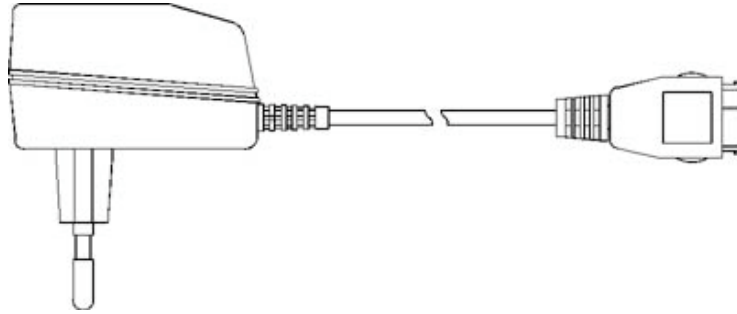
- E.E.C,
- United Kingdom
- United States,
- Australia.

### 2.6.2.2 Travel mains modules



Designation	Weight (g)	Vol (cm <sup>3</sup> )	Primary voltage
<i>UNREGULATED TRAVEL MAINS POWER SUPPLY MODULES 6.5 V. 500 mA.</i>			
TRAVEL 500 mA. EC	100	75	110/230 V
TRAVEL 500 mA. UK	110	90	110/230 V
TRAVEL 500 mA. US	125	65	110/230 V
TRAVEL 500 mA. AUS	100	75	110/230 V

2.6.2.3 Mains modules



Reference	Weight (g)	Vol (cm <sup>3</sup> )	Primary voltage
<i>SIMPLE UNREGULATED MAINS POWER SUPPLY MODULES 1.5 VA. 12V. 300 mA.</i>			
EC MAINS MODULE	180	85	230 V
UK MAINS MODULE	180	120	230 V
US MAINS MODULE	210	105	110 V
AUS MAINS MODULE	190	105	230 V

## CHAPTER 3 - SYMPTOMS

### 3.1 GENERAL

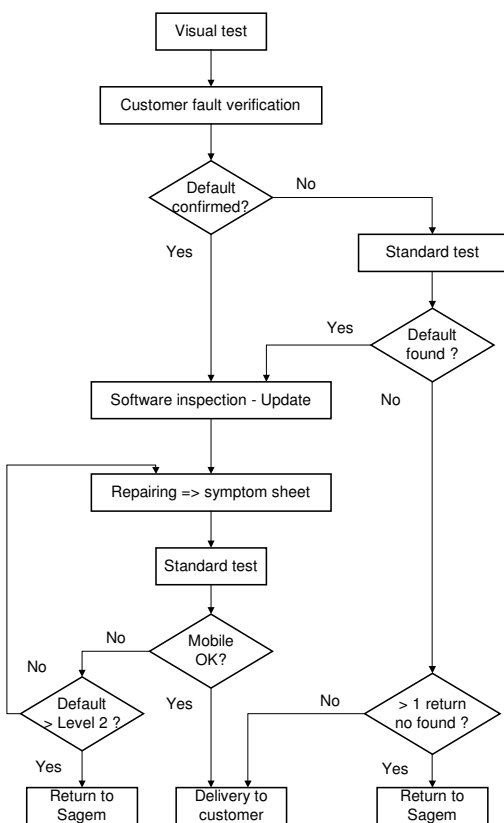
After you have received the **customer return sheet** ([Proc Sheet 3 02](#)), carry out the troubleshooting procedure.

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.

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



#### Visual test :

- Glass state
- Keypad state (elastomer, inscription)
- Connector state (DATA/ AUDIO/ CHARGE, battery, SIM)
- Plug and position of battery
- SIM card position
- Oxidation

#### Standard test :

- Display test : Hot Line menu
- Contrast control
- Photo function test
- Video function test
- MMS and GPRS test
- All keypad keys test (check bips keys)
- Audio and radio test
- Battery charge test
- Consumption of mobile in off state
- Vibrating device test : Hot Line menu
- Charger test

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.





### 3.2 LIST OF REPORTED DEFECTS

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

<b>Code</b>	<b>Indicated fault</b>	<b>Procedure</b>
A1	No power up	<a href="#">Symp Sheet 01</a>
A2	No display up	<a href="#">Symp Sheet 04</a>
A3	Freezes up	<a href="#">Test Sheet 01</a>
A5	Broken LCD	<a href="#">Symp Sheet 04</a>
A6	Line or digit missing	<a href="#">Symp Sheet 04</a>
A7	Backlights problem	<a href="#">Proc Sheet 1 14 or 3 01</a>
A10	Broken / Missing antenna	<a href="#">Proc Sheet 1 14 or 3 01</a>
B1	Defective battery contact	<a href="#">Proc Sheet 0 02</a>
B2	Defective mobile charger connector	<a href="#">Proc Sheet 1 14 or 3 01</a>
B3	Defective power supply of the board	<a href="#">Proc Sheet 1 14 or 3 01</a>
B4	Defective charge icon display	<a href="#">Proc Sheet 1 14 or 3 01</a>
B5	Current consumption with phone off	<a href="#">Test Sheet 04</a>
B7	Autonomy	<a href="#">Symp Sheet 01</a>
B8	Electrically defective battery	<a href="#">Test Sheet 03</a>
B9	Mechanical lock problem on battery	<a href="#">Proc Sheet 02</a>
B10	Broken battery	<a href="#">Test Sheet 03</a>
B11	Defective charger	<a href="#">Test Sheet 02</a>
B12	Broken charger	<a href="#">Test Sheet 02</a>
B13	Intermittent switch off with reboot	<a href="#">Proc Sheet 1 14 or 3 01</a>
B14	Intermittent switch off without reboot	<a href="#">Proc Sheet 1 14 or 3 01</a>
C1	Not functioning keyboard	<a href="#">Symp Sheet 05</a>
C2	Lateral key problem	<a href="#">Symp Sheet 05</a>
D1	Sim missing	<a href="#">Proc Sheet 1 14 or 3 01</a>
D2	Other messages	<a href="#">Proc Sheet 1 14 or 3 01</a>
D3	EEPROM problem	<a href="#">Proc Sheet 1 14 or 3 01</a>
D4	Untuned mobile	<a href="#">Proc Sheet 1 14 or 3 01</a>
D5	Hard failure	<a href="#">Proc Sheet 1 11 or 3 01</a>
D6	Sim verrou	<a href="#">Proc Sheet 1 14 or 3 01</a>
D7	Post code blocked	<a href="#">Test Sheet 01</a>
D8	SAV return	<a href="#">Proc Sheet 1 14 or 3 01</a>

D9	Unknown battery	<a href="#">Test Sheet 03</a>
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<b>Code</b>	<b>Indicated fault</b>	<b>Procedure</b>
E1	Defective loudspeaker (hails)	<a href="#">Symp Sheet 08</a>
E2	Loudspeaker voice distortion	<a href="#">Symp Sheet 08</a>
E3	Defective microphone	<a href="#">Symp Sheet 08</a>
E4	Microphone voice distortion	<a href="#">Symp Sheet 08</a>
E5	Vibrating device problem	<a href="#">Symp Sheet 07</a>
E6	Defective audio connector	<a href="#">Symp Sheet 08</a>
F1	No network retrieval	<a href="#">Symp Sheet 02</a>
F2	Intermittent calls drop	<a href="#">Symp Sheet 02</a>
F4	Test radio no ok	<a href="#">Proc Sheet 1 14 or 3 01</a>
F5	Outgoing call failure	<a href="#">Symp Sheet 02</a>
F6	Incoming call failure	<a href="#">Symp Sheet 02</a>
F7	Network temporary drop	<a href="#">Symp Sheet 02</a>
G1	Broken or damaged glass	<a href="#">Proc Sheet 1 02</a>
G2	Broken or damaged cover	<a href="#">Proc Sheet 1 01 /1 02</a>
G3	Broken or damaged flip	Not applicable for myX-8
G5	Broken or damaged keyboard	<a href="#">Proc Sheet 1 03</a>
G6	Defective lock button	<a href="#">Proc Sheet 0 01</a>
H1	Broken or damaged accessory	<a href="#">Proc Sheet 1 14 or 3 01</a>
H2	FM function	<a href="#">Proc Sheet 1 14 or 3 01</a>
H3	Monetic function	<a href="#">Proc Sheet 1 14 or 3 01</a>
I1	Oxidation marks	<a href="#">Proc Sheet 1 14 or 3 01</a>
I3	No fault found	<a href="#">Symp sheet 03</a>
I5	Lack function in the menu	<a href="#">Test sheet 01</a>
I6	Defective SIM connector	<a href="#">Proc Sheet 1 14 or 3 01</a>
I7	Malfunction of the menu	<a href="#">Test sheet 01</a>
I8	Mobile retrofit	<a href="#">Test sheet 01</a>
K1	DATA PROBLEM (SMS, EMS, SMS,GPRS, WAP, DOWNLOADING GAMES, RINGING TONES, SCREEN SAVER, NO COMMUNICATION WITH A PC, POCKET PC or PALM)	<a href="#">Test sheet 01</a>
K2	Video function	<a href="#">Test sheet 07 / Test sheet 08</a>
K3	INFRARED function (IRDA)	<a href="#">Test sheet 01</a>

### 3.3 ERROR MESSAGES DURING START UP

<i>Message</i>	<i>Meaning</i>	<i>Procedure</i>
WARNING UNTUNED RADIO	Invalid EEPROM field (SAGEM)	<a href="#">SAGEM Factory Return</a>
PB IMEI	Consistency problem at IMEI level	<a href="#">SAGEM Factory Return</a>
SIM MISSING	SIM card missing or badly inserted	Insert the SIM card
IMEI ERROR	Consistency problem at IMEI level	<a href="#">SAGEM Factory Return</a>
UNTUNED	Mobile not configured	<a href="#">SAGEM Factory Return</a>
UNKNOWN BATTERY	Battery not recognised by the mobile	Replace the battery
MOBILE PHONE LOCKED	Number of seizures of sim locked code exceeded	<a href="#">SAGEM Factory Return</a> <a href="#">Not repair under warranty</a>
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)	<a href="#">SAGEM Factory Return</a> <a href="#">Not repair under warranty</a>
BATTERY TOO LOW	Battery state	Replace the battery

**Note:** SAGEM factory return can concern either the card, or the mobile, according to instructions given to the CRAs.

### 3.4 OTHER ERROR MESSAGES


<i>Message</i>	<i>Meaning</i>
"BUSY"	"Problems" related to the network and Communications
"K.PAD LOCKED PRESS *V"	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 REACHABLE"	Call forwarding if the mobile is not reachable
"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 AVAIL."	Service not implemented in the network

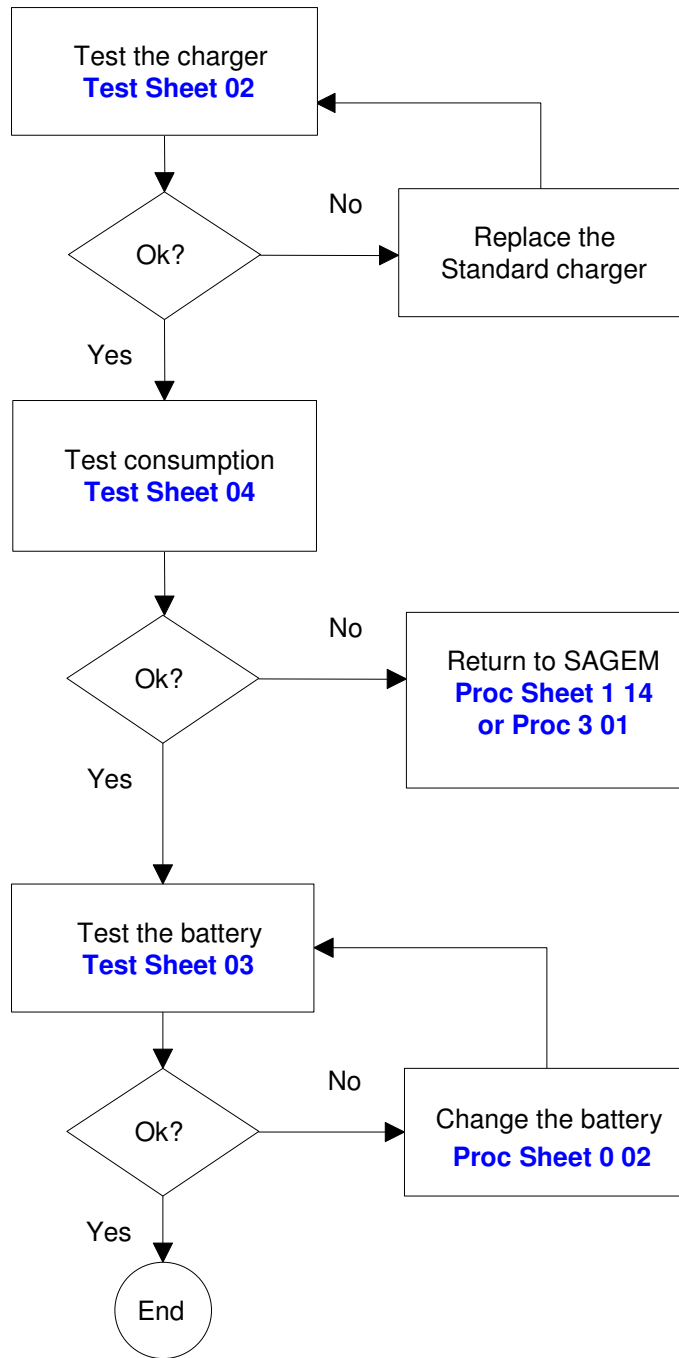
"TRY AGAIN"	Following a network problem
<b><i>Message</i></b>	<b><i>Meaning</i></b>
"NETWORK BUSY"	"Problems" related to the network and Communications
"WAIT"	"Problems" related to the network and Communications
"UNBLOCK?"	"Problems" related to the SIM card
"MEMO REC. CUT"	Save during storage in the answering machine truncated due to lack of space
"FUNCTION NOT ALLOWED"	Prohibited function requested
"NOT FOUND"	Unsuccessful search (on directory, etc.)
"BUSY"	"Problems" related to the network and Communications
"REJECTED"	The requested operation was refused by the network
"EMPTY"	Empty (note pad, memo, etc.)
"NOT IN GROUP"	Error display following an error code returned from the network (CUG menus)
"CREDIT END"	"Credit end" information (paying call prohibited)
"CREDIT TOO LOW"	"Credit too low" information (CUG menus)
"NO AUTHORIZED ACTION DURING A WAP CALL"	Not available action during a wap call
"NOT CONFIGURED ACCESS"	Selection of a not configured provider
"UNKNOWN ACCESS"	Selection of a not fully configured provider
"UNKNOWN CALL IN PROGRESS"	Selection of a provider during a call in progress
"NO RESPONSE OF THE SERVER"	" Problems" related to the server
" NO RESPONSE OF THE NETWORK"	"Problems" related to the network and Communications
"NOT AVAILABLE NETWORK"	"Problems" related to the network and Communications
"TOO LONG URL ADDRESS"	The address typed is too long

### **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**).

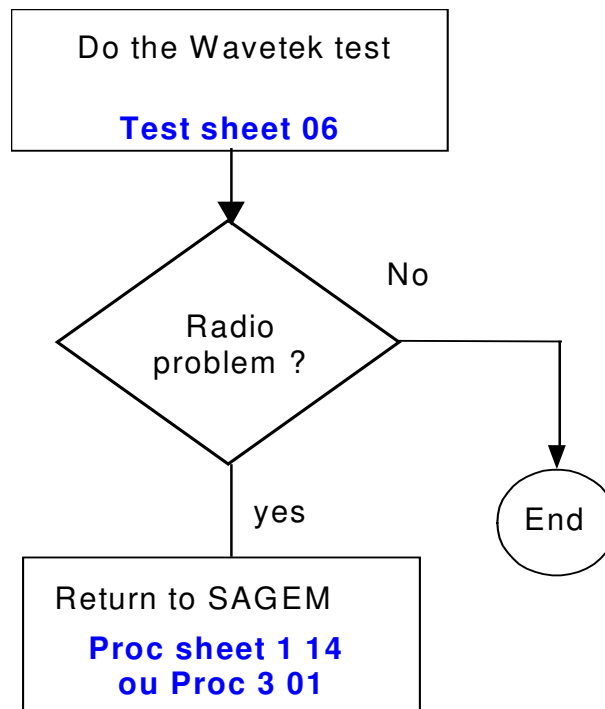
# **SYMPTOM SHEETS**


 <b>SAGEM</b>	<b>ENDURANCE, BATTERY, CHARGER PROBLEM</b>	Symp Sheet 01
myX-8		1/1

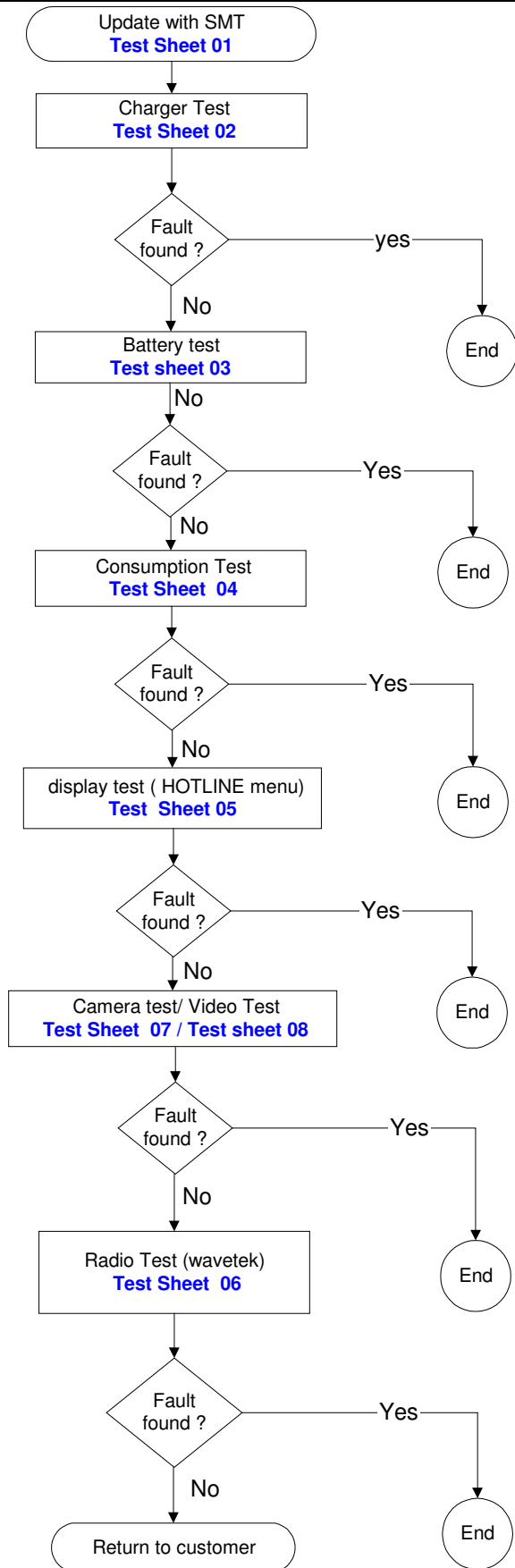





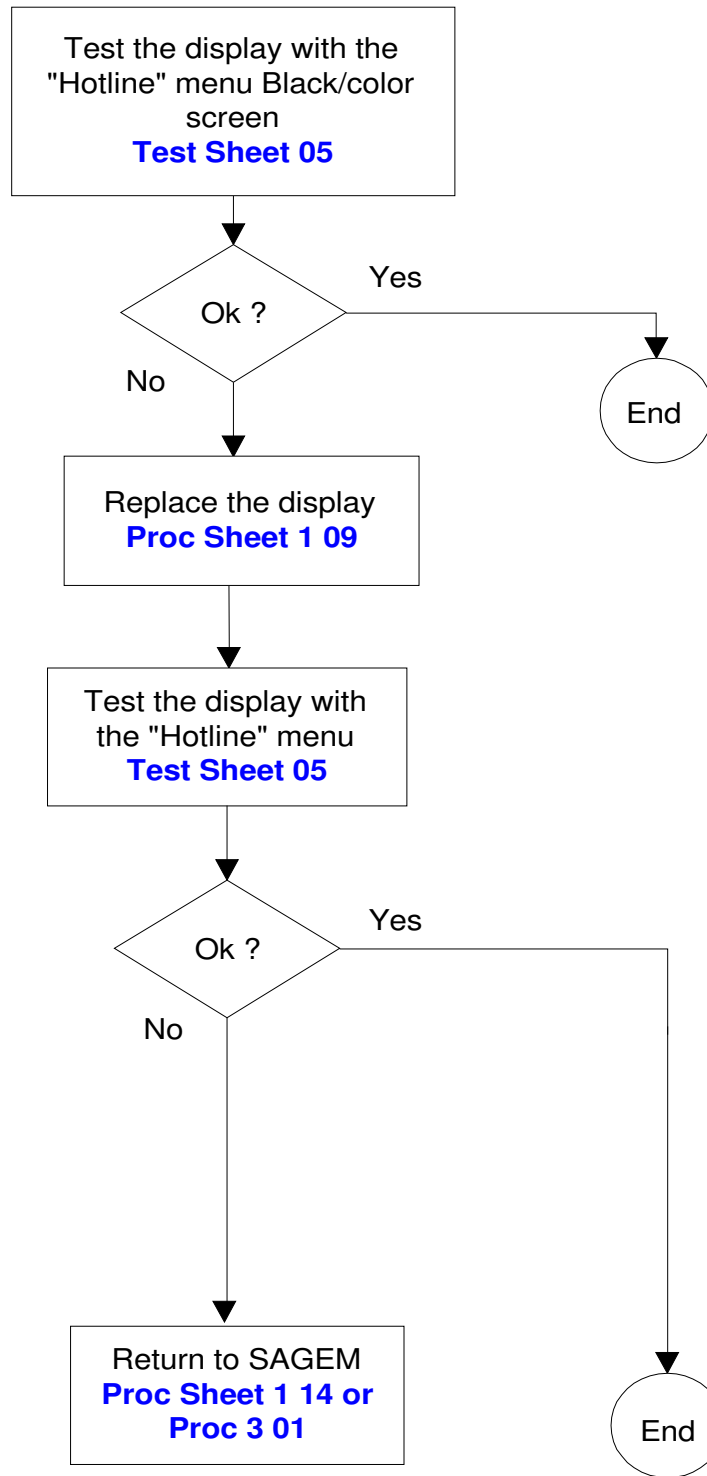
 <b>SAGEM</b>	<b>COMMUNICATION PROBLEM</b>	Symp Sheet 02
myX-8		1/1




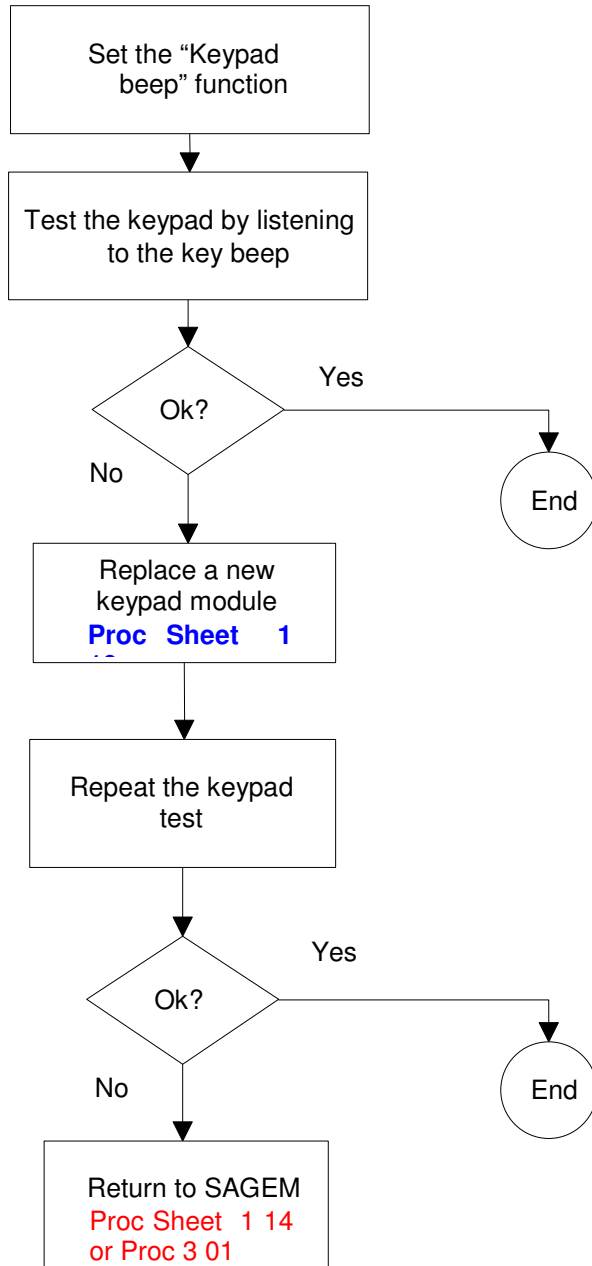
	<b>NO FAULT GIVEN</b>	Symp Sheet 03
myX-8	<b>(Expertise of the phone)</b>	1/1




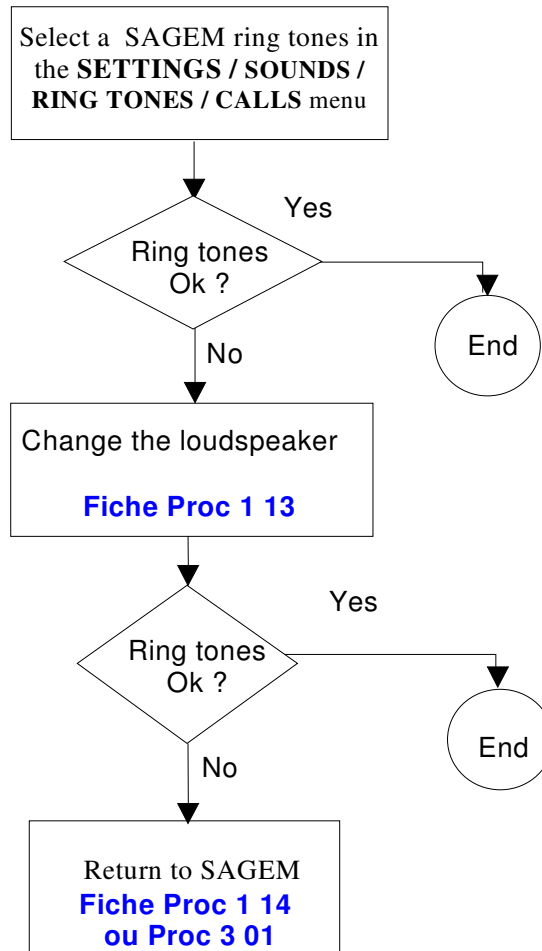
 <b>SAGEM</b>	<b>DISPLAY PROBLEM</b>	Symp Sheet 04
myX-8		1/1




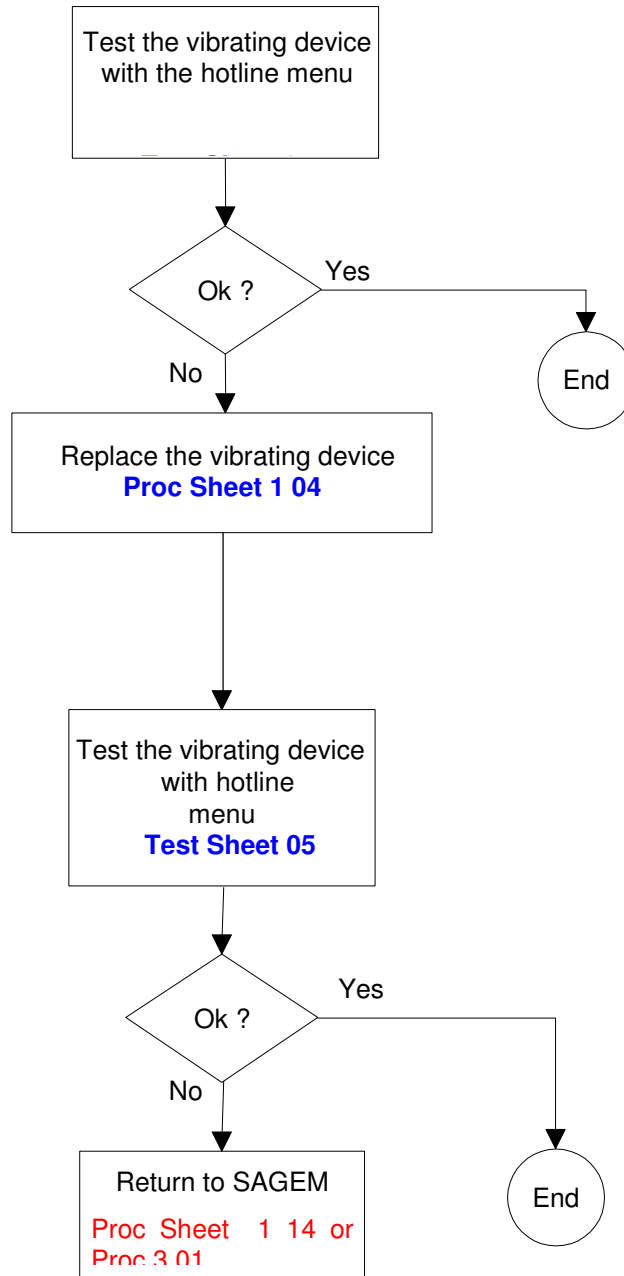
 <b>SAGEM</b>	<b>KEYPAD PROBLEM</b>	Symp Sheet 05
myX-8		1/1




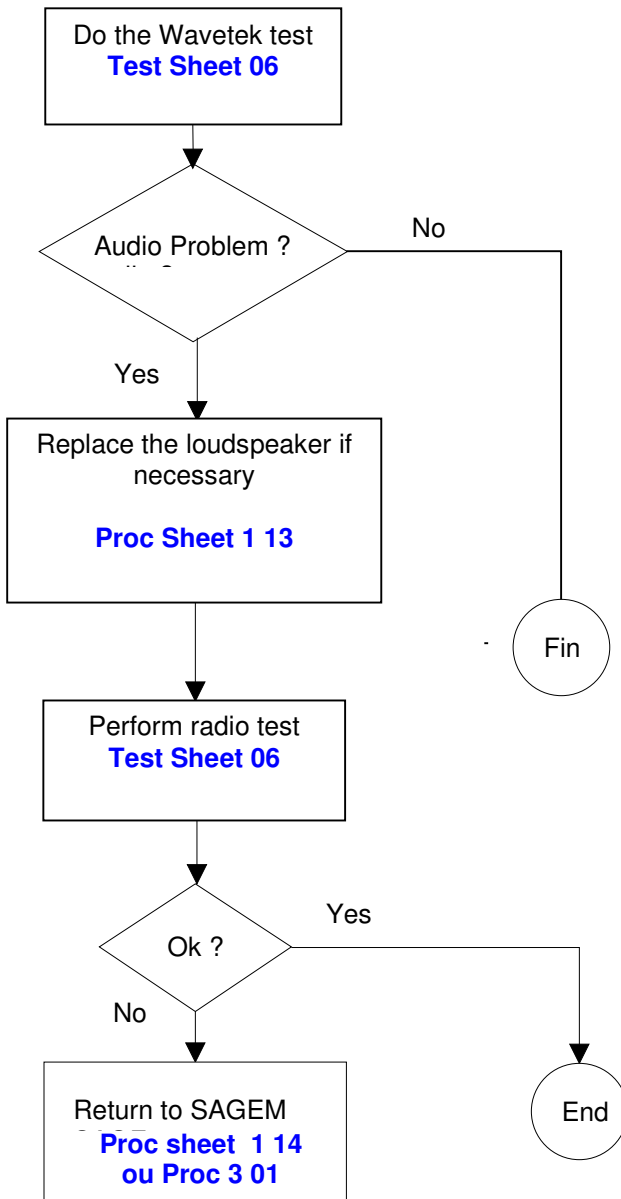
 <b>SAGEM</b>	<b>RING TONES PROBLEM</b>	Symp Sheet 06
myX-8		1/1




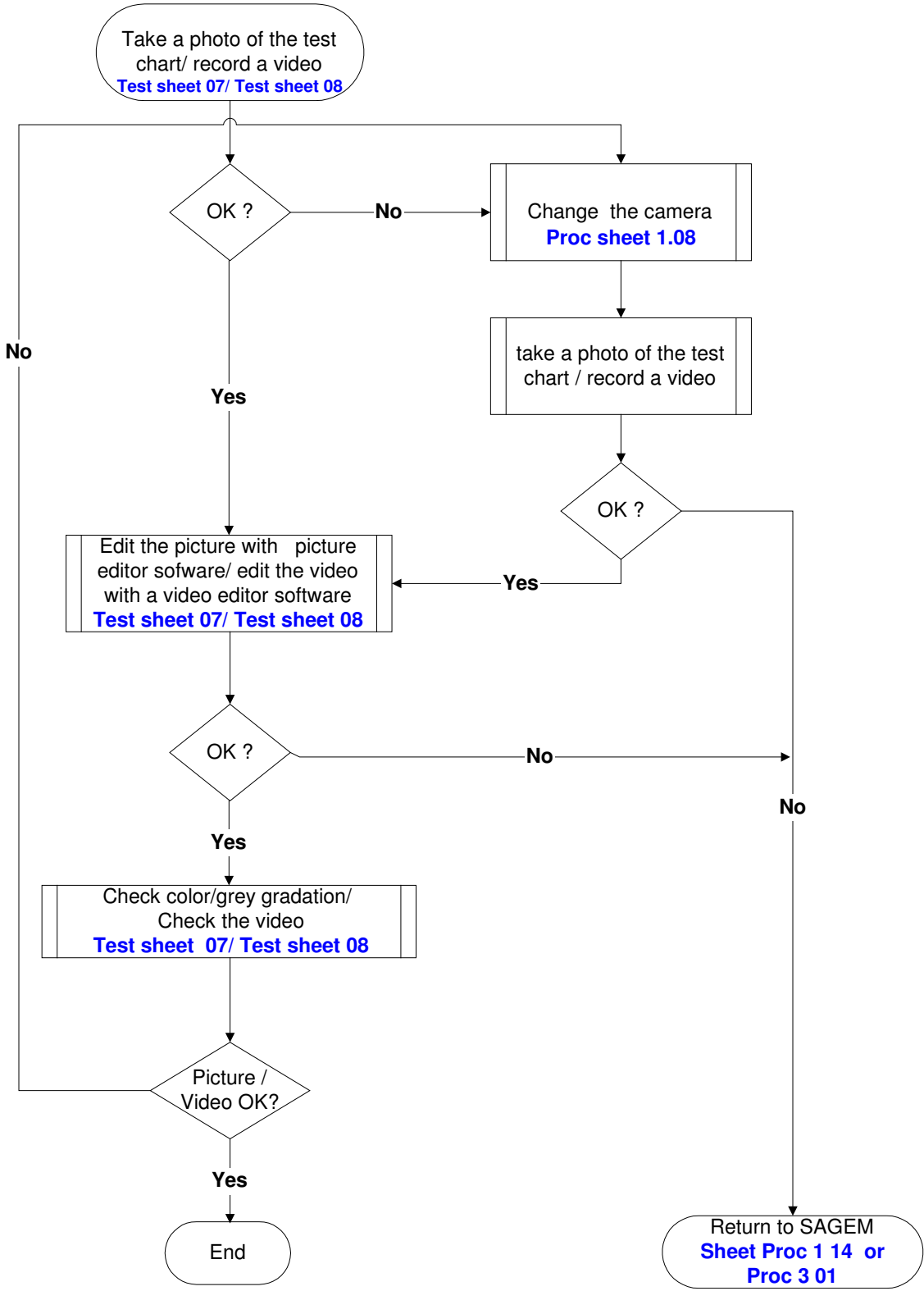
 <b>SAGEM</b>	<b>VIBRATING DEVICE</b>	Symp Sheet 07
myX-8		1/1



 <b>SAGEM</b>	<b>MICROPHONE OR LOUDSPEAKER PROBLEM</b>	Symp Sheet 08
myX-8		1/1



 <b>SAGEM</b>	<b>CAMERA PROBLEM</b>	Symp Sheet 09
myX-8		1/1





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## 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 :

1. a PC type computer,
2. the SMT maintenance software for the myX-8
3. the **ARC downloading kit**, including the test case provided with:
  - the data cable (to PC),
  - the "DATA/ AUDIO/ CHARGE" cable,
  - the mains power supply module.
4. the **radio test bench**, provided with:
  - SIM card of test.
  - myX-8 radio interface
  - Adjustable regulate power supply 0-15V / 4A
  - Wavetek 4107
- **CADEX C7000 / C7200 / ASTRATEK** with myX-8 adapter
  - Charger test kit
  - Ammeter interface myX-8 ( the same as myX-6)
  - Voltmeter (minimum impedance : 20 K $\Omega$  per Volt in DC)
  - Ammeter
- **A Test chart**
5. 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 :

6. Processor 1Ghz,
7. 128 Mbytes of RAM,
8. Windows NT (SP 4), Windows 2000, Windows XP,
9. 2.1 Gbytes hard disk (1 Gbytes available),
10. 1 parallel port and 2 serials ports.
11. network card, sound card.
12. 1 internet access,

#### **4.3.2 Installing the ARC downloading kit**

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

13. Connect the 9-pin SUB-D connector to the PC serial port (COM1).
14. Connect the power supply module to the mains power outlet.
15. Connect the phone to be repaired to the DATA/ AUDIO/ CHARGE connector.


#### **4.3.3 SMT functions**

The SMT maintenance software can :

16. Download new software if needed
17. Configure default values and checks them.
18. Unblocked the " POST CODE "
19. Delete the customer directory and SMS
20. Print identification labels.
21. Make a electronic board exchange
22. Adjust the display contrast (not available for myX-8)
23. Read the Site Technical Documentation ( manual of repair )
24. Select a test sequence

The procedures for using these functions are described in [TEST Sheet 01](#).

# TEST SHEET

 <b>SAGEM</b>	<b>TEST AND CHECK BY SMT</b>	Test Sheet 01
myX-8		1/9

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

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

***Download the latest software***

- Click on DOWNLOAD button.
- Follow the procedures on the screen.
- Make sure that the mobile phone is not in the sleep mode (press the Start key)

***Release the " POST CODE"***

1. Click on the CONFIGURE popup menu and then on RELEASE
2. Follow the procedures on the screen.

***Delete the customer directory and SMS***

1. Click on the CUSTOMER DATA popup menu and then ERASE DIRECTORY OR ERASE SMS.
2. Follow the procedures on the screen.


**Note :** There is possibility to save the directory when the ARC signed a confidential agreement.

***Print identification labels***

1. Click on the on LABEL popup menu and then PRINT LABEL .
2. Follow the procedures on the screen

▪ **Audio parameters setting**

1. Click on the AUDIO popup menu
2. Follow the procedures on the screen


 <b>SAGEM</b>	<b>TEST AND CHECK BY SMT</b>	Test Sheet 01
myX-8		2/9

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

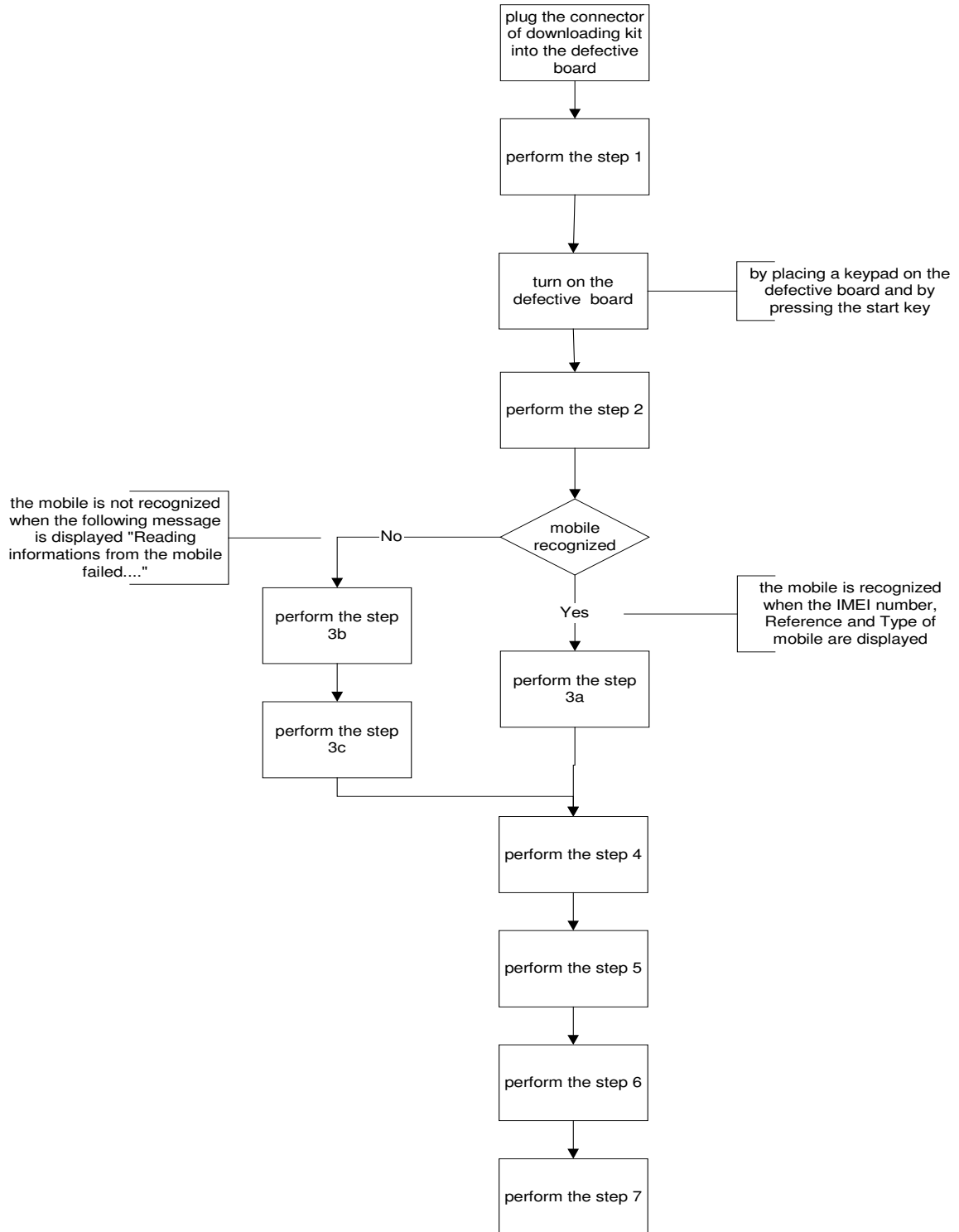
1. Click on SMT SEQUENCE popup menu.
2. Select the different functions you want to carry out then click on LAUNCH button.


▪ **Electronic board exchange**

1. Click on the SWAP popup menu , then SWAP PROCESS
2. Follow the procedures on the screen

 <b>SAGEM</b>	<b>TEST AND CHECK BY SMT</b>	Test Sheet 01
myX-8		3/9

**SWAP : Electronic board Configuration**



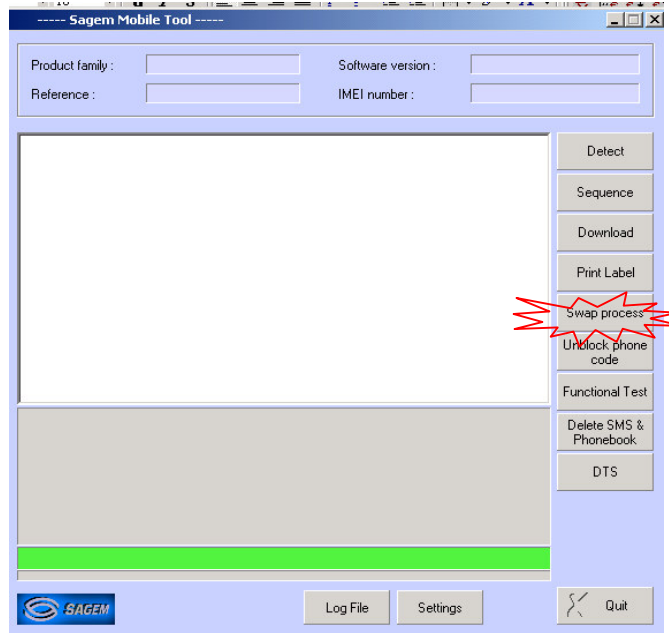
	<b>TEST AND CHECK BY SMT</b>	Test Sheet 01
myX-8		4/9

**Step 1**

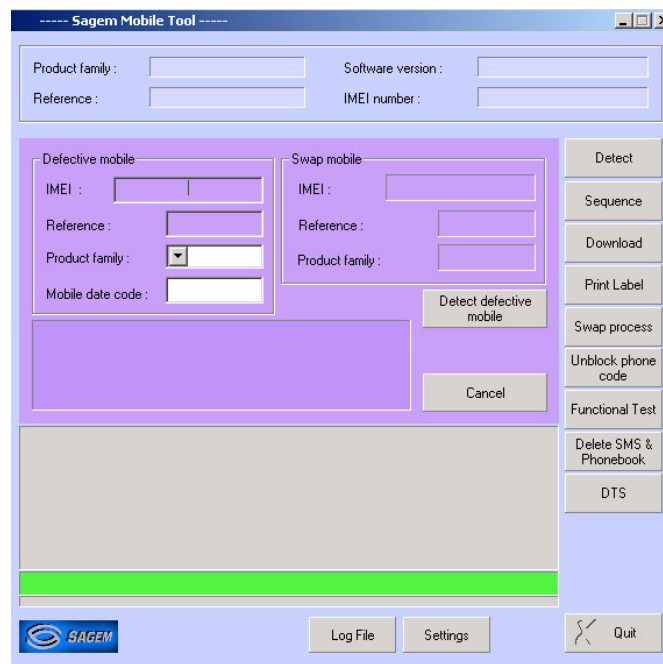
**SMT Front page**

**Click on the « SWAP Process » menu.**


**Example**



**The following screen appears :**

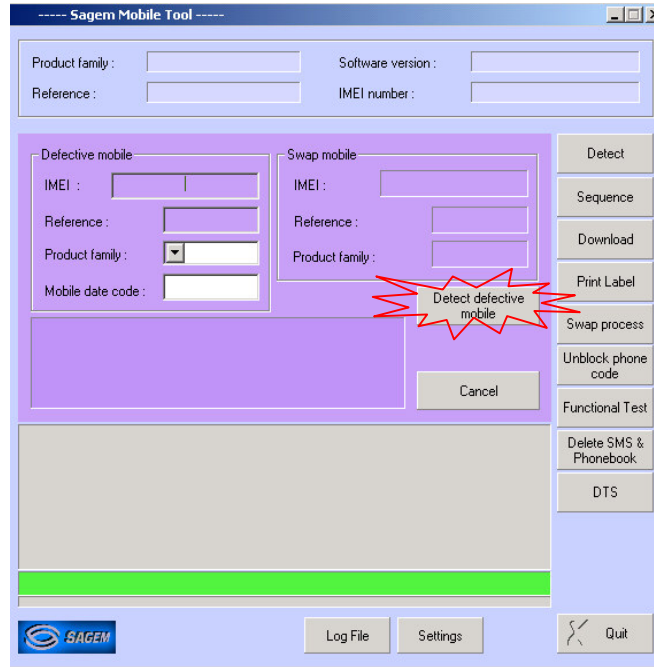




	<b>TEST AND CHECK BY SMT</b>	Test Sheet 01
myX-8		5/9

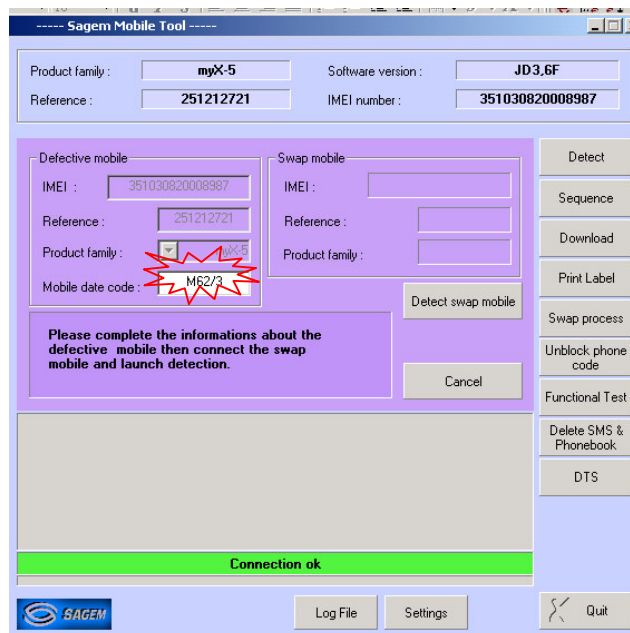
### Step 2


**Please click on « Detect defective mobile » button**



### Step 3a

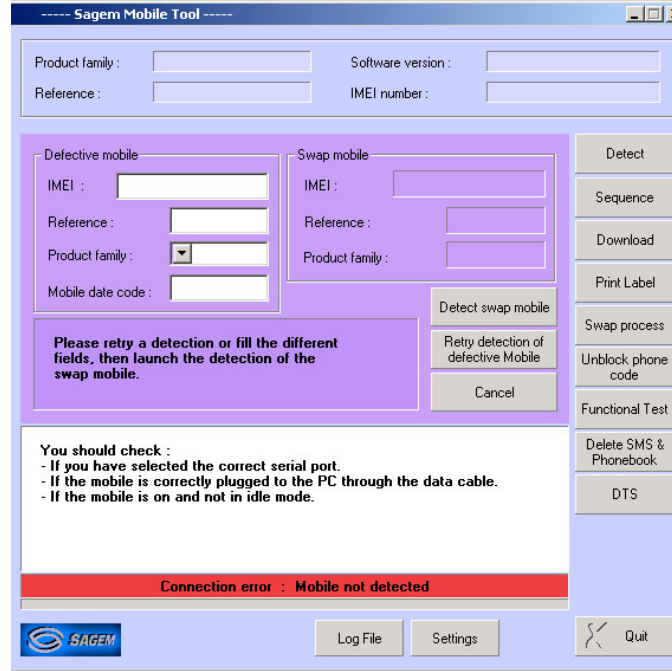
**The following screen appears : the mobile is recognized. Then, enter the mobile date code**



 <b>SAGEM</b>	<b>TEST AND CHECK BY SMT</b>	Test Sheet 01
myX-8		6/9

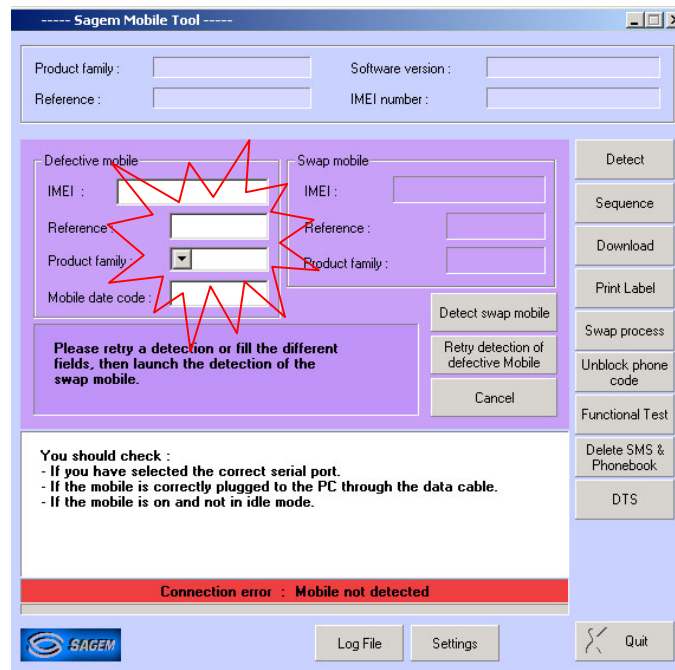
### Step 3b


If this screen appears, the mobile is not recognized.



### Step 3c

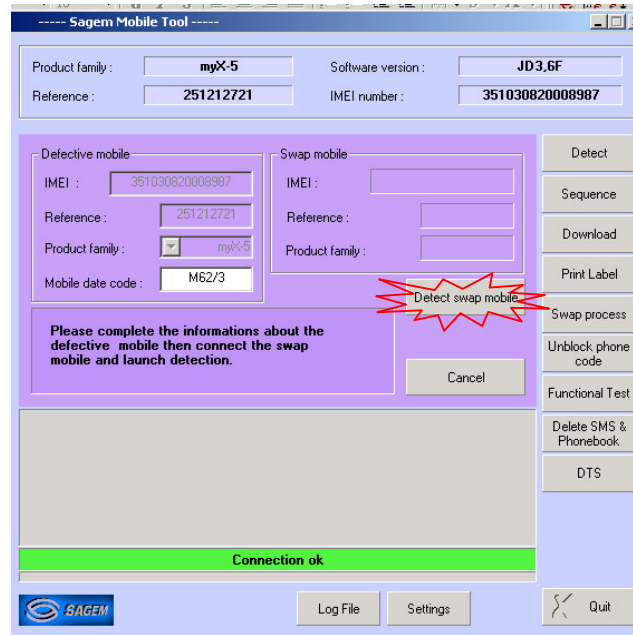
You must fill in the empty blanks requested according to the information written on the production label



	<b>TEST AND CHECK BY SMT</b>	Test Sheet 01
myX-8		7/9

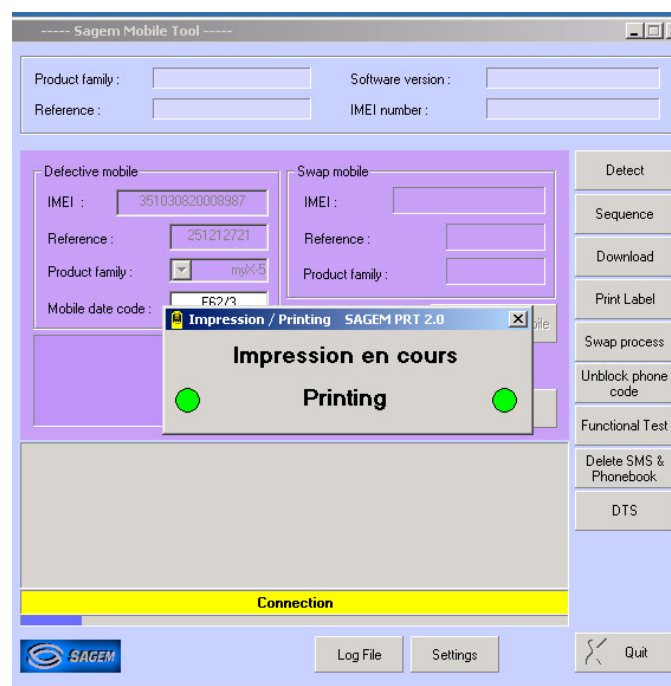
**Step 4**


**Plug and switch on the new mobile, then push on the “Detect Swap mobile” button**



**Step 5**

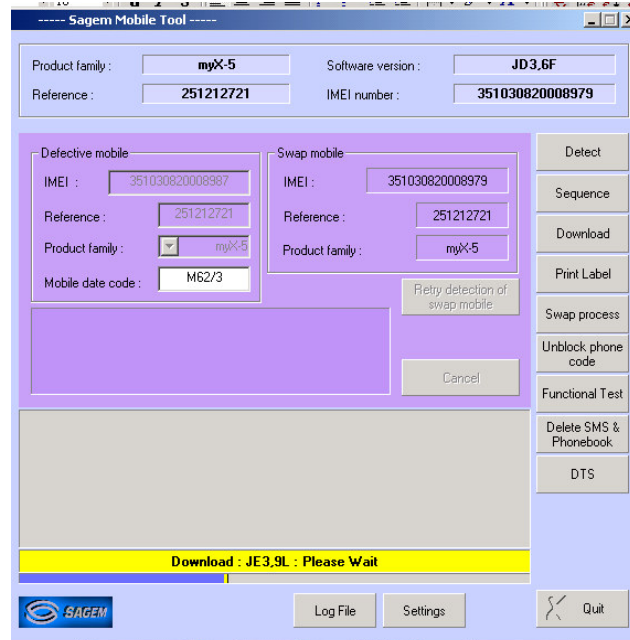
**After clicking on “OK”, SMT prints the label which will be used to close the ESD bag of the defective board.**



 <b>SAGEM</b>	<b>TEST AND CHECK BY SMT</b>	Test Sheet 01
myX-8		8/9

### Step 6

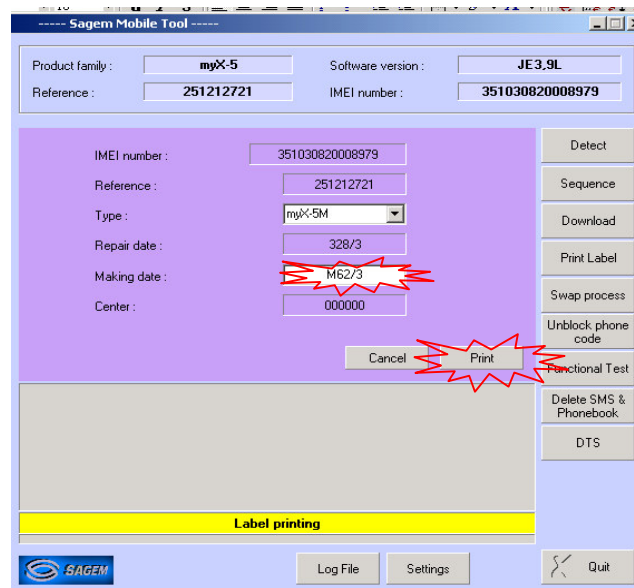
The downloading is starting if the mobile need to be updated




### 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



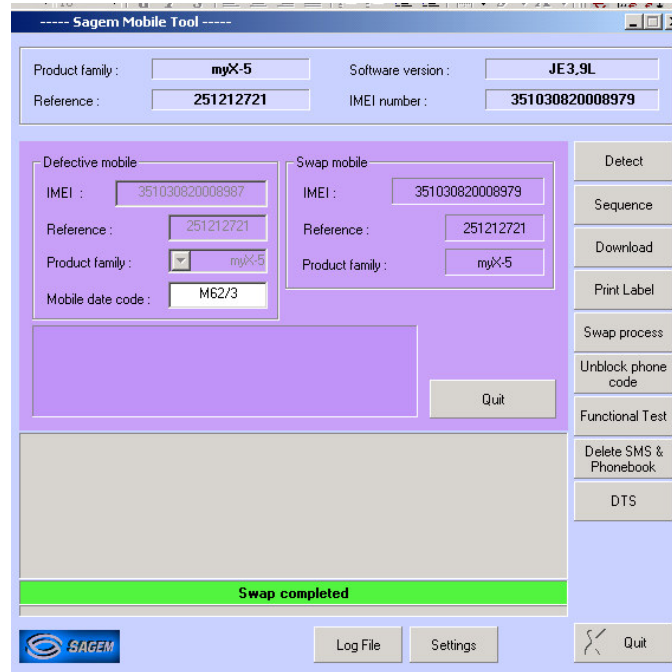
The swap board sequence is completed.


	<b>TEST AND CHECK BY SMT</b>	Test Sheet 01
myX-8		9/9

## RESULTS

**When old mobile is recognized, the audio parameters from the defective mobile have been sent to the functional mobile.**

**When old mobile is not recognized, the DEFAULTS audio parameters are sent to the functional mobile**



 <b>SAGEM</b>	<b>CHARGER TEST</b>	Test Sheet 02
myX-8		1/1

**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 :

- at no load (released position),
- under load (pushed in position).

Check visually the charger connector.

Connect the charger to be tested to the back of the tester.


Connect the voltmeter using the two banana connectors.

Before starting any other measurement, check that the charger is correctly powered (main voltage conform with the charger specifications).

Make the two measurements.

Check the recorded values using the following board. If the values are not included in the min & max limits , then the charger is defective.

Charger	At no load		Under load	
	Min.	Max.	Min.	Max.
Travel 500 mA	5,5 V	7,5 V	2 V	4 V
Simple 300 mA	9 V	15 V	1,5 V	4 V
cigar lighter	5,5 V	7,5 V	2 V	4 V

 <b>SAGEM</b>	<b>BATTERY TEST</b>	Test Sheet 03
myX-8		1/1

### ***Test description***

This test allows testing the various batteries.

### ***Required tools***

- CADEX C7000 / C7200 / ASTRATEK
- myX-8 adapters,
- myX-8 Ammeter interface
- a voltmeter (minimum impedance 20 kΩ per Volt in DC).

### ***Test procedure***


Insert battery on ammeter interface

Measure the identification resistor between the Z poles :

1. Li-Ion batteries : **120kΩ (tolérance = 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 batteries testers
  - c) If the voltage > 4V measure the internal resistance with a CADEX or ASTRATEK batteries testers

**Notice:** Choose on the batteries tester ,the battery type (Li-ion) ,the nominal battery voltage (3,6V) and the battery capacity (920 mA)

- 5 Read the result :If the internal resistance < 300 mOhms the battery is **OK**  
>= 300 mOhms the battery is **defective**

 <b>SAGEM</b>	<b>CONSUMPTION TEST</b>	Test Sheet 04
myX-8		1/1

***Test description***

This test tests the battery consumption.

***Required tools***

- myX-8 Ammeter interface
- An Ammeter.

***Test procedure***

Measurement when switched off

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

Connect the ammeter to the tool between A poles:

25. Red tool terminal on the ammeter "**COM**" or "**GND**" terminal.
26. Black tool terminal on the ammeter "+" terminal.

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

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

Measuring the charge

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

Connect the ammeter to the tool between A poles:

27. Black tool terminal on the ammeter "**COM**" or "**GND**" terminal.
28. Red tool terminal on the ammeter "+" terminal.


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

Connect the customer's charger when energised (after connecting the charger to the mains power supply).

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.**



 <b>SAGEM</b>	<b>"HOTLINE" MENU</b>	Test Sheet 05
myX-8		1/1

### ***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 pressing a long time on the \* key.

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

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

### ***Description of the myX-8 "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 DRAUGHTBOARD
  - FOR PHOTO : displays functions on the screen to take a photo.
  - VIBRATING DEVICE : tests the vibrating device.

	<b>RADIO TEST</b>	Test Sheet 06
myX-8		1/1

**Test description**

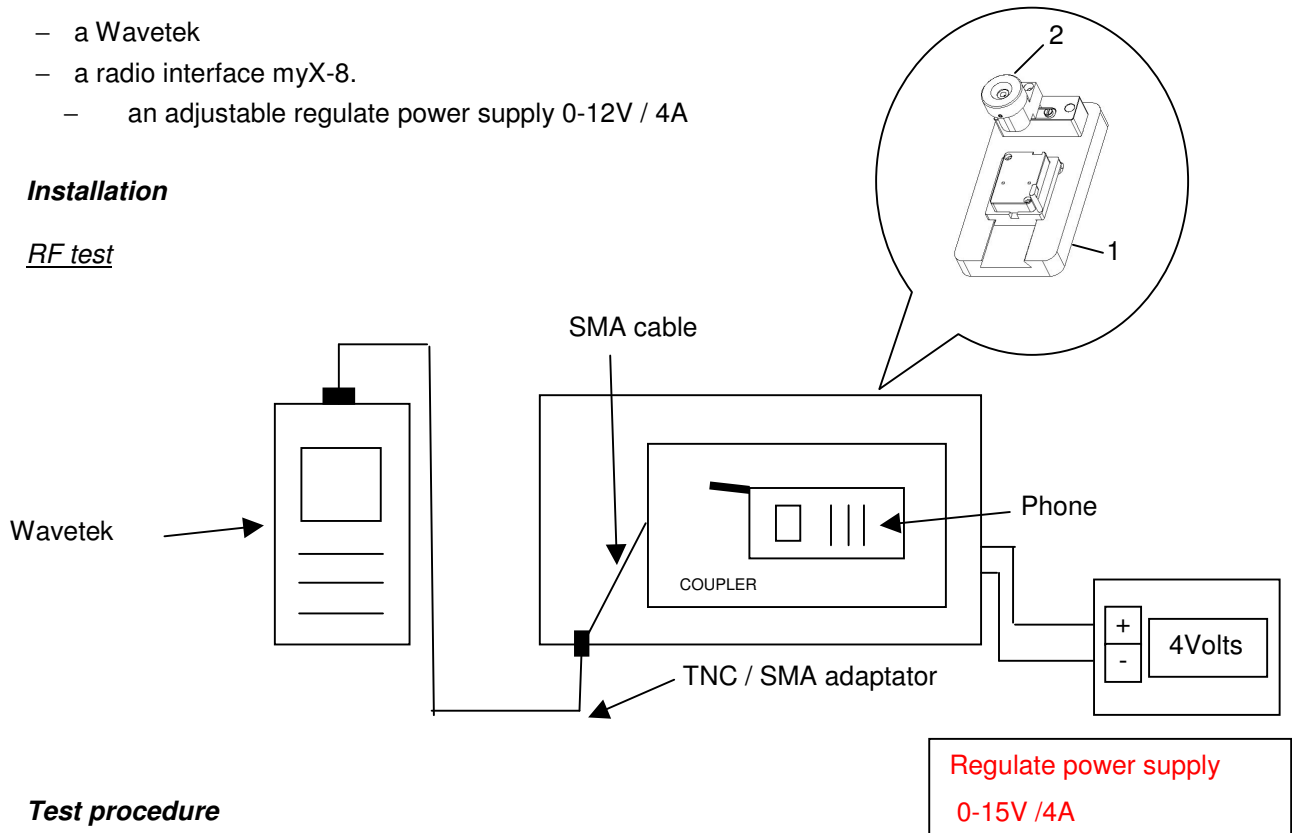
This test tests myX-8 phones during a call.

**Required tools**

- a Wavetek
- a radio interface myX-8.
- an adjustable regulate power supply 0-12V / 4A

**Installation**

RF test




**Test procedure**

3. Position the myX-8 module on the radio interface (1) (provided with a SIM test card)
4. Put a keyboard on the module and press the start key
5. Press and lock the button (2) , press the start key
6. Switch the Wavetek on and press on "AUTOTEST".
7. Choose the corresponding program using the "UP" et "DOWN" arrows.
  29. Mobile :**myX-8**,
  30. Frequency range : **GSM, DCS ,PCS (if used)**,
  31. Coupling type : **CABLE**.

Press "ENTER" and wait until the end of the calibration.

Follow the instructions shown on the Wavetek.

	<b>CAMERA TEST</b>	Test Sheet 07
myX-8		1/1

***Test description***

This test tests the good functioning of the myX-8 photo function.

***Required tools***

- The test chart reference SAGEM
- A myX-8 data link
- Pictures and sounds transferring software from mobile to PC (“My pictures and sounds.exe “ available on [www.planetsagem.com](http://www.planetsagem.com))
- A JPEG files publishing software

***Test precautions***

***-Camera function test has to make in a luminous environment***

***-Select the high resolution mode in the Settings / Photo / Size menus***


***- The lens must be clean .if not cleaned with a lint free wipe***

***Test procedure***

- Put myX-8 at about 30 cms of the color test chart in order to visualize test chart entirely (inactive zoom).
- Start photo by pressing on the dedicated touch.
- Save the photo in the mobile.
- Link myX-8 with the data link (serial / USB/ IRDA), download the picture (by way of My Pictures and sounds software ) on the computer.
- Open picture file by means of a JPEG editor.
- Check the Color / grey gradation presence

**Remarks: This test aims to verify the good operating camera functions.**

**Results disparities, being able to be obtained by different situations (screen computer / ambient lighting / distance ...), do not allow to concern a qualitative judgment on the photo.**

 <b>SAGEM</b>	<b>CAMERA TEST</b>	Test Sheet 07
myX-8		1/1

***Test description***

This test tests the good functioning of the myX-8 video function.

***Required tools***

- A myX-8 data link
- Pictures, video and sounds transferring software from mobile to PC ("My pictures and sounds.exe " available on [www.planetsagem.com](http://www.planetsagem.com))
- A 3GP files publishing software ( ex: Quick Time)

***Test precautions***

***-Camera function test has to make in a luminous environment***

***-In the Camera menu, select Video Camera and Size restriction: None***

***- The lens must be clean .if not cleaned with a lint free wipe***

***Test procedure***

- Check that the SILENT MODE is unselected
- Record an entire video sequence by pressing on the dedicated touch.
- Save the video in the mobile.
- Link myX-8 with the data link (serial / USB/ IRDA), download the video (by way of My Pictures and sounds software) on the computer.
- Open video file by means of a 3gp editor (ex: Quick Time 6.5).
- Check video totality presence

**Remarks: This test aims to verify the good operating video functions.**

**Results disparities, being able to be obtained by different situations (screen computer / ambient lighting / moving speed ...), do not allow to concern a qualitative judgment on the video.**

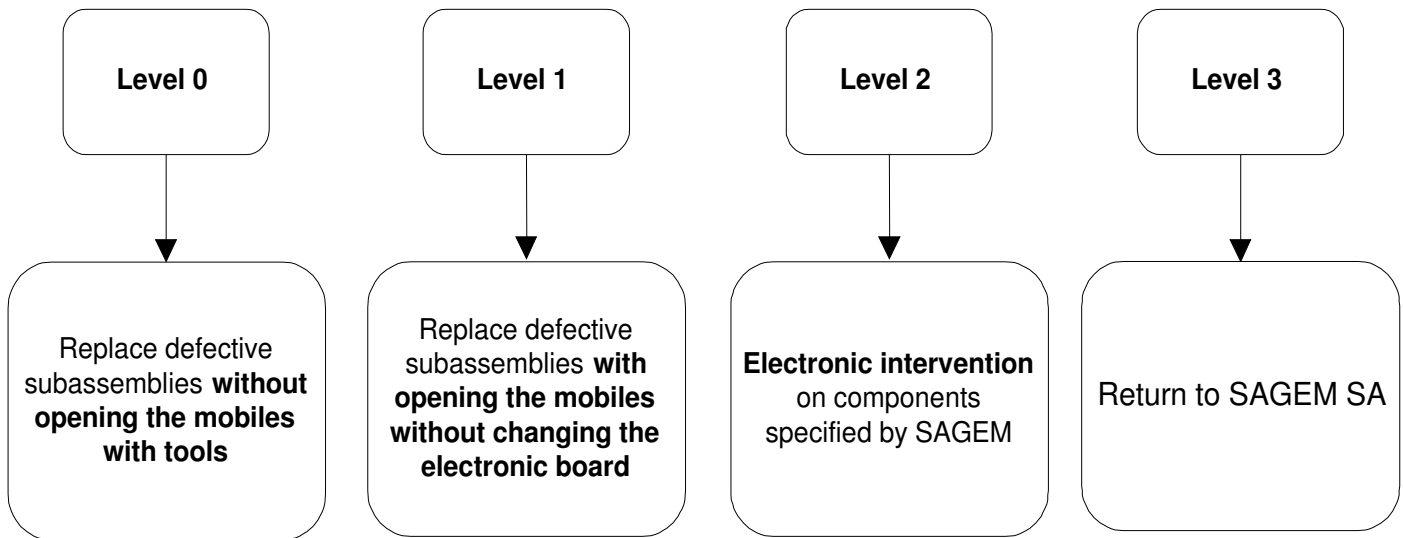
## CHAPTER 5 - MAINTENANCE PROCEDURES

### 32. TECHNICAL WORK LEVELS

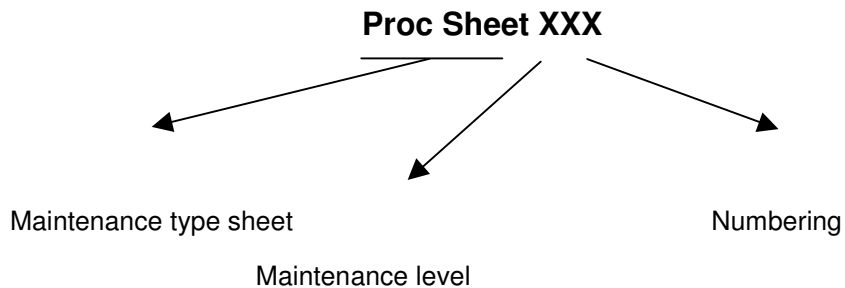
There are four technical work levels:

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

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



Maintenance procedure sheets are coded as follows :



## **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 exchange 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 acceptance 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.**

### 61. 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).

### 62. 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 : myX-8) 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.



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## 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.);
  - During which operation ? In which circumstances ?
  - 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:
  - What are his residence zone and the reception level of the mobile (Number of receipt bar);
  - What is the state of the battery when the defect appears?
  - 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:
  - In which circumstances does the problem occur?
  - Did he activate the keypad locking ?
  - Did he change or remove the upper cover ?
  - Which are the non functioning keys ?

## 33. MAINTENANCE TOOLS

The following tools are necessary to carry out maintenance operations :

- Electrical screwdrivers with tightening torque settings (**0.25 NM**) ,equipped with 0,6 mm Torx .
- Plastic Tweezers.
- Gloves
- ESD protection strap

## **LEVEL 0 MAINTENANCE**

 <b>SAGEM</b>	<b>REMOVING / REPLACING THE BATTERY COVER</b>	Proc Sheet 0 01
myX-8		1/2

4.4 **Tools :**

4.5 Not applicable.

4.6 **Preliminary operation**

Turn the handset upside down

4.7 **Removal procedure :**

1. Unlock the battery cover (1) by pressing on the button (2)
2. Remove the battery cover (1)

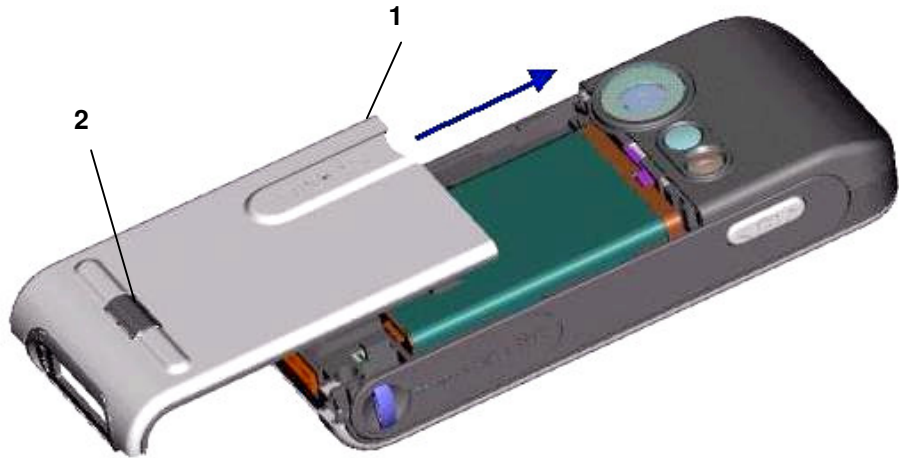
4.8 **Placement procedure :**

1. Replace the battery cover by engaging top hooks first .
2. Slide the battery cover into locked position

4.9 **Further operations :**

1. Check the cover is assembled tightly

 <b>SAGEM</b>	<b>REMOVING / REPLACING THE BATTERY COVER</b>	Proc sheet 0 01
myX-8		2/2



 <b>SAGEM</b>	<b>REMOVING / REPLACING THE BATTERY</b>	Proc Sheet 0 02
myX-8		1/2

**4.10 Tools :**

4.11 - Not applicable

**4.12 Preliminary operation :**

1. Switch off the mobile phone
2. Remove the battery cover ( [Proc sheet 0 01](#)).

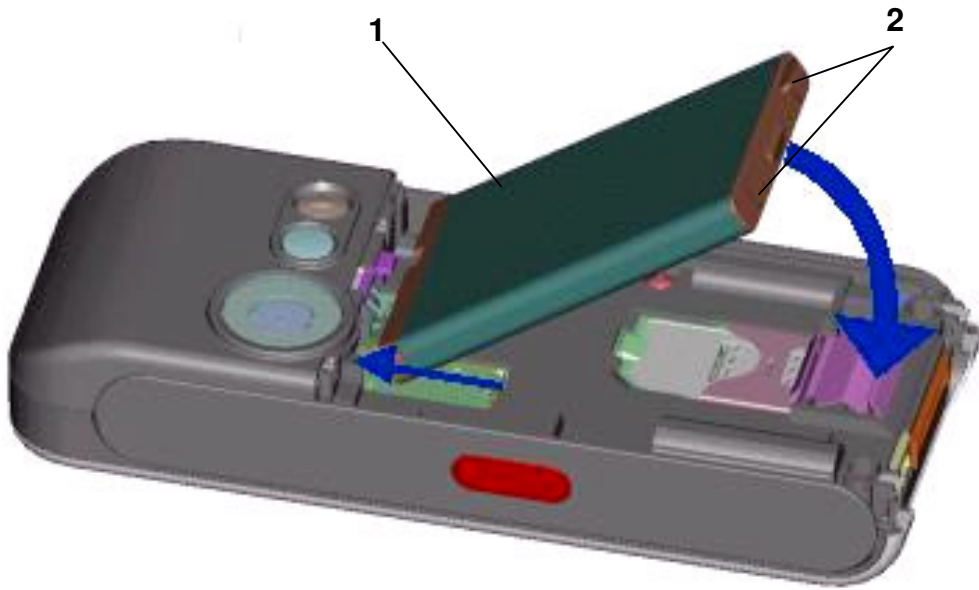
**4.13 Removal procedure :**

1. Take out the battery (1) by first extracting the stop pins (2).

**4.14 Placement procedure :**

1. Place the battery by first inserting the upper section .
2. Place the battery cover ([Proc sheet 0 01](#)).

 <b>SAGEM</b>	<b>REMOVING / REPLACING THE BATTERY</b>	Proc Sheet 0 02
myX-8		2/2



## **LEVEL 1 MAINTENANCE**

	<b>REMOVING / REPLACING THE BACK COVER</b>	Proc Sheet 1 01
myX-8		1/2

#### 4.15 **Tools :**

- A 0.6mm torx screwdriver

#### 4.16 **Preliminary operation :**

1. Remove the battery cover ( [Proc sheet 0 01](#)).
2. Remove battery pack ( [Proc sheet 0 02](#))

#### 4.17 **Removal procedure :**

1. On the equipped back cover (1), unscrew the four attachment screws (2)
2. Separate the equipped back cover (1) from the front cover by lifting lower side up
3. Remove the equipped back cover (1)

#### 4.18 **Placement procedure :**

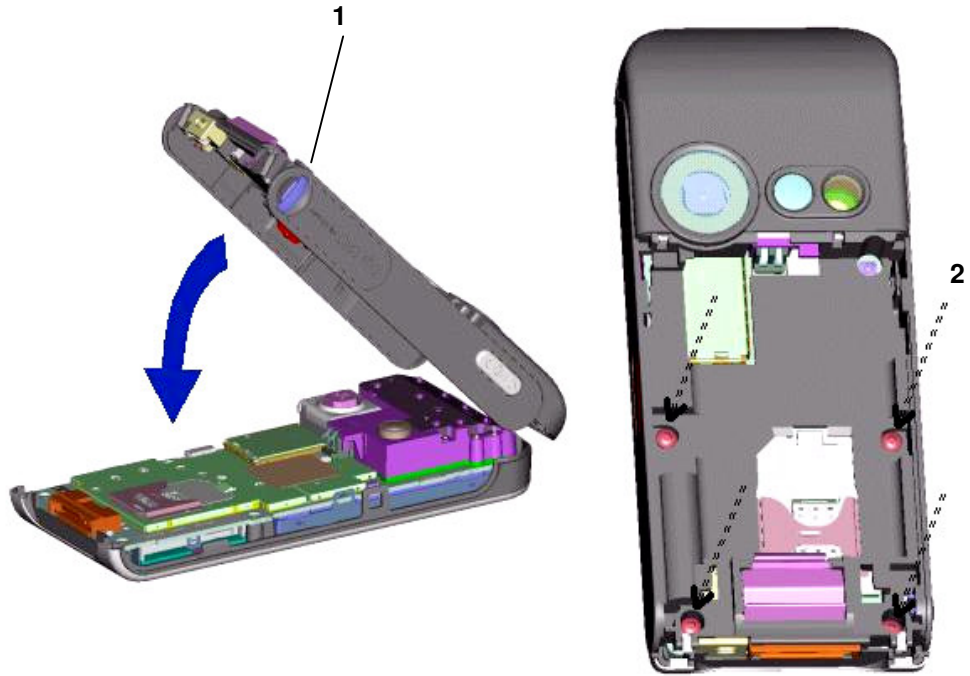
1. Position the vibrating device on the new front cover (1)
2. Position the equipped back cover (1) in its housing
3. Position and tighten the four attachments screws (2) with torx couple of **0,25 N.m.**

#### 4.19 **Further operations**

1. Replace battery pack ( [Proc sheet 0 02](#))
2. Place the back cover ([Proc sheet 0 01](#)).



 <b>SAGEM</b>	<b>REMOVING / REPLACING THE BACK COVER</b>	Proc Sheet 1 01
myX-8		2/2



 <b>SAGEM</b>	<b>REMOVING / REPLACING THE FRONT COVER</b>	Proc Sheet 1 02
myX-8		1/2

#### 4.20 **Tools :**

- A 0.6mm torx screwdriver

#### 4.21 **Preliminary operation :**

1. Remove the battery cover ( [Proc sheet 0 01](#)).
2. Remove battery pack ( [Proc sheet 0 02](#))
3. Remove the back cover ( [Proc sheet 1 01](#)).

#### 4.22 **Removal procedure :**

8. Remove the equipped electronic board (2) from the back cover (1)
9. Remove the equipped front cover (1).
10. Remove the elastomer keypad (3).

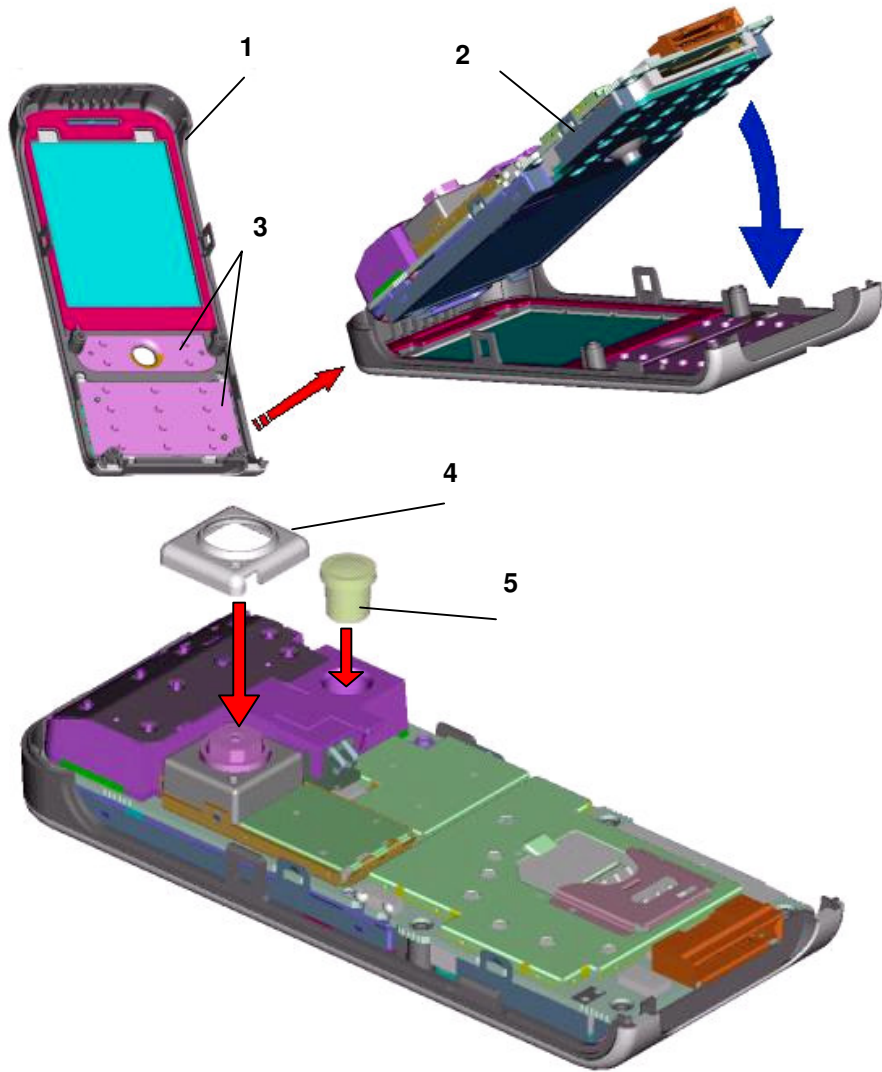
#### 4.23 **Placement procedure :**

1. On the new front cover (2), position the two Elastomer keypads (3) in position, ensuring it is free of dust.
2. Place the equipped electronic board (1) onto front cover (2)
3. Position the camera joint (4) and the flash light guide (5) on the equipped electronic board (1)

#### 4.24 **Further operations**

1. Place the back cover ([Proc sheet 1 01](#)).
2. Remove battery pack ( [Proc sheet 0 02](#))
3. Remove the battery cover ( [Proc sheet 0 01](#)).

 <b>SAGEM</b>	<b>REMOVING / REPLACING THE FRONT COVER</b>	Proc sheet 1 02
myX-8		2/2



 <b>SAGEM</b>	<b>REMOVING / REPLACING THE TWO ELASTOMER KEYPADS</b>	Proc Sheet 1 03
myX-8		1/2

#### 4.25 **Tools :**

- A 0.6mm torx screwdriver

#### 4.26 **Preliminary operation**

1. Remove the back cover ( [Proc sheet 0 01](#)).
2. Remove the front cover ( [Proc sheet 0 03](#)).

#### 4.27 **Removal procedure :**

1. Remove the two elastomer keypads (2) from the front cover (1).

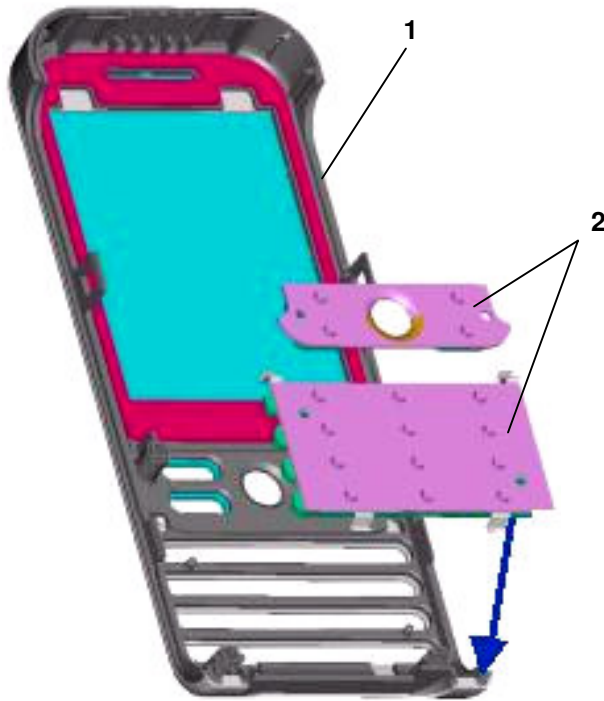
#### 4.28 **Placement procedure :**

1. Clean the two elastomer keypads (2) with compressed air.
2. Place the two elastomer keypads (2) in position in its housing

#### 4.29 **Further operations :**

1. Replace the front cover ([Proc sheet 0 03](#)).
2. Replace the back cover ([Proc sheet 0 01](#)).

 <b>SAGEM</b>	<b>REMOVING / REPLACING THE TWO ELASTOMER KEYPADS</b>	Proc Sheet 1 03
myX-8		2/2



 <b>SAGEM</b>	<b>REMOVING / REPLACING THE VIBRATING DEVICE</b>	Proc Sheet 1 04
myX-8		1/2

#### **4.30 Tools :**

- A 0.6mm torx screwdriver
- Tweezers

#### **4.31 Preliminary operation :**

1. Remove the battery cover ( [Proc sheet 0 01](#)).
2. Remove the battery ( [Proc sheet 0 02](#)).
3. Remove the back cover ( [Proc sheet 1 01](#)).

#### **4.32 Removal procedure :**

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

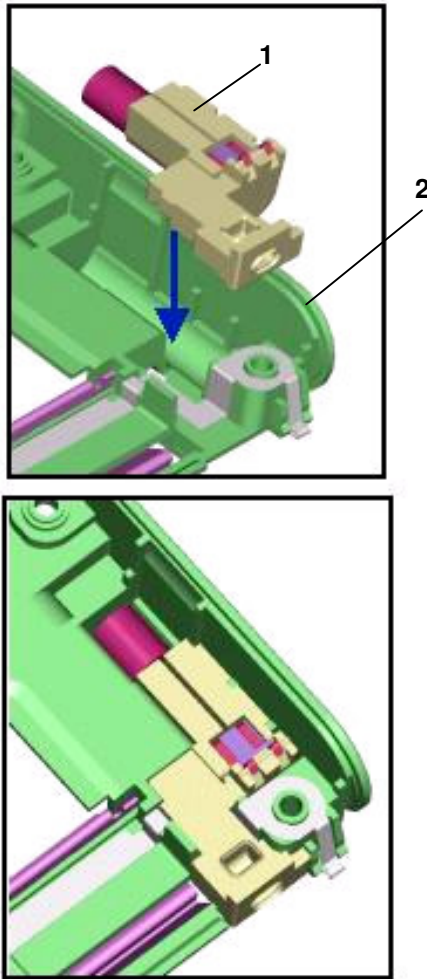
#### **4.33 Placement procedure :**

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

#### **4.34 Further operations :**

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

 <b>SAGEM</b>	<b>REMOVING / REPLACING THE VIBRATING DEVICE</b>	Proc Sheet 1 04
myX-8		1/2



 <b>SAGEM</b>	<b>REMOVING / REPLACING THE SIDE KEY</b>	Proc Sheet 1 05
myX-8		1/2

#### **4.35 Tools :**

- A 0.6mm torx screwdriver
- Tweezers

#### **4.36 Preliminary operation :**

1. Remove the battery cover ( [Proc sheet 0 01](#)).
2. Remove the battery ( [Proc sheet 0 02](#)).
3. Remove the back cover ( [Proc sheet 1 01](#)).
4. Remove the front cover ( [Proc sheet 1 02](#)).

#### **4.37 Removal procedure:**

1. With tweezers, remove the side key contact (2) and the elastomer side key (1) from the back cover (3).

#### **4.38 Placement procedure:**

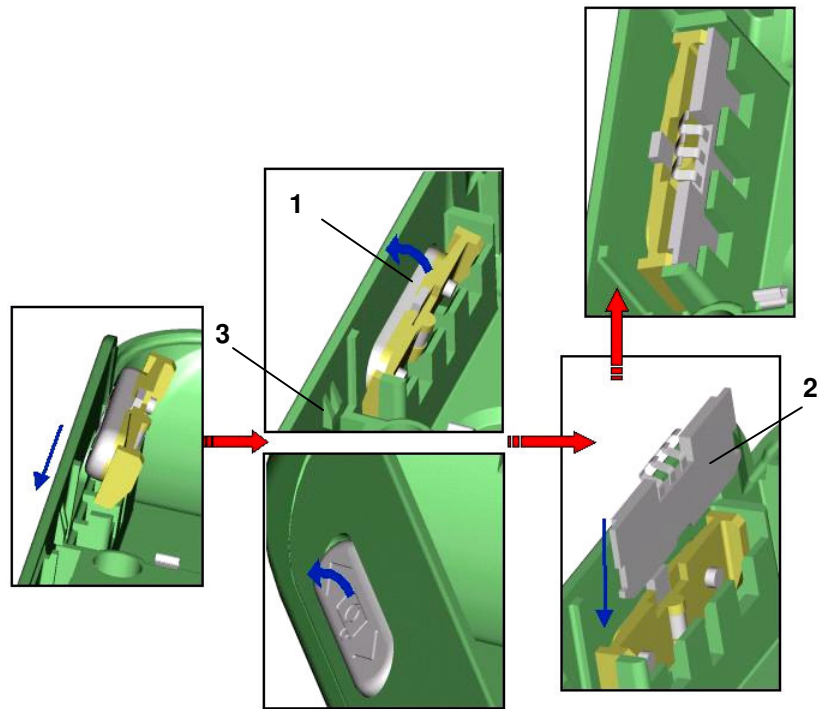
1. Place the side key contact (2) and the elastomer side key (1) into position on the back cover (3), respecting the foolproof device.

#### **4.39 Further operations :**

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



 <b>SAGEM</b>	<b>REMOVING / REPLACING THE SIDE KEY</b>	Proc Sheet 1 05
myX-8		2/2



	<b>REMOVING / REPLACING THE JOYSTICK</b>	Proc Sheet 1 06
myX-8		1/2

#### **4.40 Tools :**

- A 0.6mm torx screwdriver
- Tweezers

#### **4.41 Preliminary operation :**

1. Remove the battery cover ( [Proc sheet 0 01](#)).
2. Remove the battery ( [Proc sheet 0 02](#)).
3. Remove the back cover ( [Proc sheet 1 01](#)).

#### **4.42 Removal procedure :**

1. Lift the joystick (1) up from the equipped electronic board (2), by means of tweezers
2. Remove the joystick (1)

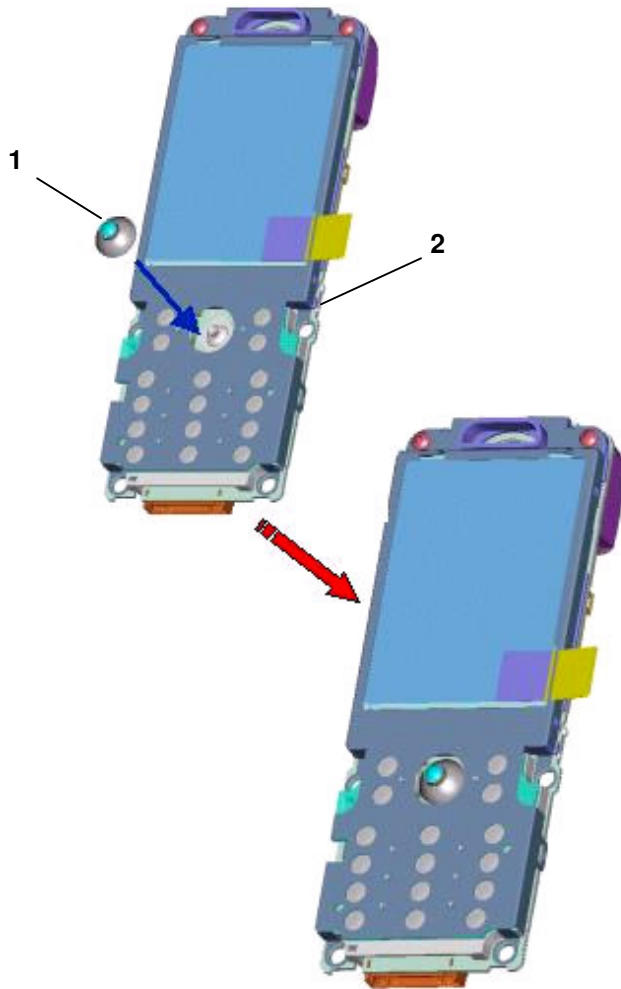
#### **4.43 Placement procedure :**

1. Position the new joystick (1) on the equipped electronic board (2) and push it into locked position .

#### **4.44 Further operations :**

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

 <b>SAGEM</b>	<b>REMOVING / REPLACING THE JOYSTICK</b>	Proc Sheet 1 06
myX-8		2/2



 <b>SAGEM</b>	<b>REMOVING / REPLACING THE ASSEMBLY FLANGE</b>	Proc Sheet 1 07
myX-8		1/2

#### **4.45 Tools :**

- A 0.6mm torx screwdriver
- Tweezers

- **Display contacts must never be touched.**

#### **4.46 Preliminary operation**

1. Remove the battery cover ( [Proc sheet 0 01](#)).
2. Remove the battery ( [Proc sheet 0 02](#)).
3. Remove the back cover ( [Proc sheet 1 01](#)).
4. Remove the front cover ( [Proc sheet 1 02](#)).

#### **4.47 Removal procedure :**

1. Unscrew the two attachment screws on the electronic board (1)
2. Remove the elastomer display gasket (6)
3. Separate three stop pins (3) to liberate the assembly flange (2) from the electronic board (1)
4. Separate the key pad stop pin (4) and the four display stop pins (5) to liberate the assembly flange (2)
5. Remove the assembly flange (2).

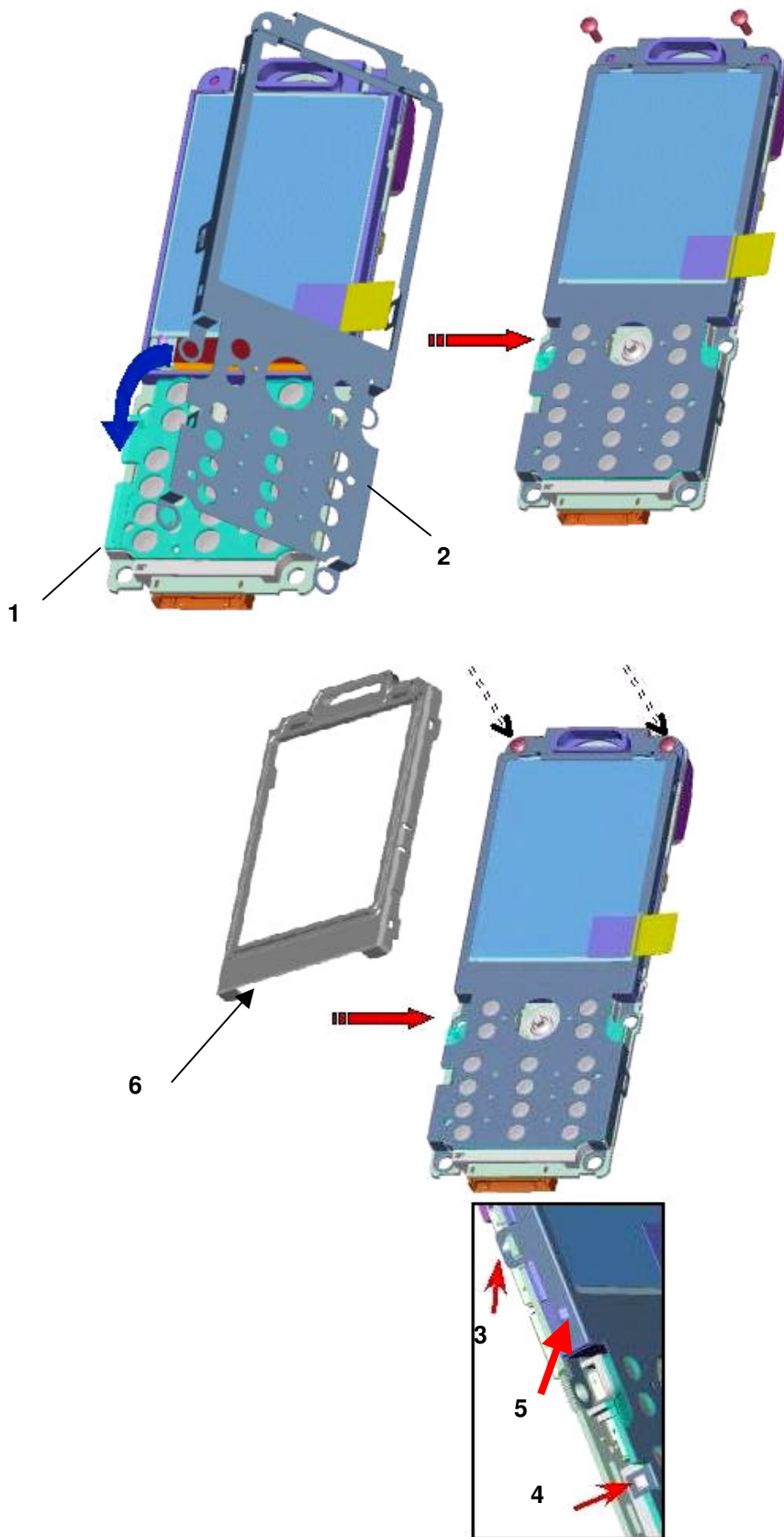
#### **4.48 Placement procedure :**

1. Replace the new assembly flange (2) on its housing.
2. Position and tighten the two attachments screws with torx couple of **0,25 N.m.**
3. Replace the elastomer display gasket (6) on the assembly flange (2)

#### **4.49 Further operations :**

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

 <b>SAGEM</b>	<b>REMOVING / REPLACING THE ASSEMBLY FLANGE</b>	Proc Sheet 1 07
myX-8		2/2



 <b>SAGEM</b>	<b>REMOVING / REPLACING THE ASSEMBLY FLANGE</b>	Proc Sheet 1 07
myX-8		2/2

	<b>REMOVING / REPLACING THE CAMERA</b>	Proc Sheet 1 08
myX-8		1/2

#### **4.50 Tools :**

- A 0.6mm torx screwdriver
- Gloves
- Tweezers
- Flex tool

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

#### **4.51 Preliminary operation :**

1. Remove the battery cover ( [Proc sheet 0 01](#)).
2. Remove the battery ( [Proc sheet 0 02](#)).
3. Remove the back cover ( [Proc sheet 1 01](#)).
4. Remove the front cover ( [Proc sheet 1 02](#)).

#### **4.52 Removal procedure :**

1. Remove the connector shielding (1) by means of tweezers
2. Remove the assembly camera (2) by means of tweezers
3. Remove delicately the board to board connector (3)
4. Remove delicately the camera (4) from the shielding (5)

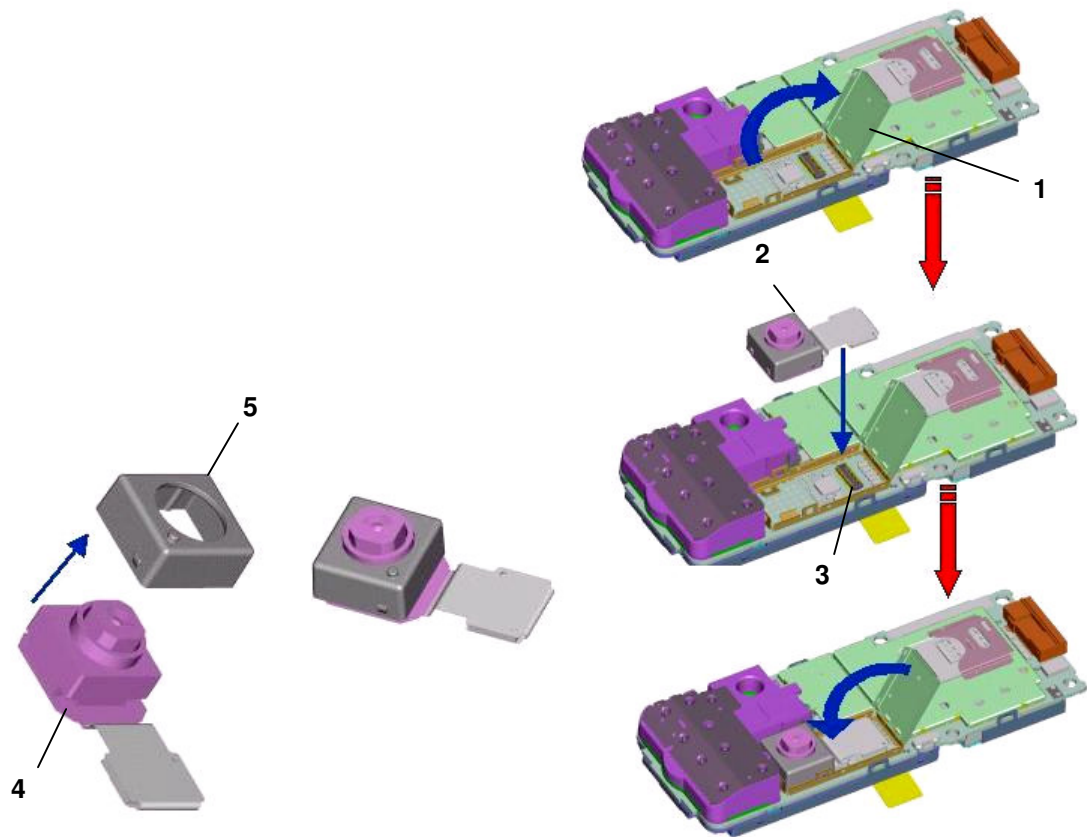
#### **4.53 Placement procedure:**

1. Present the assembly camera (2) in its housing
2. Insert delicately the flex PCB into the board to board connector by using the flex tool
3. Press down the connector
4. Replace the connector shielding (1)

#### **4.54 Further operations :**

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

 <b>SAGEM</b>	<b>REMOVING / REPLACING THE CAMERA</b>	Proc Sheet 1 08
myX-8		2/2





	<b>REMOVING / REPLACING THE DISPLAY</b>	Proc Sheet 1 09
myX-8		1/2

#### **4.55 Tools :**

- A 0.6mm torx screwdriver
- gloves
- Insertion/extraction flex tool

**Notice:** This procedure must be performed by an technician provided with gloves , to avoid any risk of pollution.

- **Display contacts must never be touched.**

#### **4.56 Preliminary operation**

1. Remove the battery cover ( [Proc sheet 0 01](#)).
2. Remove the battery ( [Proc sheet 0 02](#)).
3. Remove the back cover ( [Proc sheet 1 01](#)).
4. Remove the front cover ( [Proc sheet 1 02](#)).
5. Remove the assembly flange ( [Proc sheet 1 07](#)).

#### **4.57 Removal procedure :**

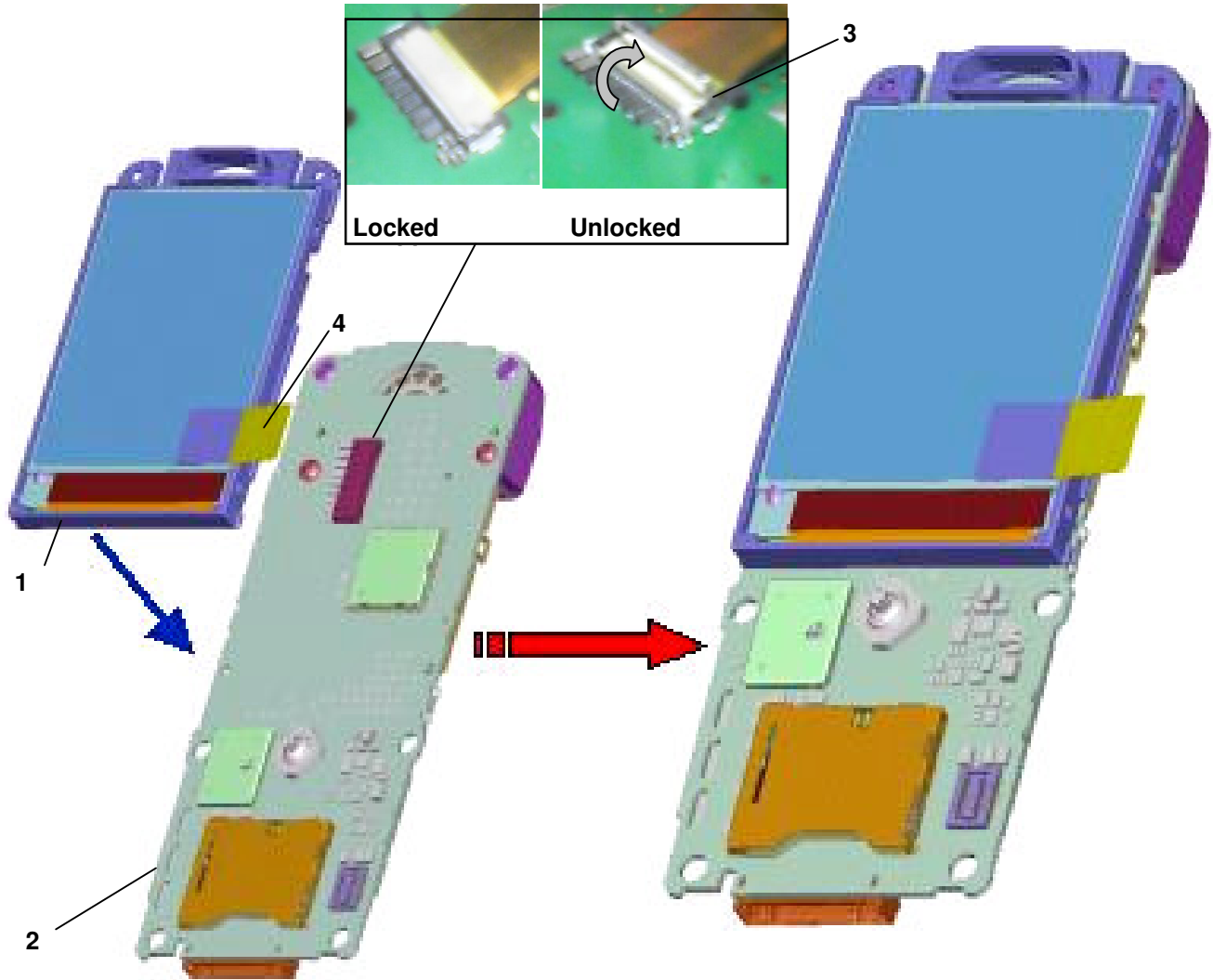
1. Turn the display (1) round ( 90° maximum) to the right of the electronic board (2)
2. Open Zif connector lock (3) by means of the extract flex tool, by lifting lock up
3. Remove delicately the flex PCB (4).
4. Remove the display (1)


#### **4.58 Placement procedure :**

1. Check that the connector lock (3) is lifted up
2. Introduce the flex PCB (4) into the zif connector
3. Use the flex tool to insert totally the flex PCB (4) into Zif connector
4. Press the Zif connector lock (3),using the tool

#### **4.59 Further operations :**

1. Replace the assembly flange ( [Proc sheet 1 07](#)).
2. Replace the front cover ( [Proc sheet 1 02](#)).
3. Replace the back cover ( [Proc sheet 1 01](#)).
4. Replace the battery ( [Proc sheet 0 02](#)).
5. Replace the battery cover ( [Proc sheet 0 01](#)).
6. Carry out the radio test ([Test Sheet 06](#)).



 <b>SAGEM</b>	<b>REMOVING / REPLACING THE KEYPAD MODULE</b>	Proc Sheet 1 10
myX-8		1/2

#### **4.60 Tools :**

- A 0.6mm torx screwdriver
- Gloves
- Tweezers

#### **4.61 Preliminary operation**

**This procedure must be performed by a technician with gloves.**

1. Remove the battery cover ( [Proc sheet 0 01](#)).
2. Remove the battery ( [Proc sheet 0 02](#)).
3. Remove the back cover ( [Proc sheet 1 01](#)).
4. Remove the front cover ( [Proc sheet 1 02](#)).
5. Remove the assembly flange ( [Proc sheet 1 07](#)).

#### **4.62 Removal procedure :**


1. Turn the keypad module (1) round at 90° maximum and disconnect the flex PCB from the board to board connector on the electronic board (2)
2. Remove the keypad module (1)

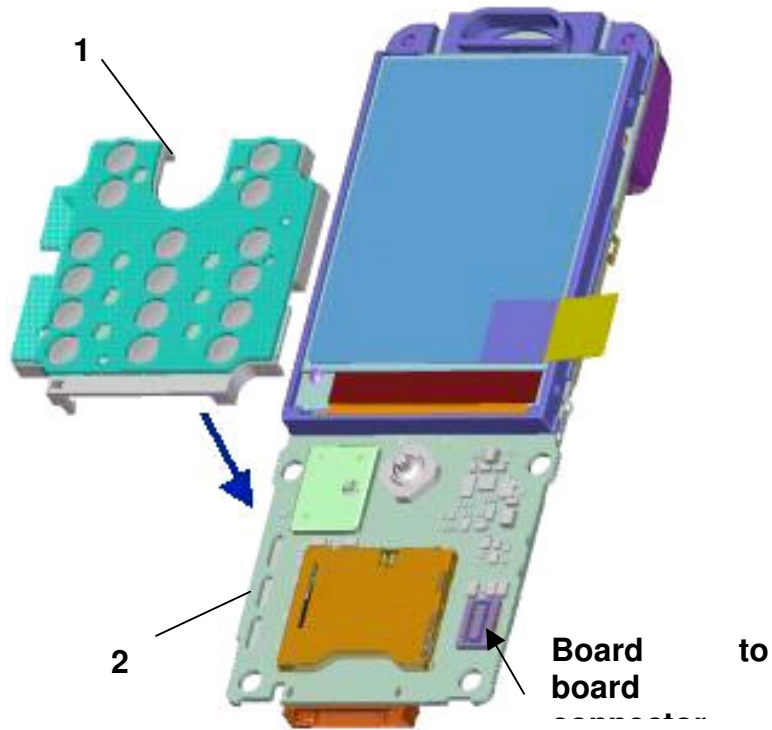
#### **4.63 Placement procedure :**

1. Replace the keypad module on the electronic board by connecting the flex PCB on the board to board connector first
2. Position the keypad module (1) in its housing

#### **4.64 Further operations :**

1. Replace the assembly flange ( [Proc sheet 1 07](#)).
2. Replace the front cover ( [Proc sheet 1 02](#)).
3. Replace the back cover ( [Proc sheet 1 01](#)).
4. Replace the battery ( [Proc sheet 0 02](#)).
5. Replace the battery cover ( [Proc sheet 0 01](#)).
6. Carry out the radio test ( [Test Sheet 06](#)).

 <b>SAGEM</b>	<b>REMOVING / REPLACING THE KEYPAD MODULE</b>	Proc Sheet 1 10
myX-8		2/2



 <b>SAGEM</b>	<b>REMOVING / REPLACING THE ELECTRONIC BOARD</b>	Proc Sheet 1 11
myX-8		1/2

#### **4.65 Tools :**

- A 0.6mm torx screwdriver

#### **4.66 Preliminary operation**

1. Remove the battery cover ( [Proc sheet 0 01](#)).
2. Remove the battery ( [Proc sheet 0 02](#)).
3. Remove the back cover ( [Proc sheet 1 01](#)).
4. Remove the front cover ( [Proc sheet 1 02](#)).
5. Remove the assembly flange ( [Proc sheet 1 07](#)).
6. Remove the display ( [Proc sheet 1 09](#)).

#### **4.67 Removal procedure :**

1. Turn the keypad module (1) round at 90° maximum and disconnect the flex PCB from the board to board connector on the electronic board (2)
2. Remove the electronic board (1)

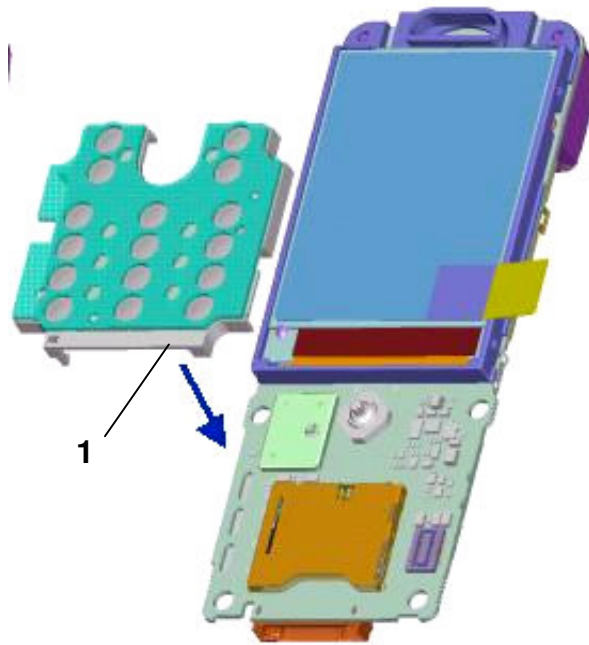
#### **4.68 Placement procedure :**

1. Replace the keypad module (1) on the new electronic board (2)

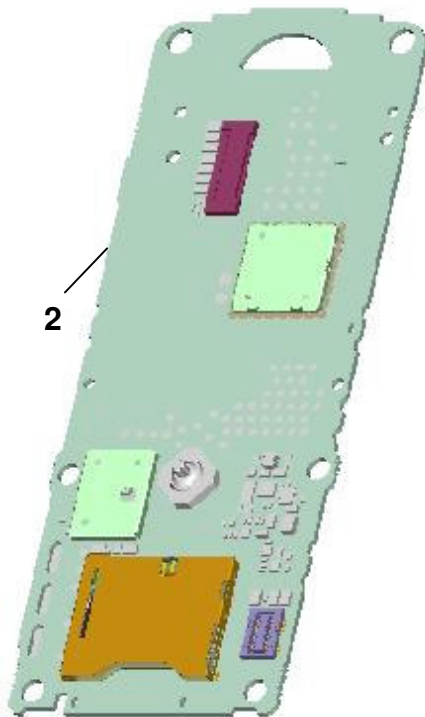
#### **4.69 Further operations :**

1. Replace the display ( [Proc sheet 1 09](#)).
2. Replace the assembly flange ( [Proc sheet 1 07](#)).
3. Replace the front cover ( [Proc sheet 1 02](#)).
4. Replace the back cover ( [Proc sheet 1 01](#)).
5. Replace the battery ( [Proc sheet 0 02](#)).
6. Replace the battery cover ( [Proc sheet 0 01](#)).
7. Carry out the radio test ([Test Sheet 06](#)).

 <b>SAGEM</b>	<b>REMOVING / REPLACING THE ELECTRONIC BOARD</b>	Proc Sheet 1 11
myX-8		2/2



1



2

	<b>REMOVING / REPLACING THE BATTERY CONNECTOR</b>	Proc Sheet 1 12
myX-8		1/2

#### **4.70 Tools :**

- A 0.6mm torx screwdriver
- Gloves
- Tweezers
- Flex tool

#### **4.71 Preliminary operation :**

1. Remove the battery cover ( [Proc sheet 0 01](#)).
2. Remove the battery ( [Proc sheet 0 02](#)).
3. Remove the back cover ( [Proc sheet 1 01](#)).
4. Remove the front cover ( [Proc sheet 1 02](#)).

#### **4.72 Removal procedure :**

1. On the electronic board (1) unscrew the two attachment screws to remove the antenna loudspeaker and battery connector module(2)
2. Remove the battery connector (3) on the module (2)

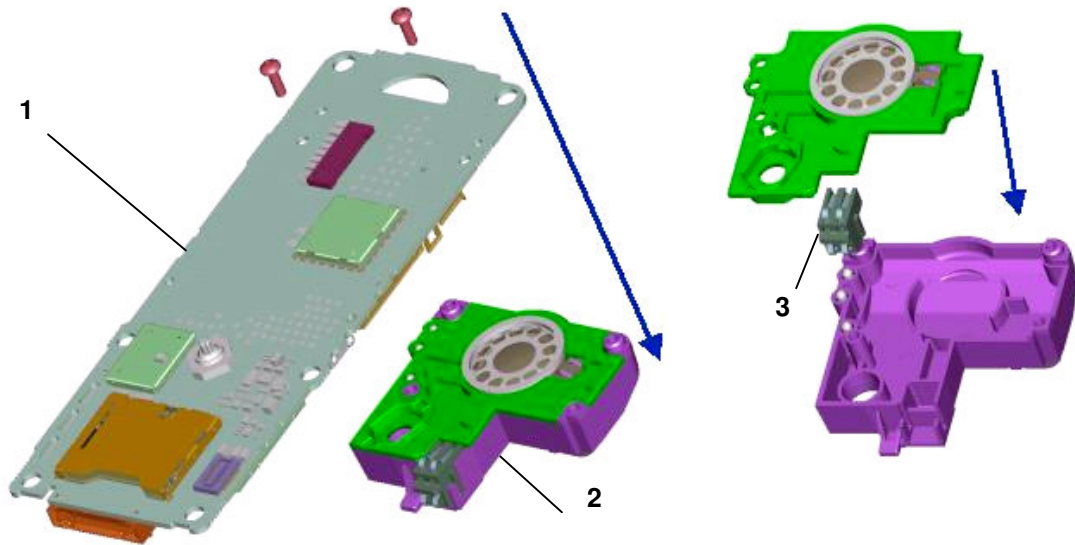
#### **4.73 Placement procedure:**

1. Position the battery connector (3) in its housing
2. Position the antenna loudspeaker and battery connector module and tighten the two attachments screws with torx couple of **0,25 N.m.**

#### **4.74 Further operations :**

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

 <b>SAGEM</b>	<b>REMOVING / REPLACING THE BATTERY CONNECTOR</b>	Proc Sheet 1 12
myX-8		2/2





 <b>SAGEM</b>	<b>REMOVING / REPLACING THE LOUDSPEAKER</b>	Proc Sheet 1 13
myX-8		1/2

#### **4.75 Tools :**

- A 0.6mm torx screwdriver
- Gloves
- Tweezers
- Flex tool

#### **4.76 Preliminary operation :**

1. Remove the battery cover ( [Proc sheet 0 01](#)).
2. Remove the battery ( [Proc sheet 0 02](#)).
3. Remove the back cover ( [Proc sheet 1 01](#)).
4. Remove the front cover ( [Proc sheet 1 02](#)).

#### **4.77 Removal procedure :**

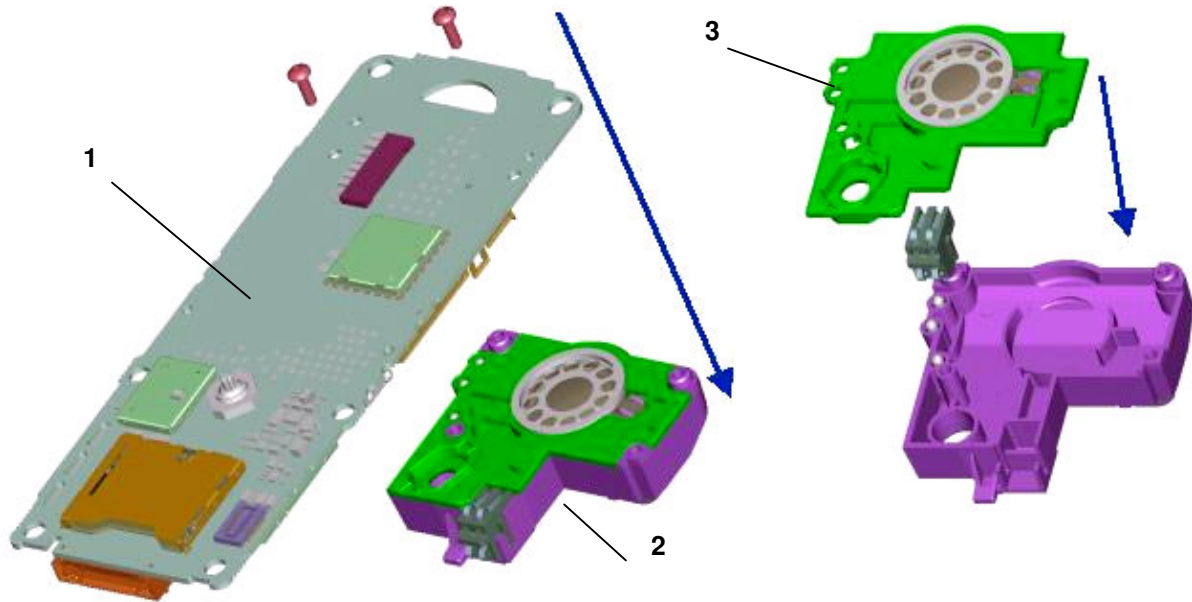
1. On the electronic board (1) unscrew the two attachment screws to remove the antenna loudspeaker and battery connector module(2)
2. Remove the equipped loudspeaker (3) on the module (2)


#### **4.78 Placement procedure:**

1. Position the equipped loudspeaker (3) in its housing
2. Position the antenna loudspeaker and battery connector module (2) and tighten the two attachments screws with torx couple of **0,25 N.m.**

#### **4.79 Further operations :**

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



 <b>SAGEM</b>	<b>ELECTRONIC BOARD EXCHANGE</b>	Proc Sheet 1 14
myX-8		1/3

#### **4.80 Preliminary operation**

1. Control of the IMEI label integrity
2. Remove the electronic board (Proc sheet 1 11)
3. Control of any oxidation marks (on the electronic board)

#### **4.81 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 SMT).

#### **Note :**


- **Boards with oxidation should not to set in conformance with the warranty**
- **The defective boards must never be mixed with the complete mobiles**

#### **4.82 Placement procedure :**

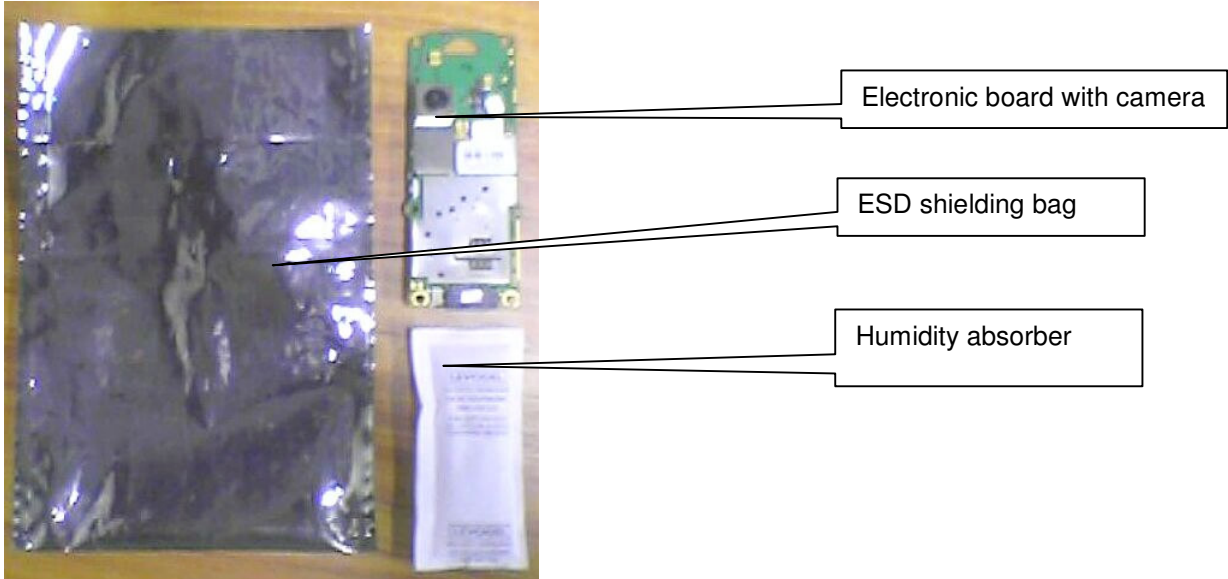
1. Exchange the defective board with a functional board of the same Sagem reference (25M).

#### **4.83 Further operations :**

1. Place the new electronic board on the assembly plate. .(Proc sheet 1 11)
2. Follow stages ( see enclosed photos) and the SMT instructions (Proc sheet 01)

	<b>ELECTRONIC BOARD EXCHANGE</b>	Proc sheet 1 14
myX-8		2/3

*Example of electronic boards packaging :*



Boards packaging SAGEM -> ARC

Boards packaging ARC -> SAGEM




ESD shielding bag closed by the product label



ESD shielding bag closed by the IMEI label

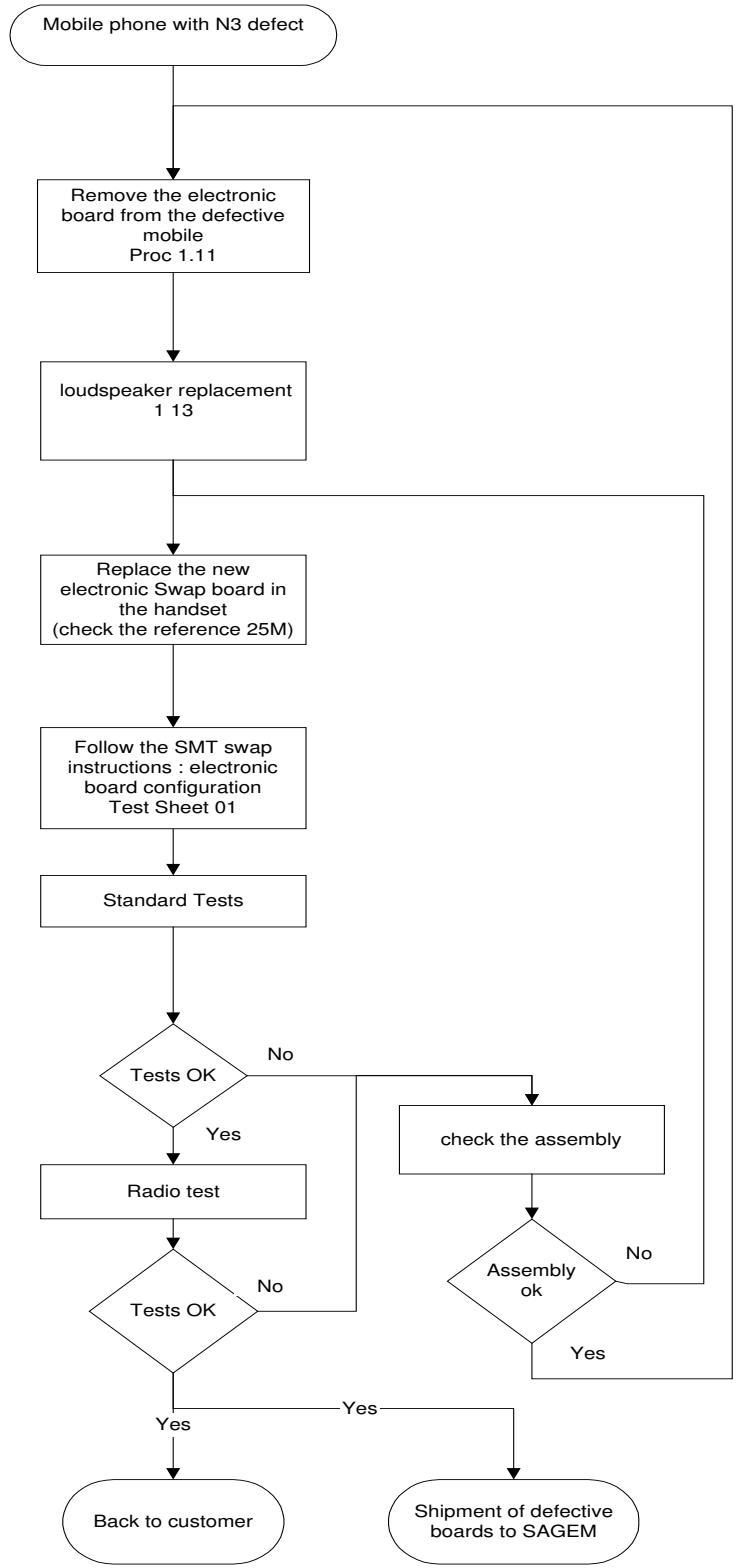
Write the defect code on the label

 <b>SAGEM</b>	<b>ELECTRONIC BOARD EXCHANGE</b>	Proc sheet 1 14
myX-8		2/3



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

## Electronic board exchange process



Detection of N3 defect : See the Technical documentation

-check the keypad module .  
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

## **LEVEL 3 MAINTENANCE**

## **IMPORTANT**

### **Mobile packaging sent to SAGEM S.A. :**

Follow the Proc sheet 1.14

### **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...).



<b>Informations CRA/CRA information :</b>		<b>Garantie/Warranty :</b>	
Nom/Name :		Garantie standard/Standard warranty : <input type="checkbox"/>	
Rue /Street :		Déjà réparé/préviously repaired : <input type="checkbox"/>	
Ville / City :		<b>Hors garantie/Out of warranty :</b>	
Code postal /Poscode :		Garantie expirée /Expired warranty : <input type="checkbox"/>	
Pays/Country :		Mauvaise utilisation / Misuse : <input type="checkbox"/>	
Telephone /Phone :			
Nom du produit/product :		N° Série/Sérial n° :	
Date d'achat/Date of purchase		N° IMEI :	
<b>Code SAGEM</b>	<b>Type de défauts</b>	<b>Type of fault</b>	
<b>PROBLEME D'AFFICHAGE</b>		<b>DISPLAY PROBLEM</b>	
A1	PAS D AFFICHAGE LED ETEINTES	NO POWER UP	
A2	PAS D'AFFICHAGE LED ALLUMÉES	NO WAKE UP	
A3	BLOCAGE DE L AFFICHAGE	FREEZES UP	
A5	AFFICHEUR CASSE	BROKEN LCD	
A6	LIGNE, DIGIT OU PIXEL MANQUANT, CONTRASTE, COULEUR	MISSING LINE, DIGIT or PIXEL, CONTRAST, COLOR	
A7	PB RETROECLAIRAGE	BACKLIGHTS PROBLEM	
<b>PROBLEME D'ANTENNE</b>		<b>ANTENNA PROBLEM</b>	
A10	ANTENNE CASSEE / ABSENTE	BROKEN / MISSING ANTENNA	
<b>PROBLEME D'ALIMENTATION / CHARGEUR</b>		<b>POWER SUPPLY / CHARGING PROBLEM</b>	
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	AUTONOMY	
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	
<b>PROBLEME DE CLAVIER</b>		<b>KEYBOARD PROBLEM</b>	
C1	CLAVIER INOPERANT	NOT FUNCTIONING KEYBOARD	
C2	PROBLEME TOUCHE LATERALE	LATERAL TOUCH PROBLEM	
<b>MESSAGE D'ERREUR</b>		<b>ERROR MESSAGE</b>	
D1	SIM ABSENTE	SIM MISSING	
D2	AUTRES MESSAGES	OTHER MESSAGES	
D3	PB EEPROM	EEPROM	
D4	MOBILE NON REGLE	UNTUNED MOBILE	
D5	HARD FAILURE	HARD FAILURE	
D6	SIM VERROU	SIM VERROU	
D7	CODE POSTE	POST CODE BLOCKED	
D8	RETOUR SAV	SAV RETURN	
D9	BATTERIE INCONNUE	UNKNOWN BATTERY	
<b>PROBLEME AUDIO</b>		<b>AUDIO PROBLEM</b>	
E1	HP DEFECTUEUX (grésille)	DEFECTIVE LOUDSPEAKER (hails)	
E2	HP VOIX DEFORMEE OU PARASITES	LOUDSPEAKER VOICE DISTORTION	
E3	MICRO DEFECTUEUX	DEFECTIVE MICROPHONE	
E4	MICRO VOIX DEFORMEE OU PARASITE (DISTANT)	MICRO VOICE DISTORTION	
E5	PROBLEME DE VIBREUR	VIBRATING DEVICE PROBLEM	
E6	CONNECTEUR AUDIO DEFECTUEUX	DEFECTIVE AUDIO CONNECTOR	
<b>PROBLEME DE COMMUNICATION</b>		<b>COMMUNICATION PROBLEM</b>	
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	
<b>PROBLEME COSMETIQUE / DEFAULT VISUEL</b>		<b>COSMETIC PROBLEM</b>	
G1	VITRE CASSEE OU ABIMEE	BROKEN OR DAMAGED GLASS	
G2	COQUE CASSEE OU ABIMEE	BROKEN OR DAMAGED COVER	
G3	FLAP CASSE OU ABIME	BROKEN OR DAMAGED FLIP	
G5	CLAVIER CASSE OU ABIME	BROKEN OR DAMAGED KEYBOARD	
G6	BOUTON VERROU DEFECTUEUX	DEFECTIVE LOCK BUTTON	
<b>AUTRES PROBLEMES</b>		<b>OTHER PROBLEM</b>	
H1	KIT ACCESSOIRES HS	BROKEN OR DAMAGED ACCESSORY	
H2	FONCTION FM (MOBILE)	FM FUNCTION (Mobile)	
H3	FONCTION MONETIQUE	MONETIC FUNCTION	
I1	TRACE D OXYDATION	OXYDATION MARKS	
I3	PAS DE DEFAULT CONSTATE	NO FAULT FOUND	
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	
<b>PROBLEME MULTIMEDIA</b>		<b>MULTIMEDIA PROBLEM</b>	
K1	PROBLEME DATA (SMS, EMS, SMS,GPRS, WAP, TELECHARGEMENT JEUX, SONNERIES, SAUVEUR D'ECRAN, NE COMMUNIQUE PAS AVEC UN PC, POCKET PC OU PALM)	DATA PROBLEM (SMS, EMS, SMS,GPRS, WAP, DOWNLOADING GAMES, RINGING TONES, SCREEN SAVER, NO COMMUNICATION WITH A PC, POCKET PC or PALM)	
K2	FONCTION VIDEO	VIDEO FUNCTION	
K3	FONCTION INFRAROUGE (IRDA)	INFRARED FUNCTION (IRDA)	

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

## **OUT OF WARRANTY INTERVENTION**

 <b>SAGEM</b>	<b>REMOVING/ REPLACING THE DATA/ AUDIO/ CHARGE CONNECTOR</b>	Proc Sheet 4 01
myX-8		1/3

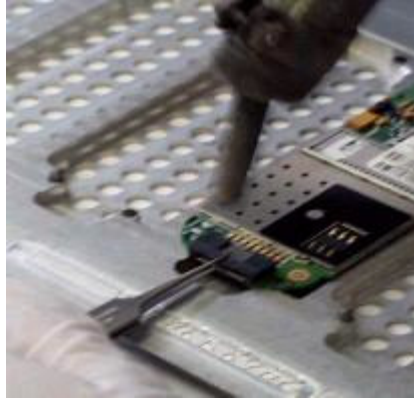
**Notice:** The handsets requiring the replacement of system connectors cannot be repaired under Sagem warranty.

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

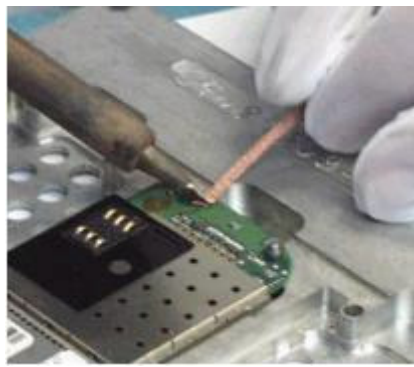
**- Replacement procedure of DATA/ AUDIO/ CHARGE connector**

- 1-Disassemble the handset Proc 1 11
- 2-Replace the defective connector (see below) **Ref 18 598 906-8**
- 3 - Replace the electronic board in the mobile phone Proc 1 11
- 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

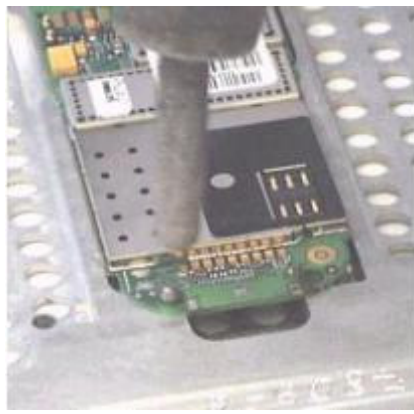
 <b>SAGEM</b>	<b>REMOVING/ REPLACING THE DATA/ AUDIO/ CHARGE CONNECTOR</b>	Proc Sheet 4 01
myX-8		2/3



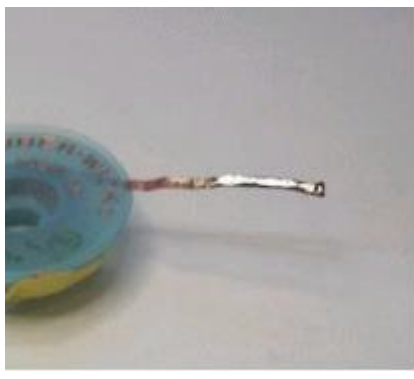
- Maintain the electronic board
  - flux Correctly the pins of the connector.
  - Reference of the flux to be used:
  - LITTON flux -Supplier reference 952-D6
  - SAGEM reference 18 775 103-7
  - With tweezers, hold the connector and heat the pins up.
- ATTENTION:**
- Do not pull the connector but let 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 warm.



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.

 <b>SAGEM</b>	<b>REMOVING/ REPLACING THE DATA/ AUDIO/ CHARGE CONNECTOR</b>	Proc Sheet 4 01
myX-8		3/3

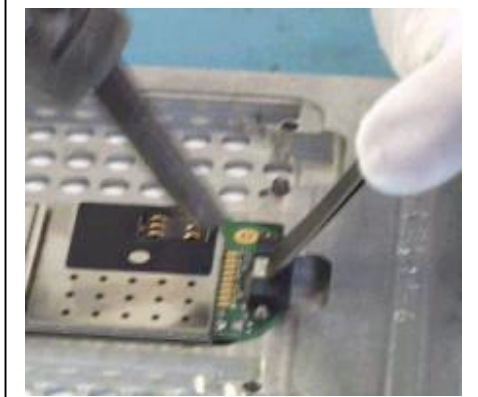


Before any operation,

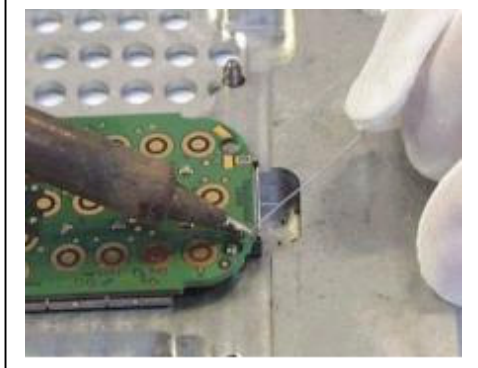
- flux correctly the pins of the connector.
- with the solder wick loaded with tin , tin the pins of the DATA/ AUDIO/ CHARGE connector by positioning it straight ahead (pads upward), and by heating the solder wick which is in touch with pins.

**Attention:**

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



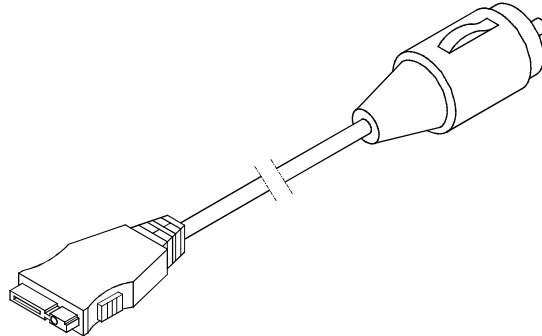
- Start soldering the connector pins.
- Flux the place of the connector and position the DATA/ AUDIO/ CHARGE connector.
- Verify that the pins of the DATA/ AUDIO/ CHARGE connector are well centred on pads.
- Heat pins with an air blow device while maintaining the connector with tweezers
- Verifv that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



**At last, solder the 4 pins crossing the board..**

## CHAPTER 5 - ACCESSORIES

### 5.1 12 V / 24 V CHARGERS



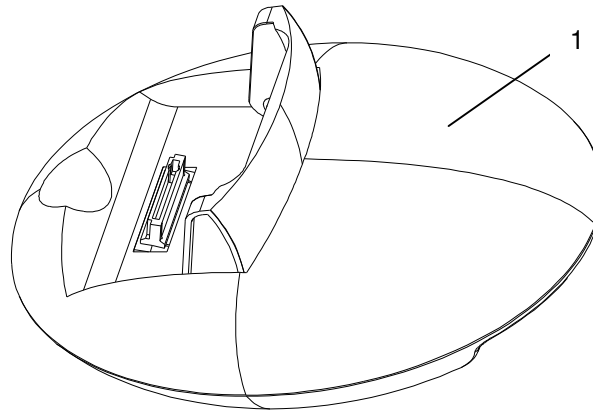
#### 5.1.1 Description

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.

#### 5.1.2 Characteristics

Item	Packaging reference	Input voltage	No load voltage	Output current
CIGAR LIGHTER CHARGER AC1	Blister	10.8 to 30 V=	6.5 V	500 mA

**5.2 DESKTOP CHARGERS AND CRADLES**



**5.2.1 Description**

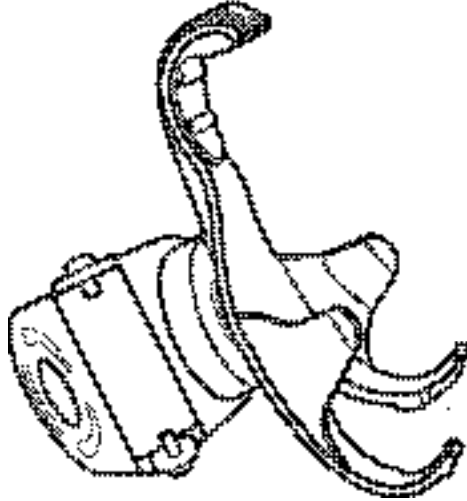
This charger could charge a mobile, while acting as holder the handset.

**5.2.2 Characteristics**

Item	Designation	Nature
1	SIMPLE DESKTOP CRADLE	Simple support recess



### **5.3 CAR CRADLE**



#### **5.3.1 Description**

Car cradle compatible with AC1 or antenna adapter.

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**5.3.2 Characteristics**

<b>Item</b>	<b>Packaging</b>	<b>Comments</b>
CAR CRADLE KIT mechanical	BLISTER	Mechanical cradle

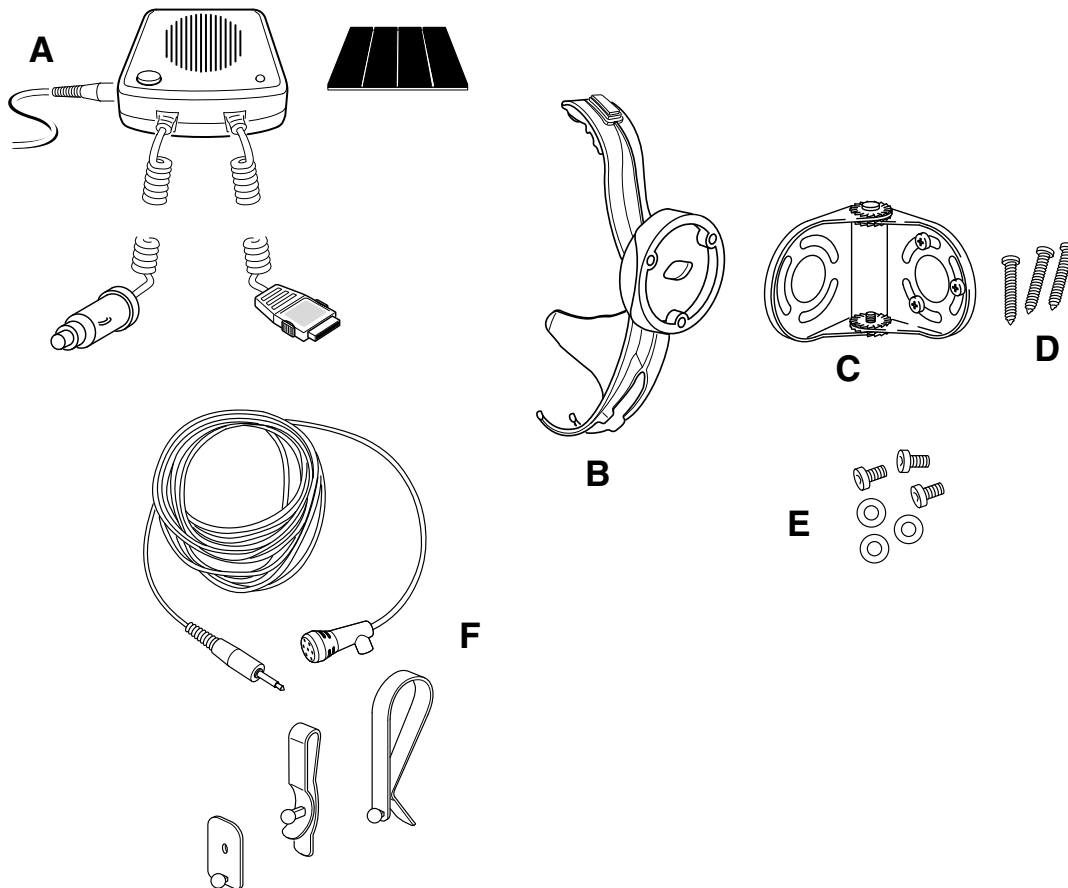
**6.4. FULL DUPLEX CAR HANDSFREE KIT**

**6.4.1. Description**

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

**6.4.2. Characteristics**

Item	Packaging	Comments
Rapido kit	Box	No antenna.



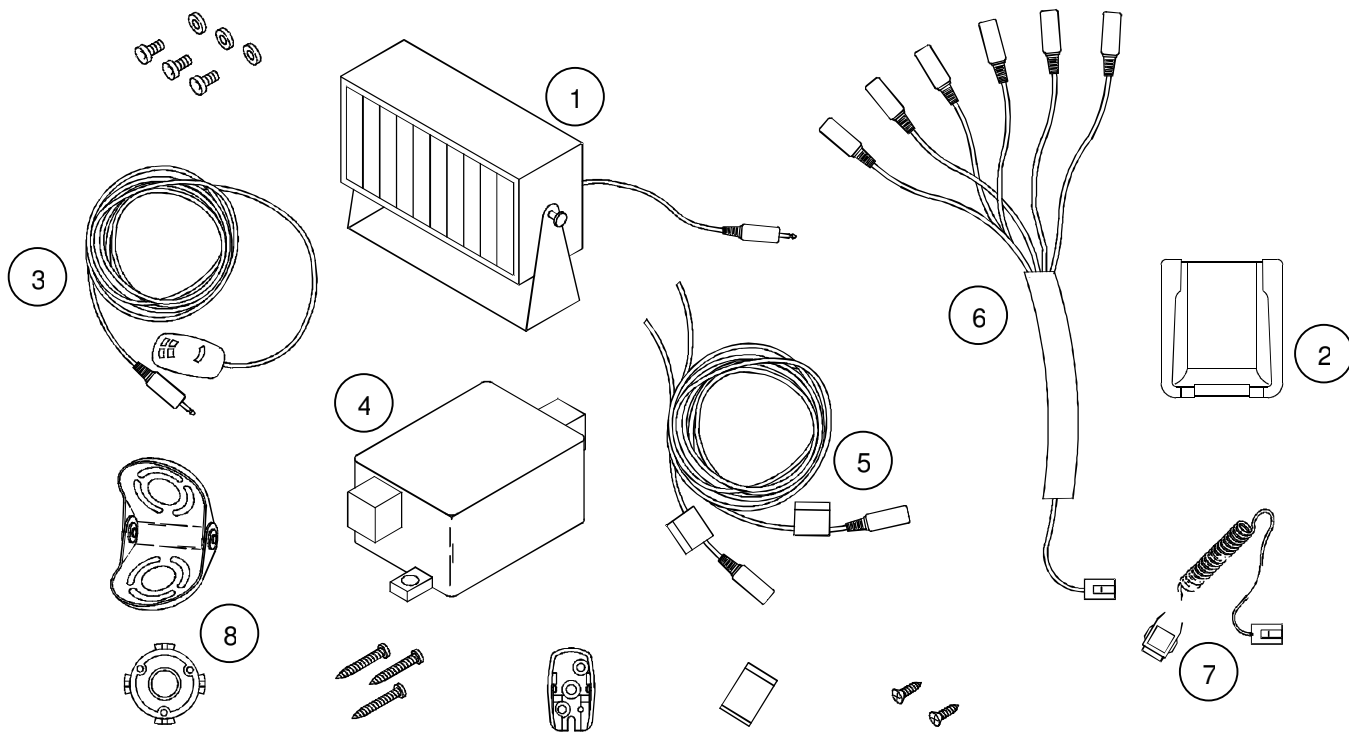
A : Connecting case and loudspeaker.

B : Cradle.

C, D et E : Support kit.

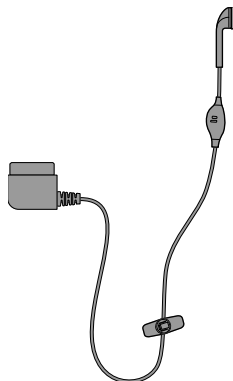
F : Microphone.

Item	Packaging	Comments
KIT K3	Box	No antenna. Requires car installation 900/1800 MHz dual band



- 1 : Loudspeaker.
- 2 : Cradle.
- 3 : Microphone.
- 4 : Connecting case.
- 5 : Power supply cable.
- 6 : Cable : microphone, loudspeaker, car ⇔ connecting case.
- 7 : Cable : mobile ⇔ connecting case.
- 8 : Support kit.

**5.5 PEDESTRIAN HANDSFREE KIT**



**5.5.1 Description**

Ear support with microphone on the cable for handsfree conversation.

**5.5.2 Characteristics**

Item	Dimensions	Loudspeaker impedance	Microphone
PEDESTRIAN HANDSFREE KIT	Length: 1.25 m Dist. micro/loudspeaker: 25 cm	150 Ω 119 dB SPL	2,2 kΩ -42 dB SPL

## 5.6 DATA CABLES

### 5.6.1 Description

Data cables are used for transferring data through standard equipment.

### 5.6.2 Characteristics

Item	Packaging	Target mobile	Mobile link to	Signals
DATA CABLE	Blister	Range 900/3000/myX-3/myX-5/myX-8	PC	Standard V28 3V<Us<-3V  Fmax = 115kbauds
DATA CABLE PC/USB	Blister	MyX-6/myX-8	PC	

## **CHAPTER 6 - TECHNICAL INFORMATION BULLETIN**

### **6.1 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.

### **6.2 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 7 - ILLUSTRATED PART CATALOG

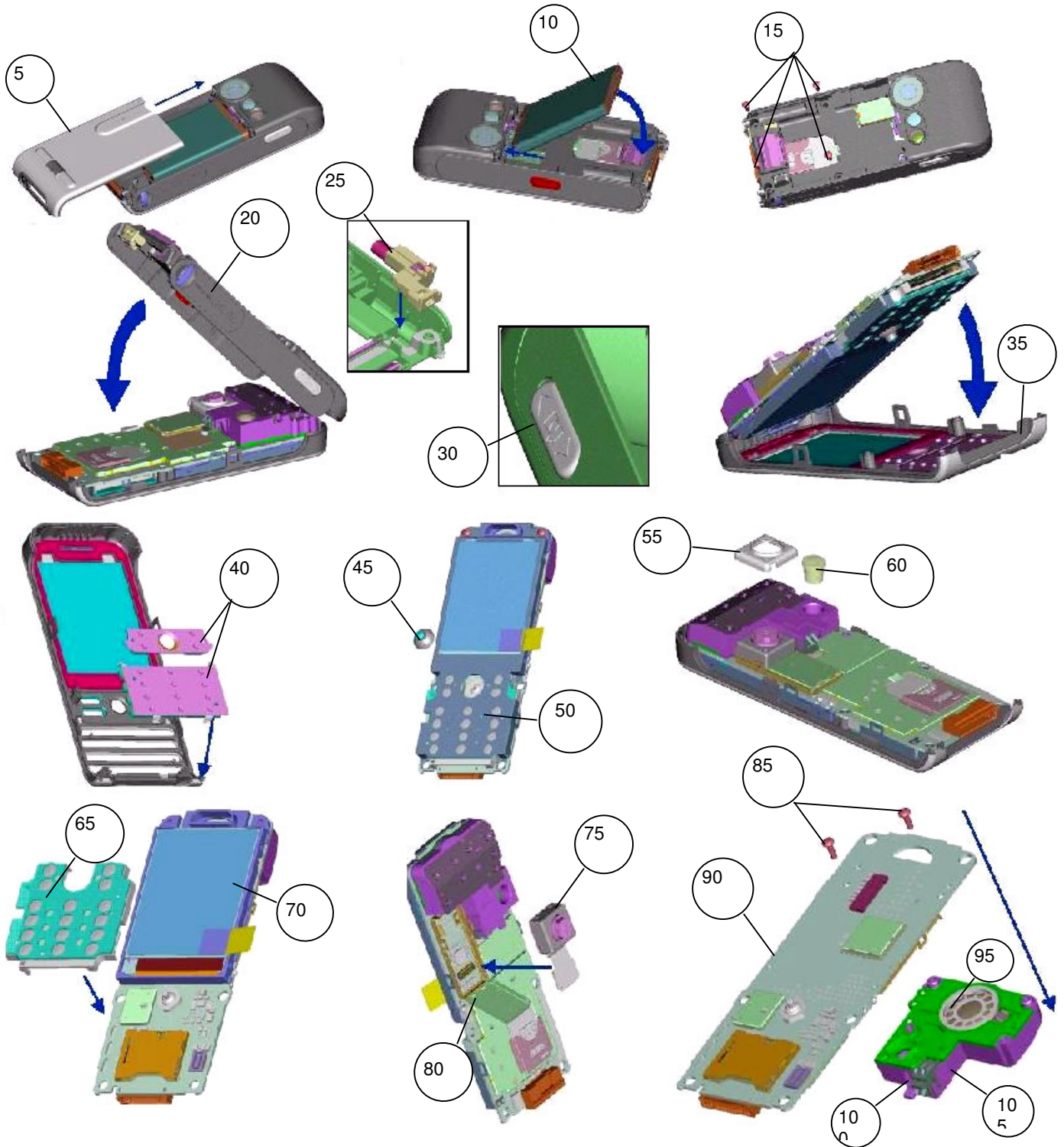
### 8.1 myX-8 spare parts

ASSEMBLY	QTY	DESIGNATION
5	1	ly cover
10	1	y
15	4	,8-6 screw
20	1	cover
25	1	ing device
30	1	key
35	1	cover
40	1	omers keypads
45	1	ck
50	1	nbly flange
55	1	ra joint
60	1	light guide
65	1	ad module
70	1	y
75	1	nbly camera
80	1	ector shielding
85	2	,8-6 screw
90	1	onic board

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95	1	speaker
100	1	y connector
105	1	na-loudspeaker-battery connector module

**8.2 myX-8 exploded view**



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## CHAPTER 8 - COMPOSITION TABLE

### 8.1 PURPOSE

This chapter contains the SAGEM codes of articles mentioned throughout the Site Technical Documentation.

### 8.2 LIST OF ARTICLES

<b>TEST TOOLS</b>	
<b>Designation</b>	<b>Reference</b>
Secured downloading kit	23 810 395-5
Mains charger test kit	23 810 480-8
myX-8 calibration tool	To define
myX-8 ammeter interface	25 160 683-2
Test Chart	25 134 968-5

<b>12 V / 24 V CHARGERS</b>	
<b>Designation</b>	<b>Reference</b>
Cigar-lighter charger AC1	23 810 045 - 9

<b>DESKTOP CHARGERS</b>	
<b>Designation</b>	<b>Reference</b>
Desktop charger	23 812 376 - 7

<b>FULL DUPLEX CAR HANDSFREE KIT</b>	
<b>Designation</b>	<b>Reference</b>
Kit K3	23 811 416 - 4
Rapido Kit	23 811 861 - 7
Simple car support	23 812 339 - 5

<b>PEDESTRIAN HANDSFREE KIT</b>	
<b>Designation</b>	<b>Reference</b>
Pedestrian handsfree kit	18 851 296-8