

SERVICE MANUAL

Level 1&2

NOKIA

E65

RM-208



Transceiver characteristics:

Band: Dual mode Quad-band phone for GSM 850/900/1800/1900MHz and WCDMA (Band I)

Camera: 2.0 Megapixel camera

Display: Active matrix color display with 16M colors, resolution 320 x 240 pixel

Operating System: Series 60 3rd Edition

EGPRS

WLAN

Bluetooth

FM radio

Connector: Pop-Port™ Connector

Memory card: micro SD (hot swap)

Transceiver with BL-5F Li-Ion battery pack

Talk time	Standby	Note
up to 6h	up to 14days	Depends on network parameters

Environmental characteristics:

- Lead-free soldered

TABLE OF CONTENTS

Page

1.	INTRODUCTION	3
2.	GENERAL REPAIR INFORMATION	4
3.	PATHFINDER FOR WORKSHOP STAFF	5
4.	EXPLODED VIEW	6
5.	SPARE PARTS OVERVIEW	7
6.	GENERAL RECYCLING RECOMMENDATION	8
7.	LEVEL 2 SOLDER COMPONENTS	9
8.	NOKIA ONLINE (NOL)	10
9.	SERVICE TOOLS	11
10.	SW-UPDATE	13
11.	DISASSEMBLY INSTRUCTION	14
12.	ASSEMBLY INSTRUCTION	23
13.	LEGEND FOR QUICK TROUBLE SHOOTER	30
14.	QUICK TROUBLE SHOOTER - POWER ON	31
15.	QUICK TROUBLE SHOOTER - CHARGING	32
16.	QUICK TROUBLE SHOOTER - NO SERVICE	33
17.	QUICK TROUBLE SHOOTER - SIM	34
18.	QUICK TROUBLE SHOOTER - EARPIECE	35
19.	QUICK TROUBLE SHOOTER - IHF SPEAKER	36
20.	QUICK TROUBLE SHOOTER - DISPLAY	37
21.	QUICK TROUBLE SHOOTER - MICROPHONE	38
22.	QUICK TROUBLE SHOOTER - T9 KEYMAT	39
23.	QUICK TROUBLE SHOOTER - S60 KEYMAT	40
24.	QUICK TROUBLE SHOOTER - VOLUME KEYS/ EDIT/VOICE KEY	41
25.	QUICK TROUBLE SHOOTER - CAMERA	42
26.	GONOGO TEST	43
27.	BATTERY TEST	44

CHANGE HISTORY

Status	Version No.	Date	Comments
Draft	0.1	17.Jan.2007	Initial draft
Approved	1.0	19.Jan.2007	Approved

1. INTRODUCTION

The purpose of this document is to help NOKIA service levels 1 and 2 workshop technicians to carry out service to NOKIA products. This Service Manual is to be used only by authorized NOKIA service suppliers, and the content of it is confidential. Please note that NOKIA provides also other guidance documents (e.g. Service Bulletins) for service suppliers, follow these regularly and comply with the given instructions.

While every endeavor has been made to ensure the accuracy of this document, some errors may exist. If you find any errors or if you have further suggestions, please notify NOKIA using the address below:

<mailto:cc-ts-rc.documentation@nokia.com>

Please keep in mind also that this documentation is continuously being updated and modified, so watch always out for the newest version.

Warnings and Cautions

Please refer to the phone's user guide for instructions relating to operation, care and maintenance including important safety information. Note also the following:

Warnings:

1. CARE MUST BE TAKEN ON INSTALLATION IN VEHICLES FITTED WITH ELECTRONIC ENGINE MANAGEMENT SYSTEMS AND ANTI-SKID BRAKING SYSTEMS. UNDER CERTAIN FAULT CONDITIONS, EMITTED RF ENERGY CAN AFFECT THEIR OPERATION. IF NECESSARY, CONSULT THE VEHICLE DEALER/MANUFACTURER TO DETERMINE THE IMMUNITY OF VEHICLE ELECTRONIC SYSTEMS TO RF ENERGY.
2. THE HANDPORTABLE TELEPHONE MUST NOT BE OPERATED IN AREAS LIKELY TO CONTAIN POTENTIALLY EXPLOSIVE ATMOSPHERES, EG PETROL STATIONS (SERVICE STATIONS), BLASTING AREAS ETC.
3. OPERATION OF ANY RADIO TRANSMITTING EQUIPMENT, INCLUDING CELLULAR TELEPHONES, MAY INTERFERE WITH THE FUNCTIONALITY OF INADEQUATELY PROTECTED MEDICAL DEVICES. CONSULT A PHYSICIAN OR THE MANUFACTURER OF THE MEDICAL DEVICE IF YOU HAVE ANY QUESTIONS. OTHER ELECTRONIC EQUIPMENT MAY ALSO BE SUBJECT TO INTERFERENCE.

Cautions:

1. Servicing and alignment must be undertaken by qualified personnel only.
2. Ensure all work is carried out at an anti-static workstation and that an anti-static wrist strap is worn.
3. Use only approved components as specified in the parts list.
4. Ensure all components, modules screws and insulators are correctly re-fitted after servicing and alignment.
5. Ensure all cables and wires are repositioned correctly.



Electrostatic discharge can easily damage the sensitive components of electronic products. Therefore every Service Supplier has to take care of all precautions, which are mentioned in the service level related "Service Partner Requirements", available on NOKIA Online. Also see ESD Protection Requirements in this Service Manual.

2. GENERAL REPAIR INFORMATION

In this section the technician will get some general hints how to carry out repairs:

- To familiarize oneself with NOKIA product read the tutorials or user guide on www.nokia.com -->Support--> Phones, by selecting the Phone Model.
 - Before starting the repair you must take care of ESD precautions like being in your ESD Protected Area and connecting your wristband.
 - Use gloves to avoid corrosion and fingerprints.
 - Protect windows and displays with a film to avoid dust and scratches.
 - When cleaning the LCD Module any lint-free cloth can be used (e.g. Micro-Fibre cloth).
 - When cleaning the pads you have to use a soft cloth/ESD brush and Isopropanol. It is not allowed to use a glass fiber pencil because it scratches the surface and will lead later on to corrosion.
 - Mechanical parts (except shielding lids and bent parts), which didn't repair the failure, can be reused, if they are not soldered.
 - When removing the shielding lids make sure to replace them with new ones, otherwise the high-frequency leakage can have an influence on the device.
 - Always use original NOKIA spare parts.
 - Check the soldering joints of the parts, which are concerned regarding the indicated error (e.g. soldered connectors or switches) and resolder them if necessary (Level 2 only).
 - Remove redundant soldering flux after repair.
 - Meet the torque requirements when assembling the unit (see also the document "torques for transceiver assembly" on NOKIA Partner Web Site/NOKIA Online).
 - Always use your own equipment for testing where you are sure that it works. E.g. if the customer complains about charger function, please test the phone with your own charger to be sure if phone or charger causes the malfunction.
 - A SIM card is needed for all GoNoGo tests.
 - When doing the fault log entries, always note the Item code, which caused the malfunction. Also, fill in the appropriate part code from the assembly, if needed.
 - Please be aware that some malfunctions could be software related and solved by an update.
-
- There are several documents available on NOL, which have to be followed:
 -
 - First, take care for the latest content pages of Service Bulletins, which are always available for each folder on NOKIA Online. This is also important to recognize, if existing documents have become invalid.
 -
 - The service level indicator at the bottom of each document tells the appropriate destination.

Downloads > Support Library >

1. Instructions
 2. General Service Bulletins
 3. Product related documents
 4. Spare Part Service Bulletins
 5. Service Tools Service Bulletins
 6. Common Software Service Bulletins
- etc,...

Use General SB-217 as a reference or overview.

Please also check NOKIA Online (NOL) for latest news and files on a regular basis.

3. PATHFINDER FOR WORKSHOP STAFF

This is the NOL page (NOKIA Online) which is currently available in Europa, Middle East and Africa only!

In addition to the information in this Service Manual, there are several instructions and information, which have to be followed. Main documentation database is [NOKIA Online](#) with the purpose of serving different multimedia content, like video clips or interactive tutorials.

It is mandatory to watch for newest technical and organizational information on a daily basis to be updated as required (see **“Latest files in Support Library”**). Every new information has to be processed and implemented as soon as possible.

When logged into NOL you can also find needed information in different folder like:

Support Library



Phones



Service Manuals
Service Bulletins
Software
Repair Information

Level 1&2 e-learning (former NOKIA CarePoint) on NOKIA Online

Former NOKIA CarePoint content, such as	<ul style="list-style-type: none"> • Online Troubleshooting • Product information • Videos – Disassembly/Assembly 	can be found on NOKIA Online
		<p>NOKIA Online</p> <p>↓</p> <p>Care Services</p> <p>↓</p> <p>Training</p> <p>↓</p> <p>Phone Models</p>

Level 1&2 e-learning courses offer a quick overview of the NOKIA phone and support for how to repair and use the phone:

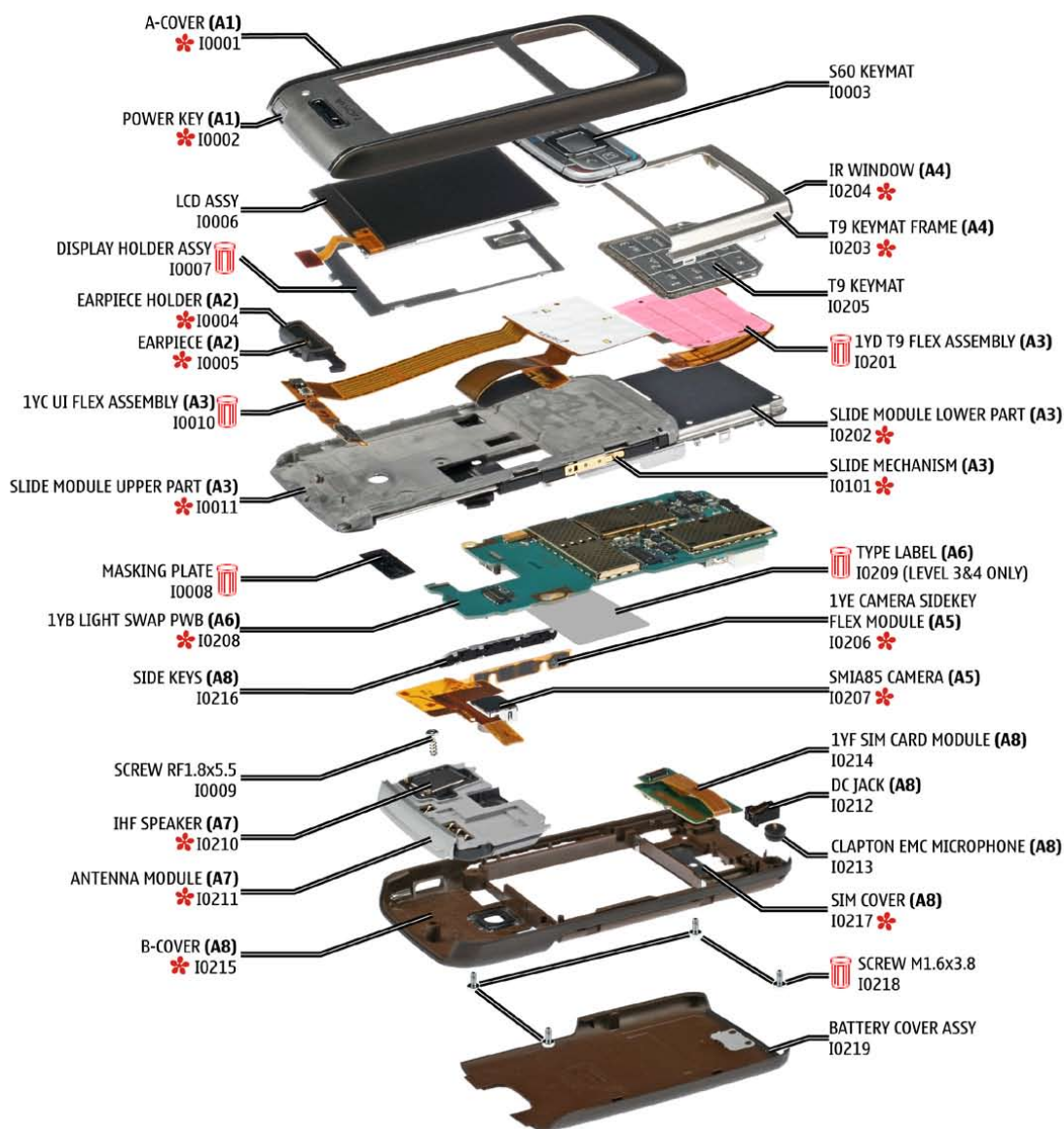
Overview & Guides	Disassembly & Assembly	Troubleshooting
Basic information about the phone, features and technologies	Instructions how to disassemble and assemble the phone	Step-by-step instructions on how to locate and repair the most common problems with the phone

To reduce the server traffic it is recommended to download newest version of huge files like videos, Phoenix packages or Service Manuals only once and distribute it internally for further use.

4. EXPLODED VIEW

See corresponding ITEM/CIRCUIT REF in the Spare Parts Service Bulletins on NOL.

E65 RM-208 Exploded view



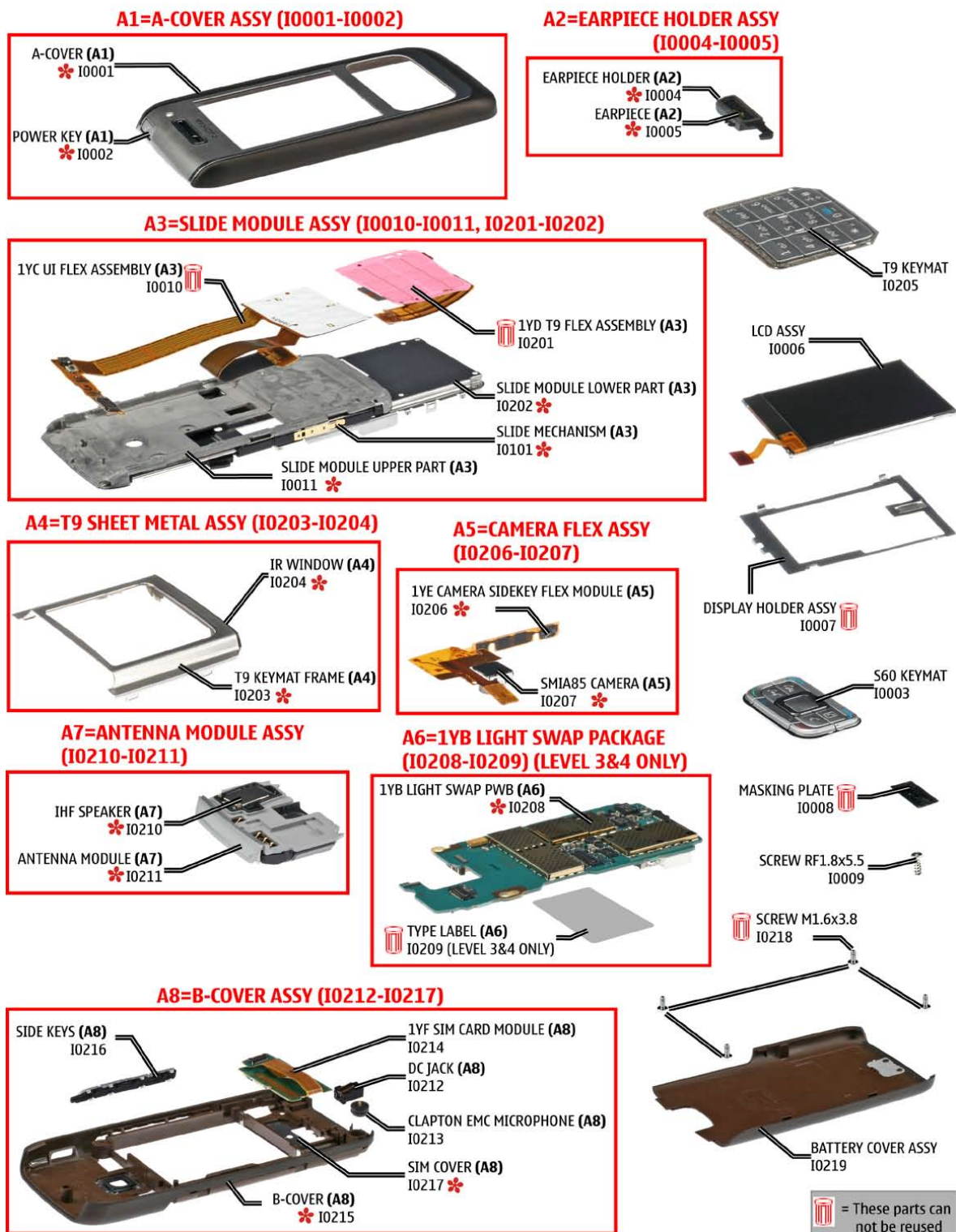
= These parts can not be reused after removal.

= only available as assembly

Ver. 2.0

5. SPARE PARTS OVERVIEW

E65 RM-208 Spare Parts overview



6. GENERAL RECYCLING RECOMMENDATION

NOKIA

CMO Operations & Logistics
Training and Vendor Development
Multimedia Creation & Support

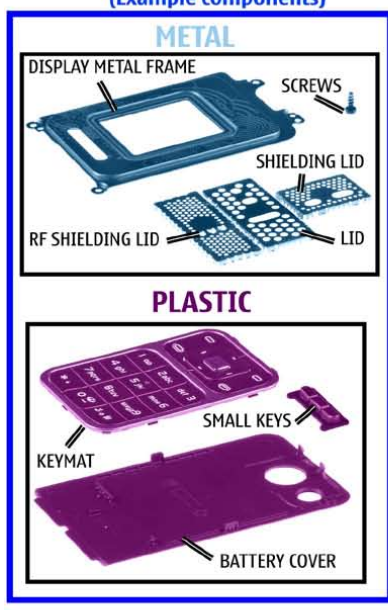
Confidential

13.11.2006

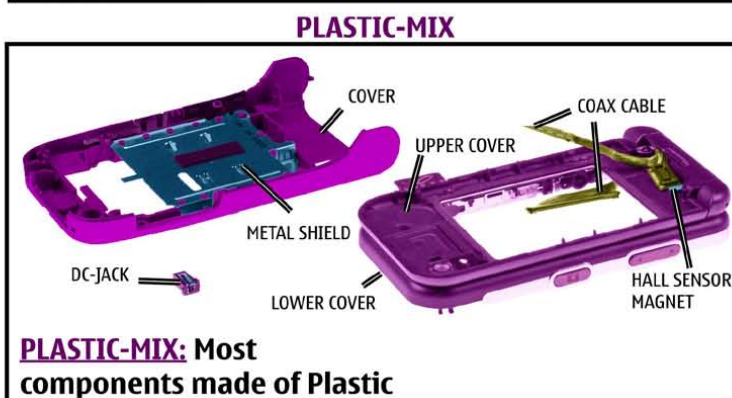
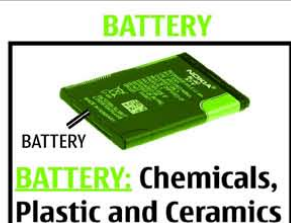
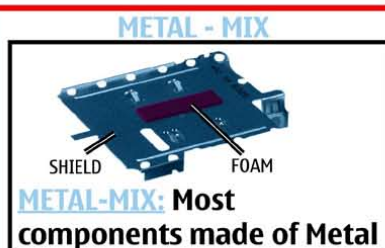
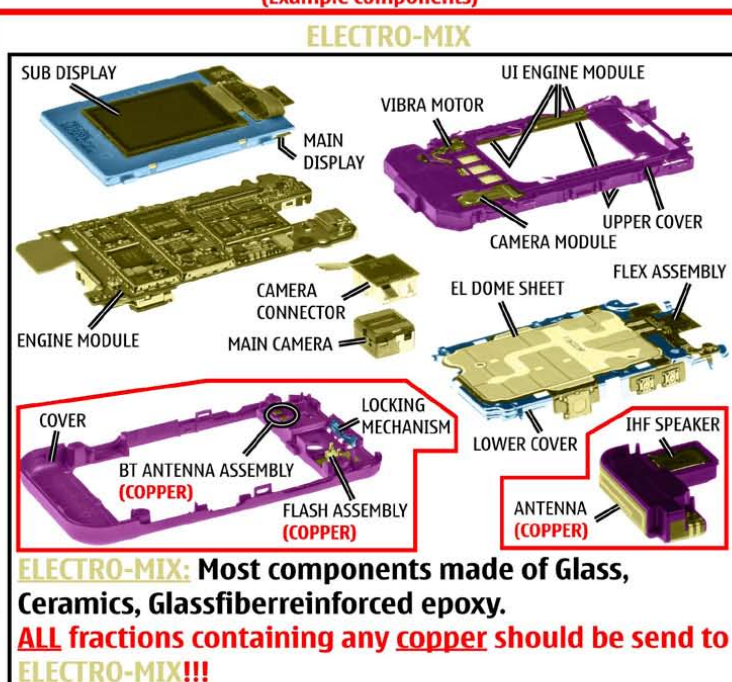
MGR

General Recycling recommendation

100% - only one Material
(Example components)



Mixed components
(Example components)



Some of these options can be utilized directly and some need pretreatment as for instance dismantling, grinding, milling, etc.
For sorting the waste into fractions for recycling, your recycler will offer you more specific information, but a **GENERAL RULE** is:

Electronic Equipment: There are recyclers that can process this "multimaterial" for high recycling yields.

Metals: Fractions containing metals must always be collected and sent for (metal) material recycling.

Plastics: Pure plastics fractions (i.e. covers) can be sent for (plastics) materials recycling.

Mixed Plastic/Metals: A metal fraction contaminated with plastics does not represent a problem for metal recycling/recovery whereas recycling/recovery of plastics is generally sensitive for contamination by other materials.

● ELECTRO ● METAL ● PLASTIC ● BATTERY

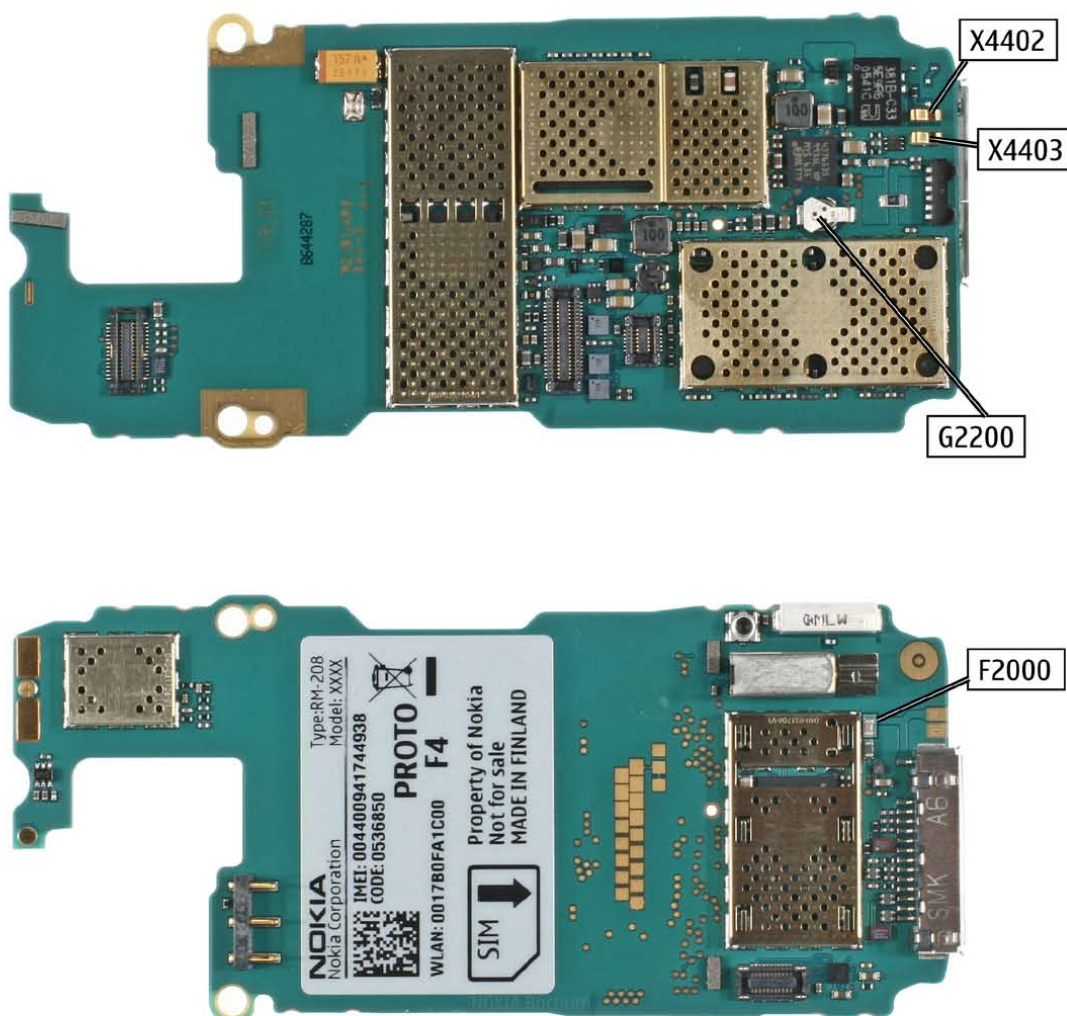
Ver. 3.0

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7. LEVEL 2 SOLDER COMPONENTS

E65 RM-208 Level 2 solder components

Solder components only for LEVEL 2




Ver. 1.0

8. NOKIA ONLINE (NOL)

NOL is the database where you can find the latest corresponding Service Bulletins (spare parts, SWAP units and service tools).

This will ensure, that you are using up-to-date order codes only.

Therefore Service Bulletins have to be checked from NOL on daily basis.

**NOKIA**
CONNECTING PEOPLE

Nokia Online

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Search

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Support Library

Browse files

Latest files
⇒ Browse files

Select category:

Select subcategory:

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Date range from / /

until: / /

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Files for Service level 2

Date:03.02.2005

■ XXXXXXXXXXXXXXXXXXXX

Files for Service level 1

Date:16.02.2005

■ XXXXXXXXXXXXXXXXXXXX

■ XXXXXXXXXXXXXXXXXXXX

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9. SERVICE TOOLS

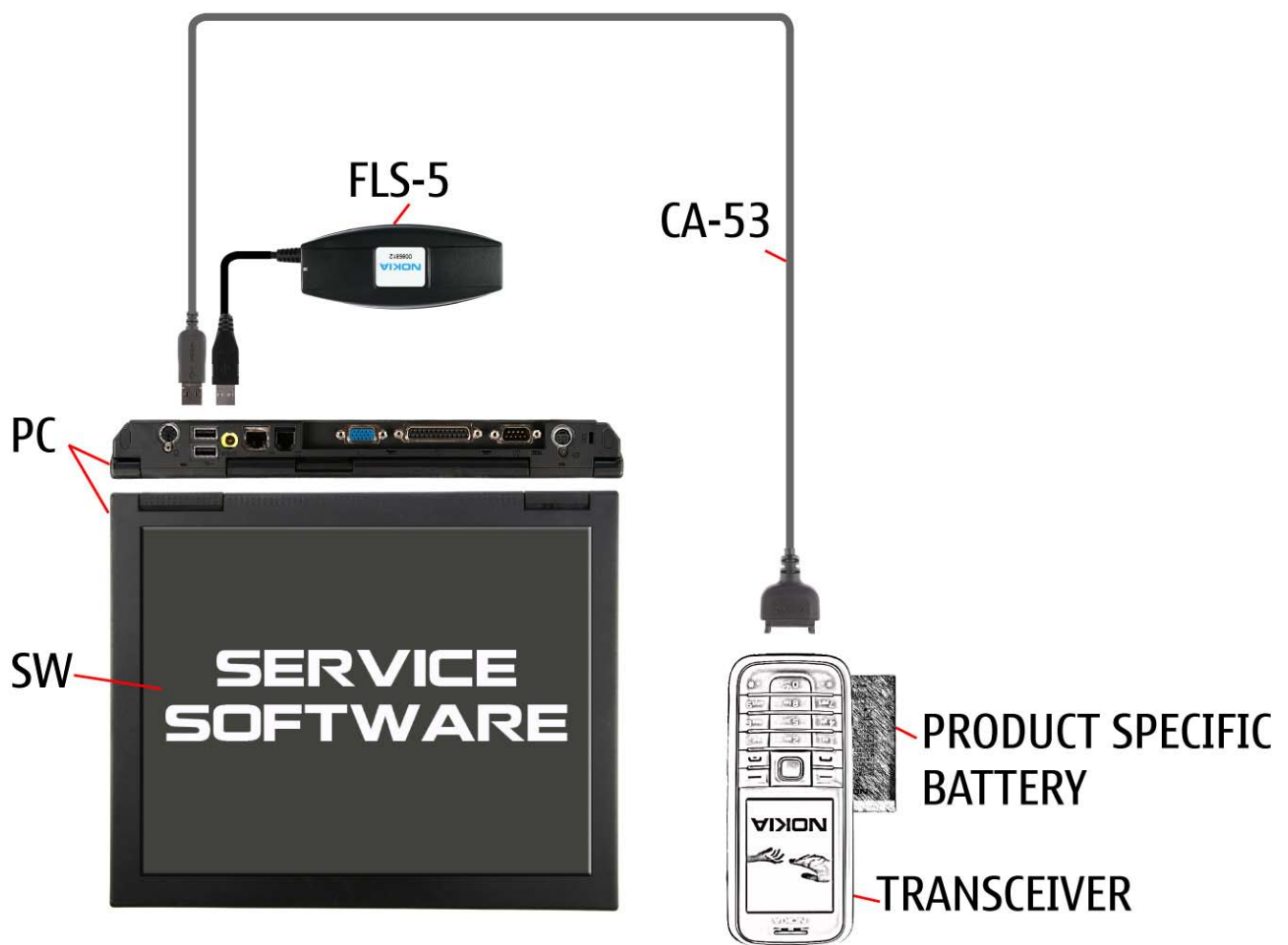
<p>FLS-5</p> 	<p>FLS-5 incl. ACF-8, Driver and User Guide Dongle and flash device incorporated into one package, developed specifically for POS use.</p>
	<p>ACF-8 Universal Power Supply is used to power FLS-4S.</p>
	<p>Travel Charger AC-4 Small and lightweight charger for fast charging of your phone battery.</p>
<p>BL-5F</p> 	<p>Internal Battery BL-5F Inserted under the back cover, this Li-Ion battery provides power in a lightweight package.</p>
<p>SS-110</p> 	<p>SS-110 Domesheet alignment jig.</p>
	<p>CA-53 Service Cable to connect the PC with the Pop-Port™ connector.</p>

<p>RJ-142</p> 	<p>RJ-142 Soldering Jig</p>
	<p>Lead-free Solder Wire Mandatory for lead-free products (Level 2 only).</p>
	<p>0772040 NMP Standard Toolkit (V2)</p> <p>For more informations refer to the Service Bulletin (SB-011) on NOKIA Online.</p> <p>Supplier or manufacturer contacts for tool re-order can be found in “Recommended service equipment” document on NOKIA Online.</p>

10.SW-UPDATE

Flash Concept – (Point of Sales)

To use FLS-5 Flash Dongle you have to follow the user guide inside the sales package. Please check always for the latest version of flash software, which is available on [NOKIA Online](#).



11. DISASSEMBLY INSTRUCTION



1. Needed tools: The SS-93, the SRT-6, metal tweezers, the dental pick, a bit holder with a Torx Plus size 6 bit and a dc plug.



2. Always cover the windows with a protective film.



3. Unlock and remove the BATTERY COVER.



4. Shift open the assembly. Carefully pry open the clips of the A-COVER with the SS-93...



5. ...on both sides.



6. Lift up the whole assembly.



7. Remove the S60 KEYMAT.



8. Protect the window from inner side.



9. Shift together the assembly.



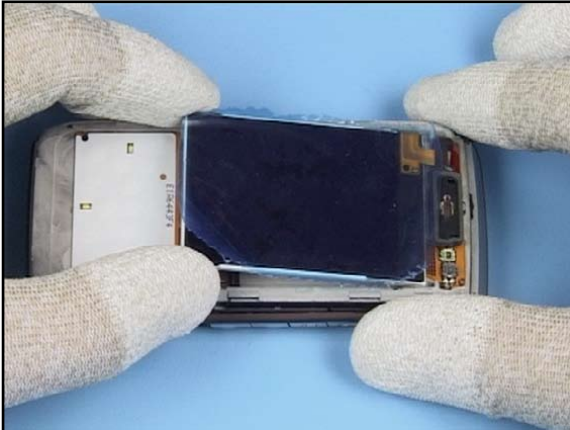
10. Carefully bend open the metal snaps of the DISPLAY HOLDER ASSEMBLY.



11. ...on both sides.



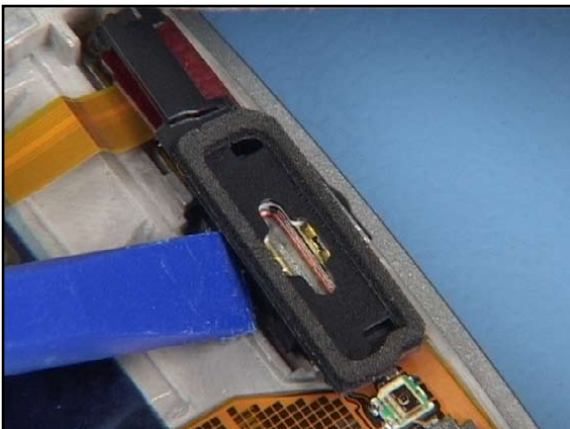
12. Cover the LCD with a protective film.



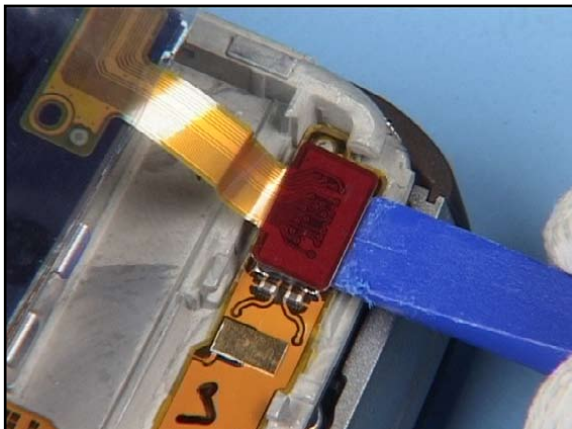
13. Lift up the whole display assembly.



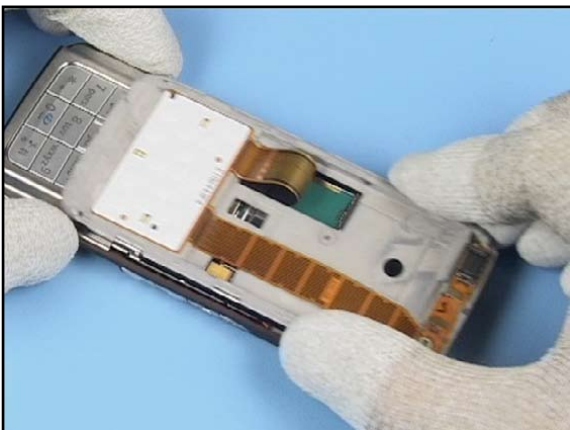
14. Carefully bring it into position shown to gain the maximum flex foil lengths.



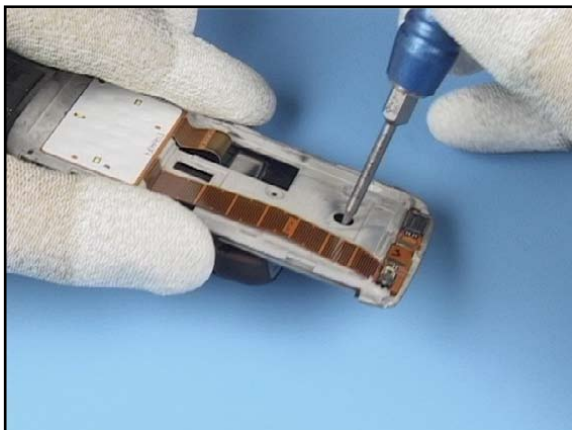
15. Lever out the EARPIECE HOLDER ASSEMBLY.



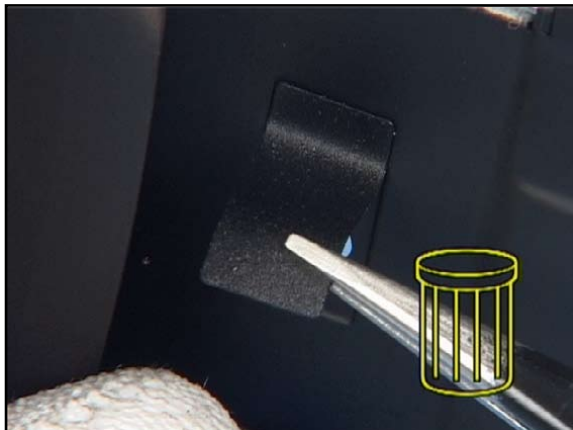
16. Open the flex connector of the display.



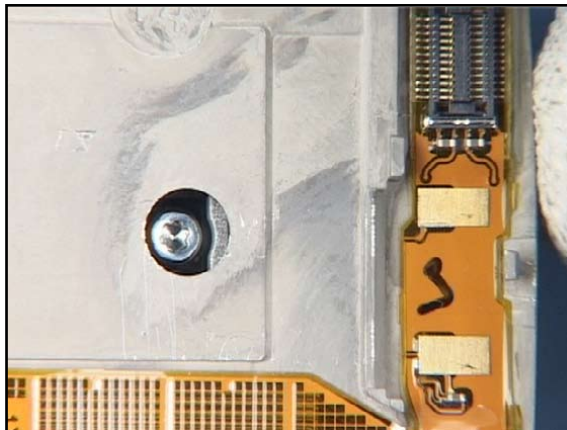
17. Shift open the assembly.



18. Push out the glued in MASKING PLATE and discard it.



19. It can't be used again.



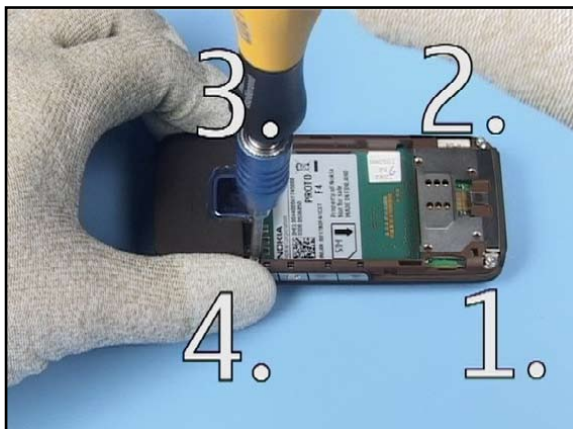
20. Align the recess of the slider to reach the screw and keep it into position.



21. Unscrew this screw and remove it before continue.



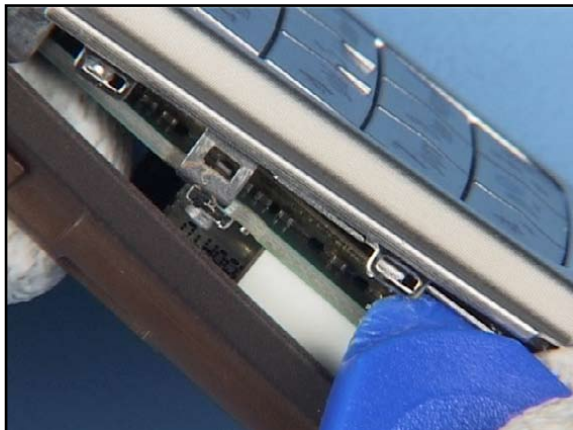
22. Close the assembly.



23. Unscrew these 4 screws in the order shown.



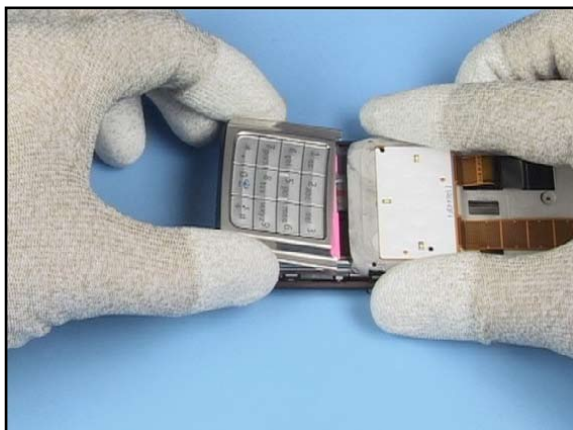
24. Shift open the assembly. Gently pry open these clips of the B-COVER with the SRT-6 in order to reach the clips of the T9 KEYMAT.



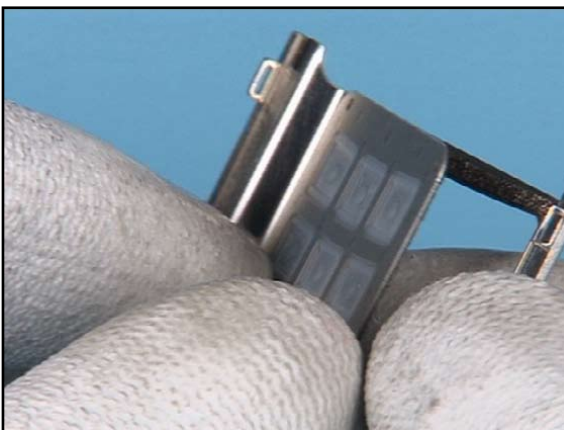
25. Now unlock the metal latches of the KEYMAT...



26. ... on both sides.



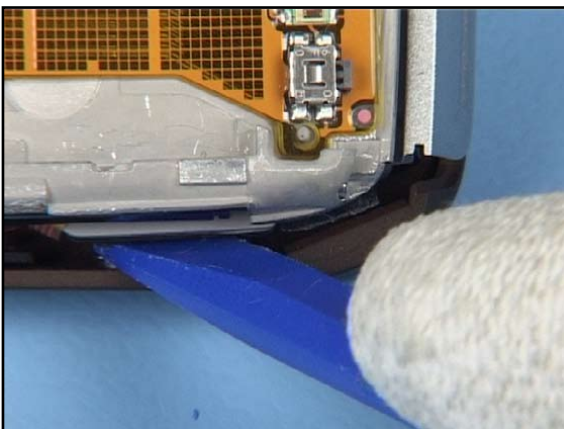
27. Carefully remove the SHEET METAL ASSEMBLY.



28. Remove the glued in T9 KEYMAT.



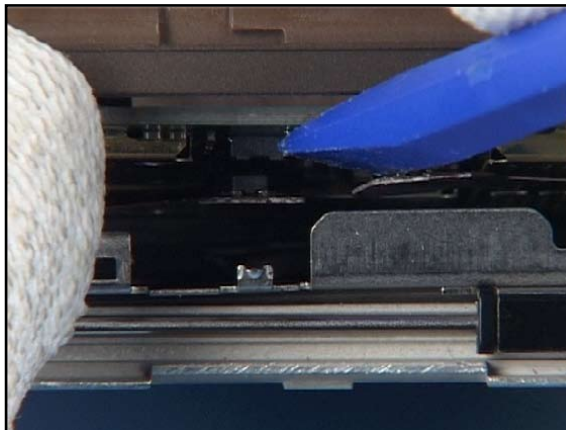
29. Unlock the snaps...



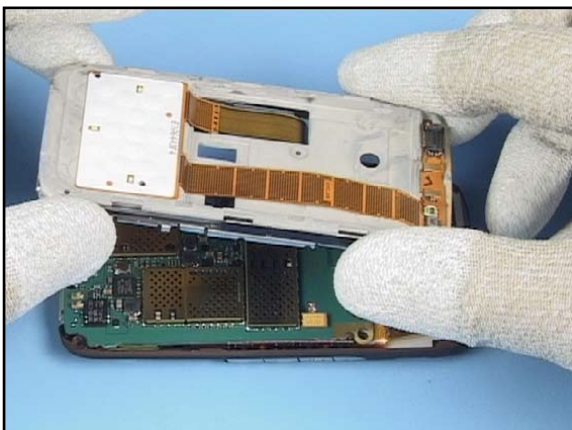
30. ... on both sides.



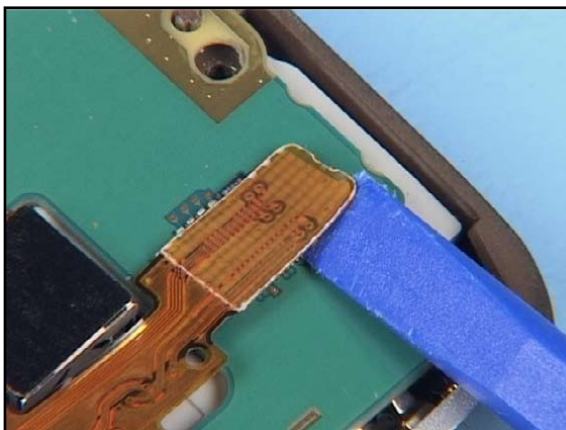
31. Separate the cover slightly. Keep in mind that flex foils are still connected.



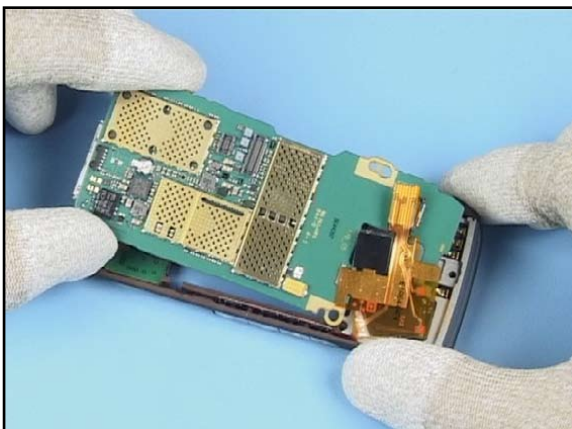
32. Open these 2 connectors with the SS-93 carefully.



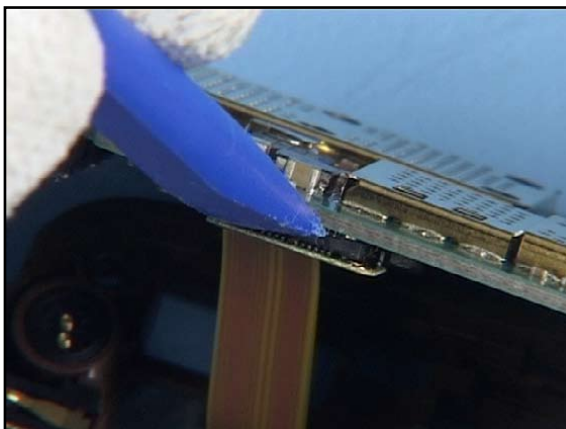
33. Now the SLIDE MODULE ASSEMBLY can be removed.



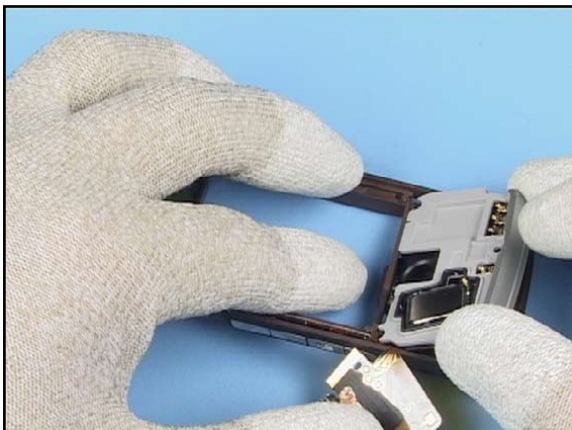
34. Disconnect the camera connector.



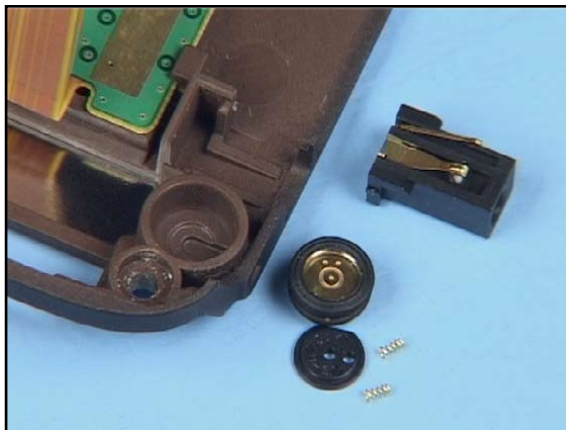
35. Lift up the ENGINE MODULE. Keep in mind that the flex foil is still connected.



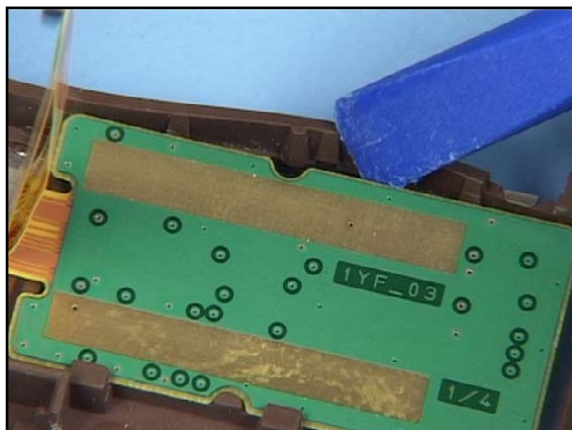
36. Disconnect the flex foil.



37. Lift out the ANTENNA MODULE ASSEMBLY.



38. Remove the MICROPHONE and the DC JACK. The MICROPHONE will be destroyed surely and must be renewed when reassemble.



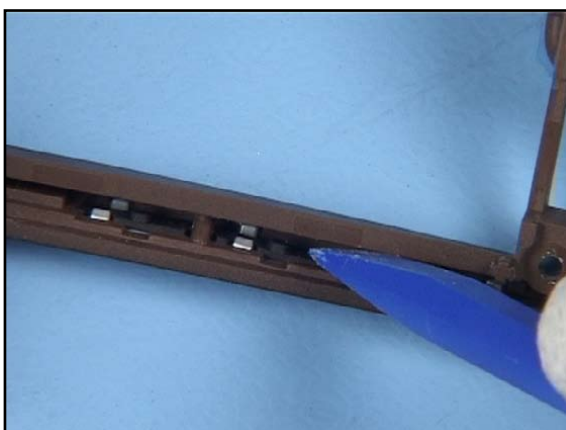
39. Gently pry out the 1YF SIM CARD MODULE and remove it.



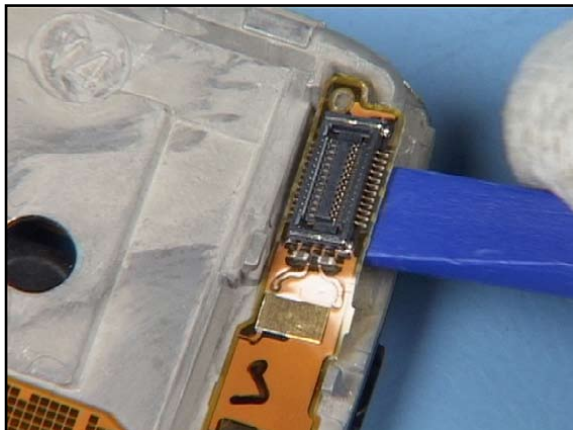
40. Carefully release the glued in CAMERA FLEX ASSEMBLY.



41. Now it can be removed easily.



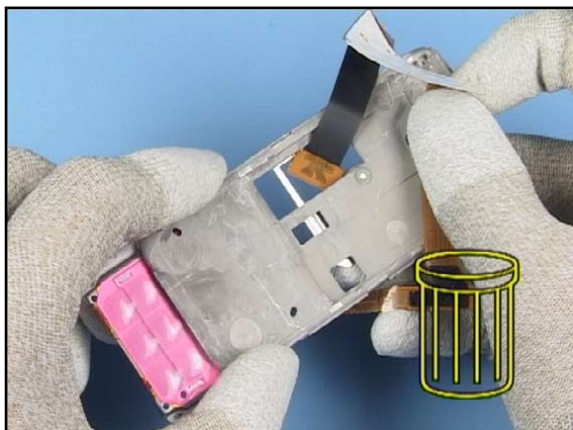
42. Unlock all clips of the SIDE KEYS. Note that these clips are very delicate and can break easily.



43. Lift up the 1YC UI FLEX ASSEMBLY.



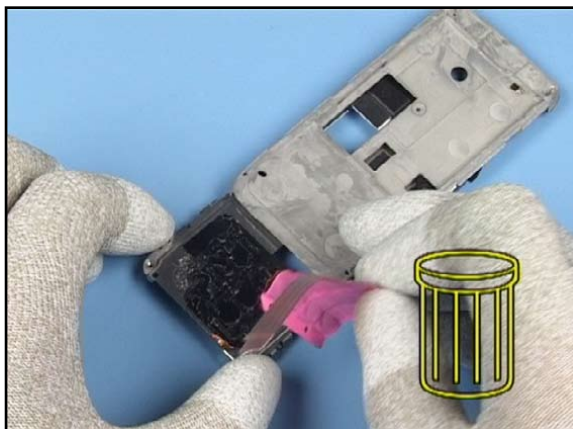
44. Peel it up completely.



45. It can't be used again. Remove all adhesive residues before reassemble.



46. Peel up the T9 FLEX ASSEMBLY, beginning from the connector side.



47. It can't be used again.



48. Remove any adhesive residues before reassemble.



49. The disassembly procedure is now complete.

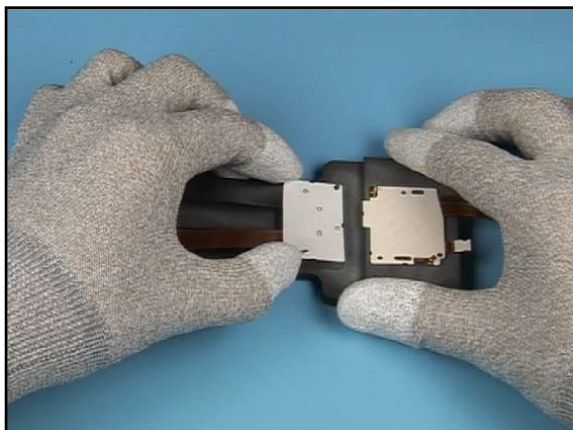
12.ASSEMBLY INSTRUCTION



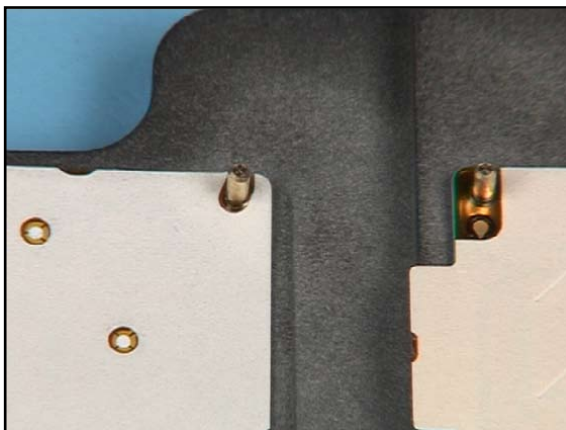
1. Needed tools: The SS-93, metal tweezers, a torque driver with a Torx Plus size 6 bit and a DC plug.



2. The SS-110 Alignment tool is also needed for correct placement of the flex foils.



3. Place the flex foil assemblies.



4. Mind the guide.



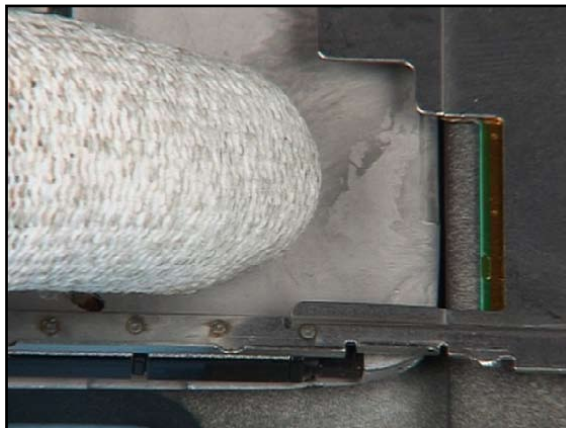
5. Remove all protective films.



6. Bring the slider into position shown.



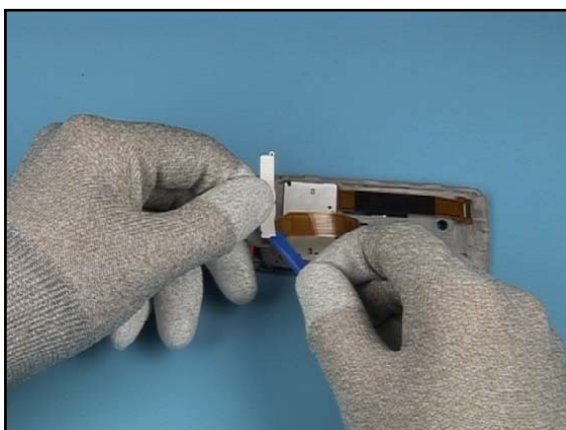
7. Position it over the flex foil assemblies, mind the guides.



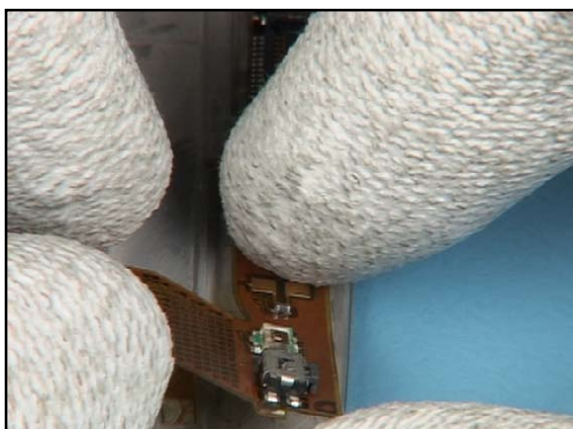
8. Push it down slightly.



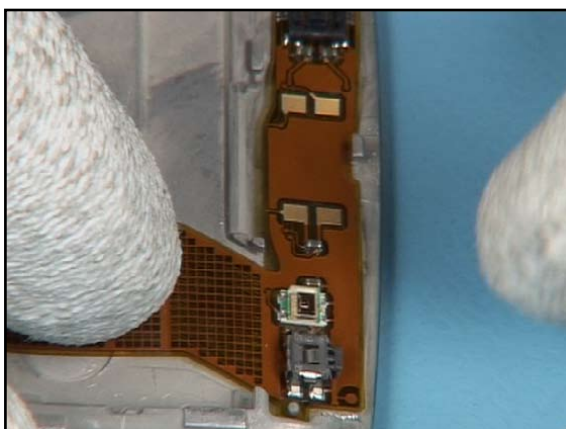
9. Bend over this contact foil and fix it.



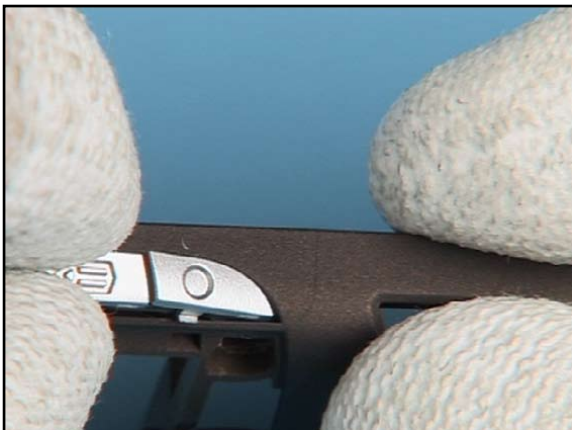
10. Lift up the SLIDE MODULE ASSEMBLY and turn it. Remove this protecting film.



11. Position it as shown, smooth it down evenly.



12. Mind the alignment tabs.



13. Insert the SIDE KEYS.



14. Push it down slightly, click all snaps into their places.



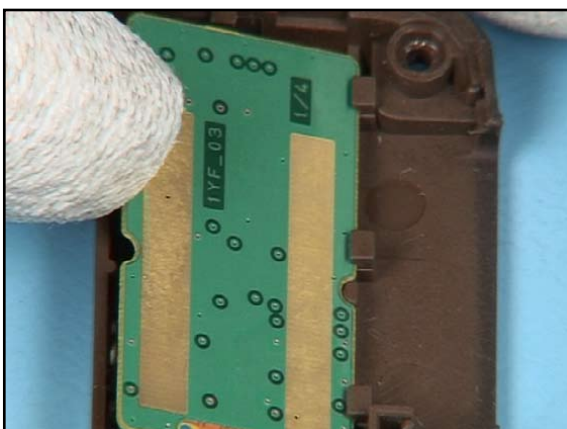
15. Position them with the SS-93.



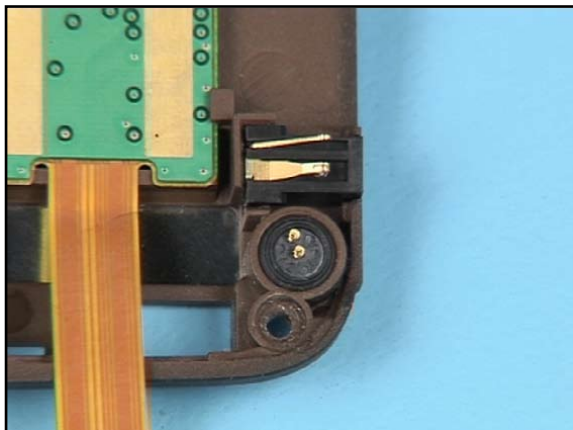
16. Insert the CAMERA FLEX ASSEMBLY.



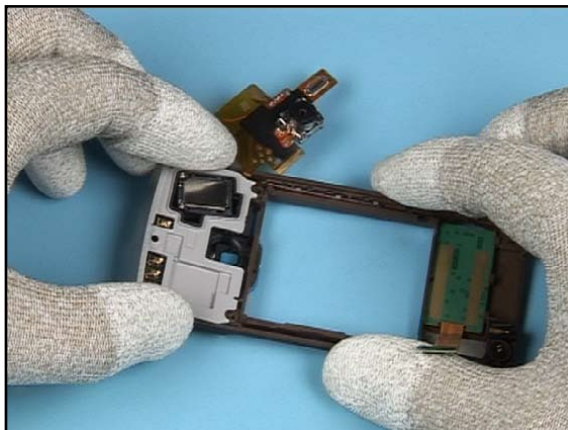
17. Check the correct positioning before continue.



18. Insert the SIM CARD MODULE and click it into its place.



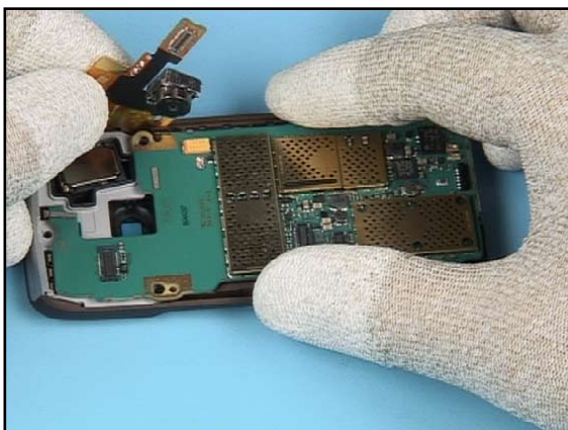
19. Insert the MICROPHONE and CD JACK.



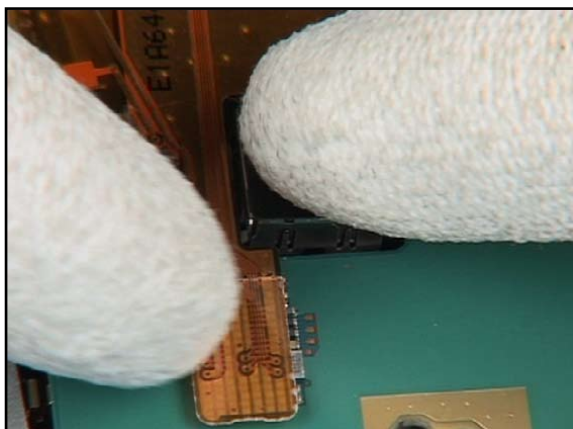
20. Insert the ANTENNA MODULE ASSEMBLY.



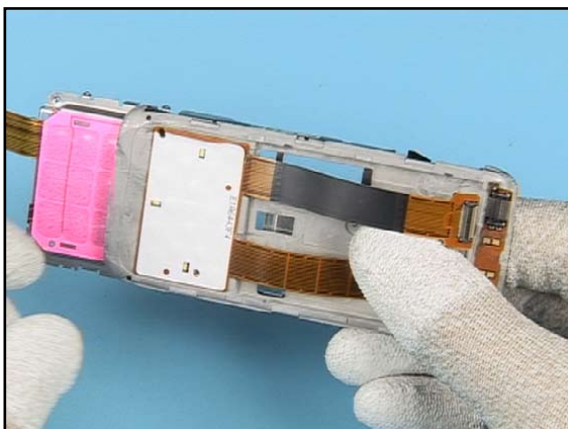
21. Close the connector of the SIM CARD MODULE.



22. Position the ENGINE MODULE into the B-COVER ASSEMBLY.



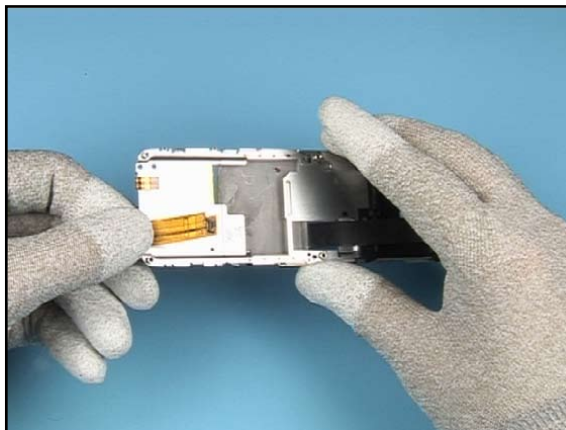
23. Close the connector of the CAMERA FLEX ASSEMBLY.



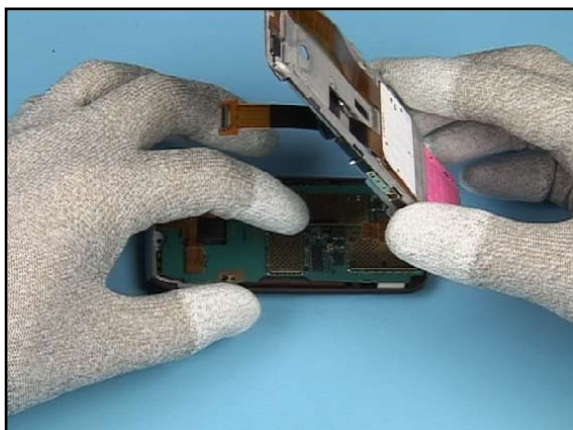
24. Bring the SLIDE MODULE ASSEMBLY into position shown.



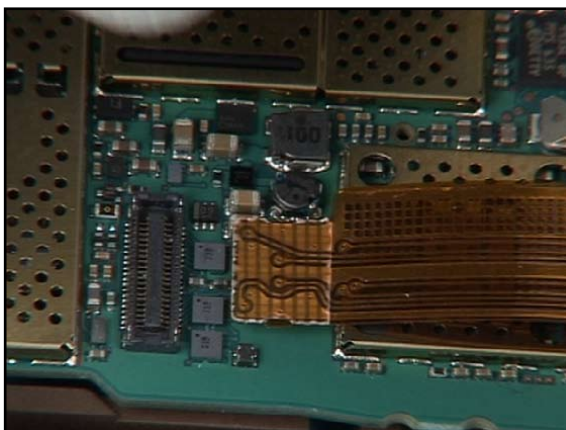
25. Slot the connector through the recess as shown.



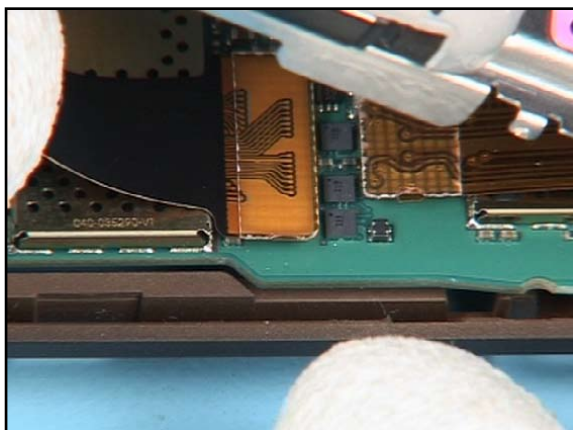
26. Bend over the 2nd flex foil as shown.



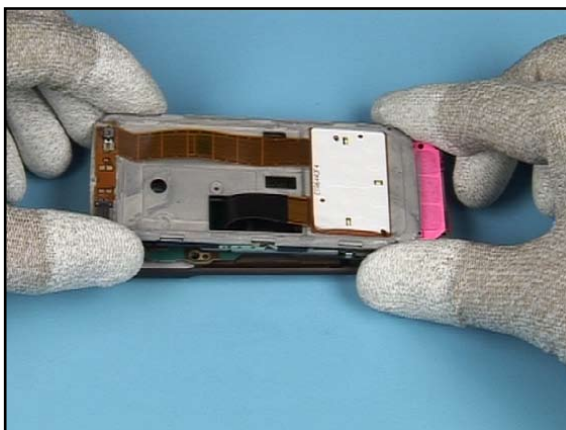
27. Now position the SLIDE MODULE ASSEMBLY over the B-COVER ASSEMBLY.



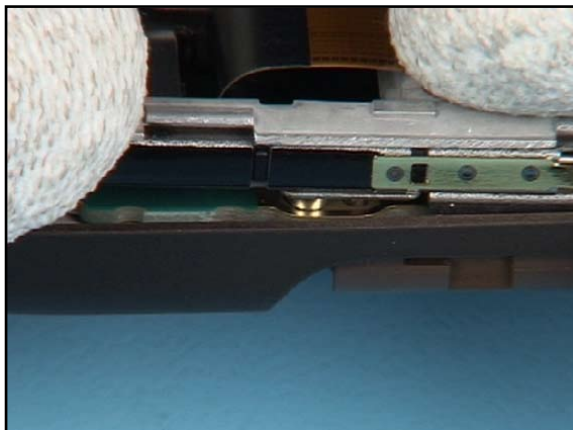
28. Close this connector first.



29. Move the SLIDE MODULE ASSEMBLY down and close the 2nd connector.



30. Now close the slider slowly and align it to the B-COVER ASSEMBLY.



31. Mind this guide.



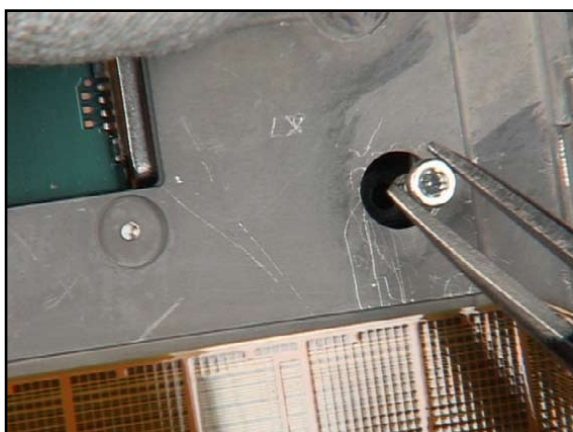
32. Click these 2 top snaps into their places.



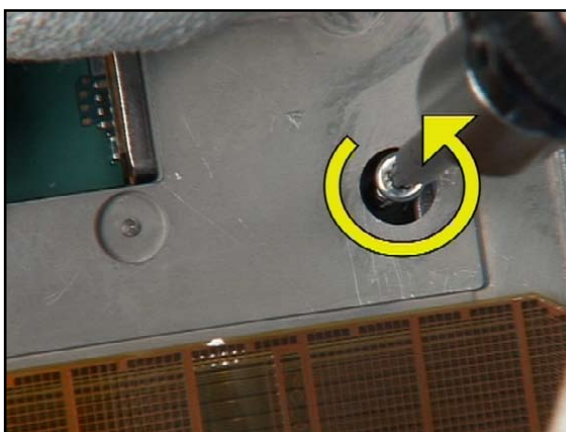
33. Set the correct torque for the single screw.



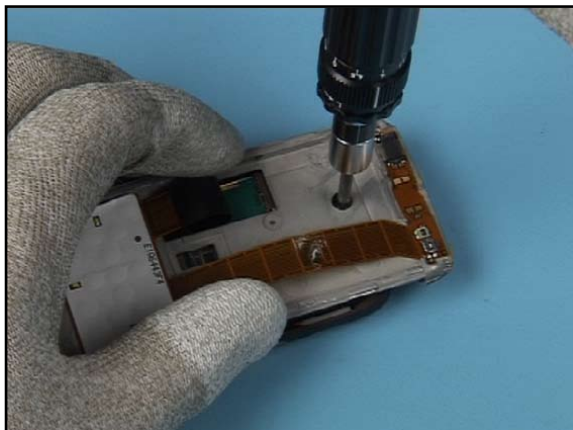
34. Bring the SLIDE MODULE ASSEMBLY into position shown to reach the hidden thread.



35. Hold the slider into position. Insert the screw.



36. To prevent destroying the plastic thread, turn the screw to the left first.



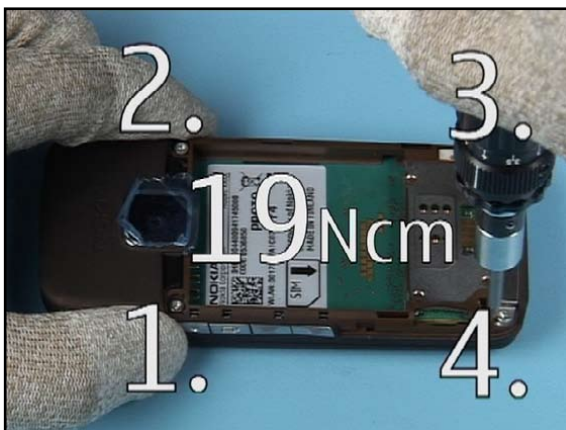
37. Then tighten it to the correct torque.



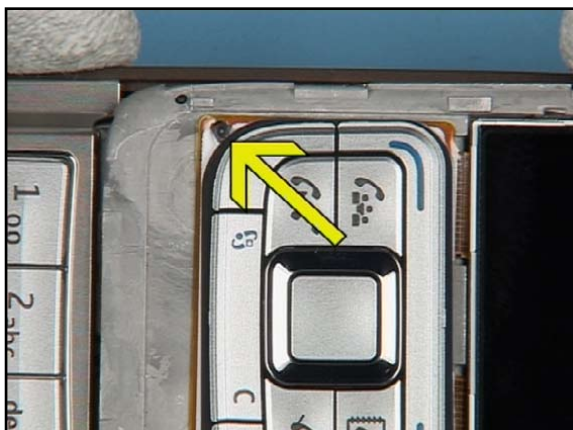
38. Mind the correct placement of the EARPIECE HOLDER ASSEMBLY.



39. Check that the SHEET METAL ASSEMBLY was positioned correctly to ensure the correct functionality of the slider.






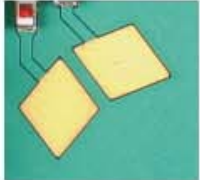














40. Tighten the 4 screws in the order shown.




41. Insert the S60 KEYMAT first before placing the A-COVER ASSEMBLY. Mind the guide.

13.LEGEND FOR QUICK TROUBLE SHOOTER

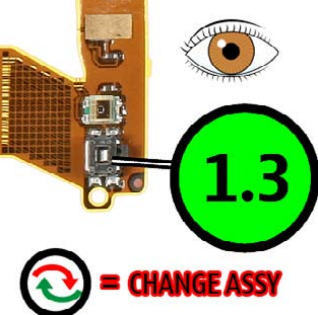
Legend for Quick Trouble Shooter	
This legend is valid for all parts of the Quick Trouble Shooter	
Follow the steps until the problem is solved. If this doesn't help, you are not authorized to go forward.	
	Check the mechanical condition of the component (bent, broken or missing).
	Only marked components can be replaced. If additionally " =CHANGE ASSY " appears, then change the whole assembly (e.g. A4=D-COVER ASSEMBLY).
	Cloth usage: Check pads or contacts for optical and mechanical condition particularly regarding to corrosion. Clean it if necessary.    
	Measure component for electrical functionality and change, if needed. (Level 2 only)  
	ESD Brush usage: Check contacts for optical and mechanical condition particularly regarding to corrosion. Clean it if necessary.    
	<p>Explanation</p> <div style="border: 1px solid red; padding: 5px;">  Symtom (3) <div style="display: flex; justify-content: space-around;"> <div>Zoom position (Note! First zoom starts with 1.2)</div> <div>Fault name</div> <div>Count of fault positions</div> </div>  </div>

14. QUICK TROUBLE SHOOTER - POWER ON



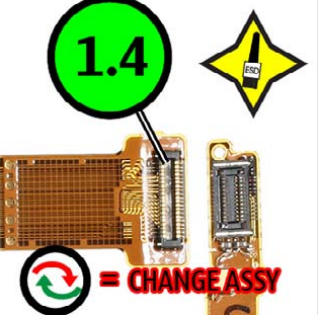
1.2

= CHANGE ASSY



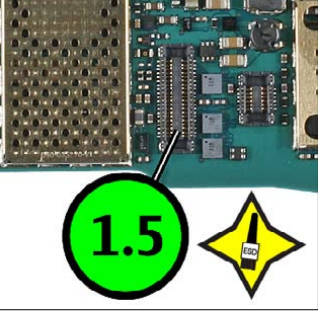
1.3

= CHANGE ASSY

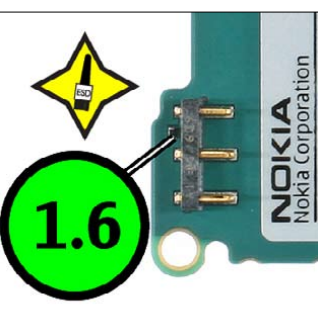


1.4

= CHANGE ASSY



1.5



1.6

Explanation

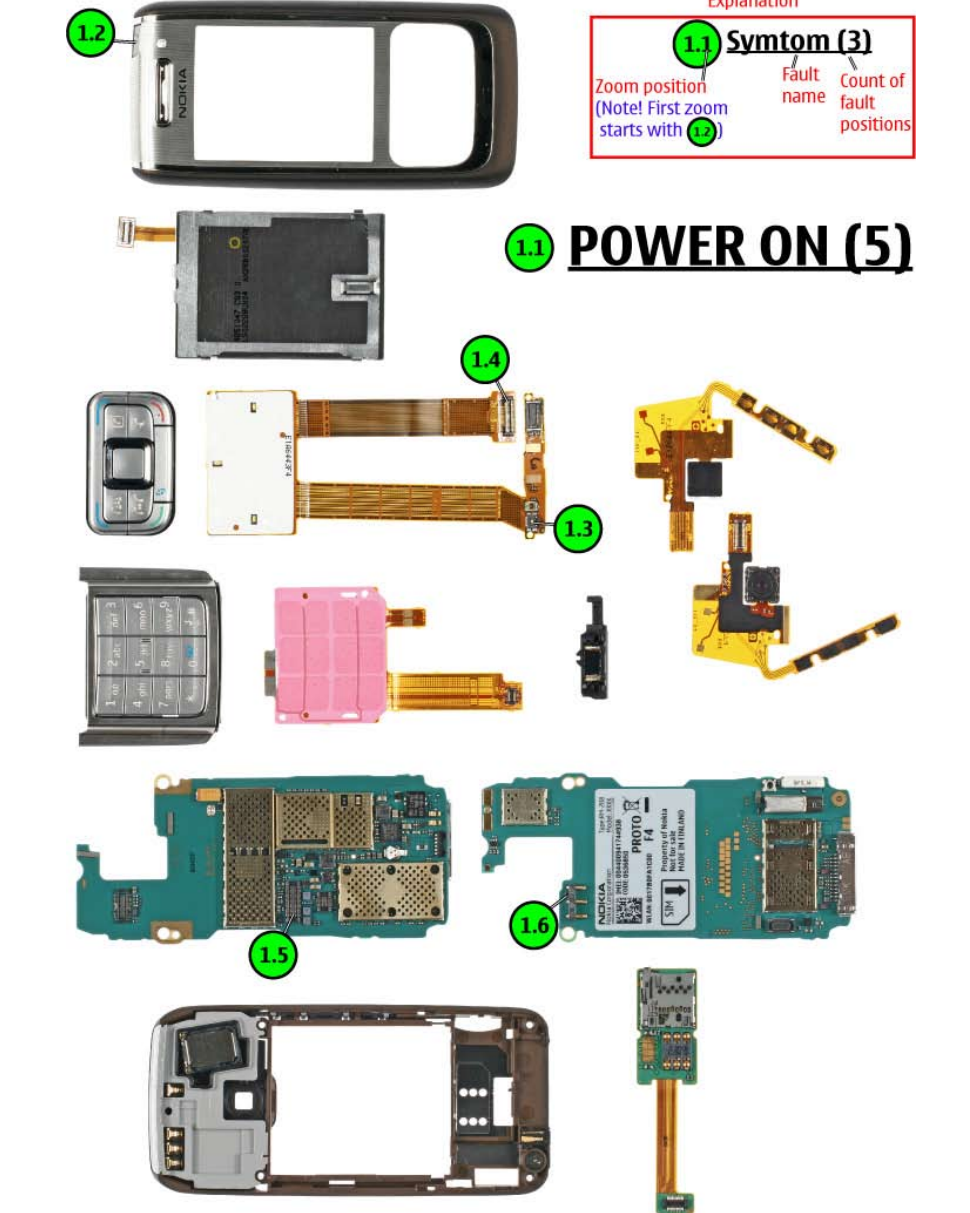
1.1 Symtom (3)

Zoom position (Note! First zoom starts with 1.2)

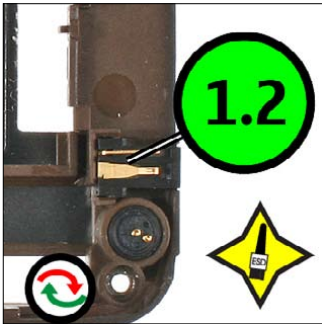
Fault name

Count of fault positions

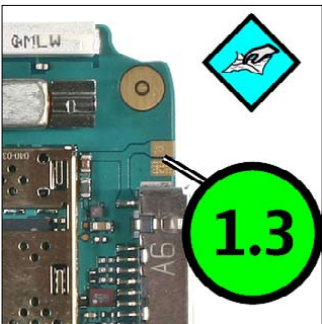
1.1 POWER ON (5)




15. QUICK TROUBLE SHOOTER - CHARGING



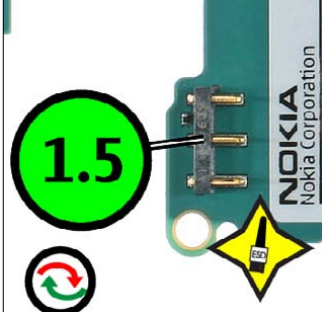
1.2



1.3



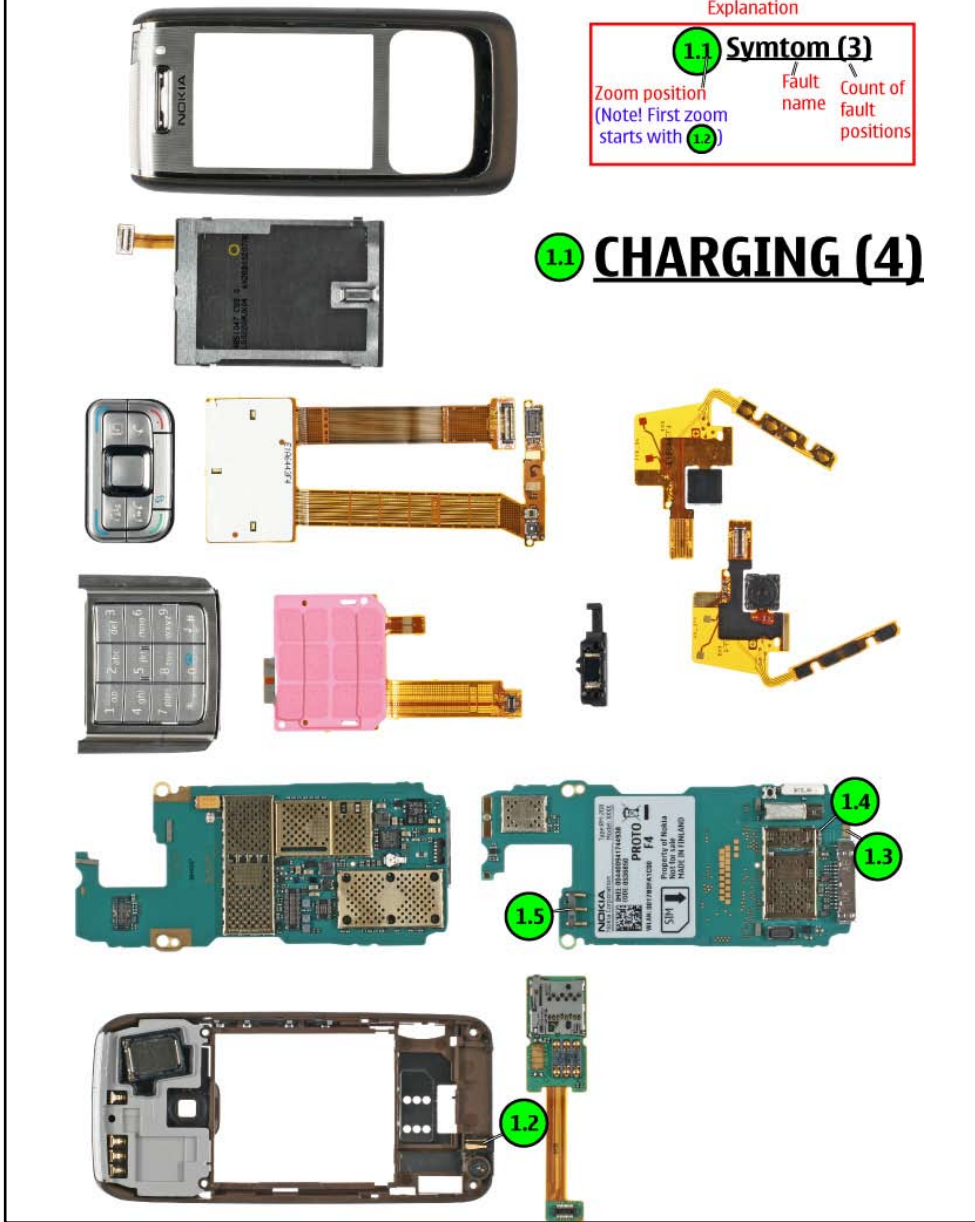
1.4

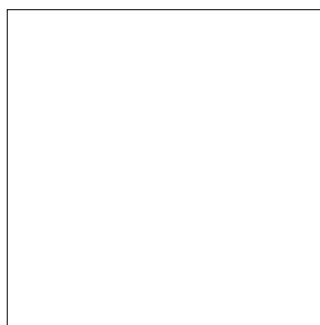
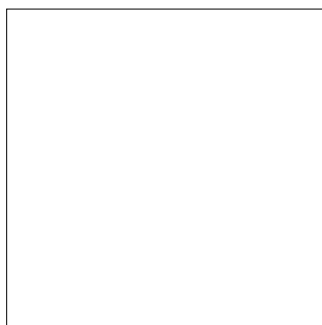
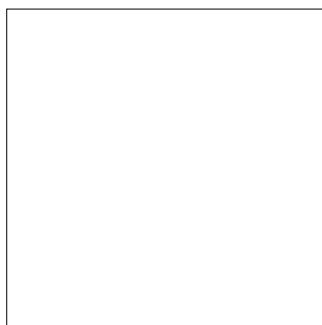
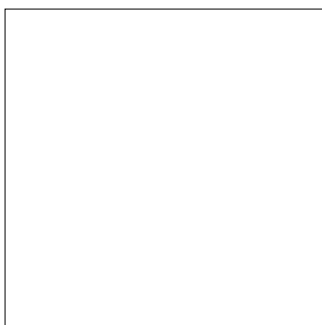


1.5


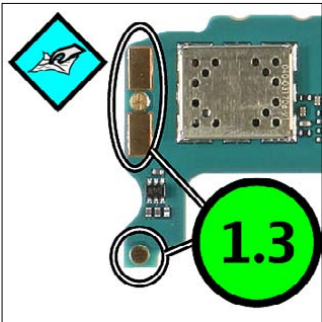
Explanation


Zoom position (Note! First zoom starts with 1.2)	Symtom (3)	Fault name	Count of fault positions
1.1 CHARGING (4)			





16. QUICK TROUBLE SHOOTER - NO SERVICE



1.1

1.2

1.3

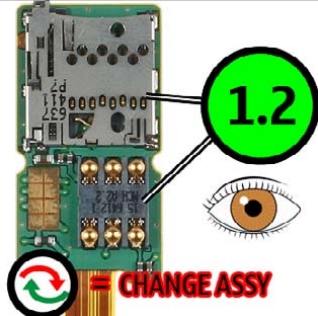
Explanation

Symtom (3)	Fault name	Count of fault positions
Zoom position (Note! First zoom starts with 1.2)		

NO SERVICE


GSM/WCDMA (2)

17. QUICK TROUBLE SHOOTER - SIM



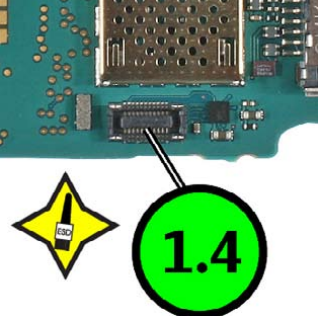
1.2

= CHANGE ASSY



1.3

= CHANGE ASSY

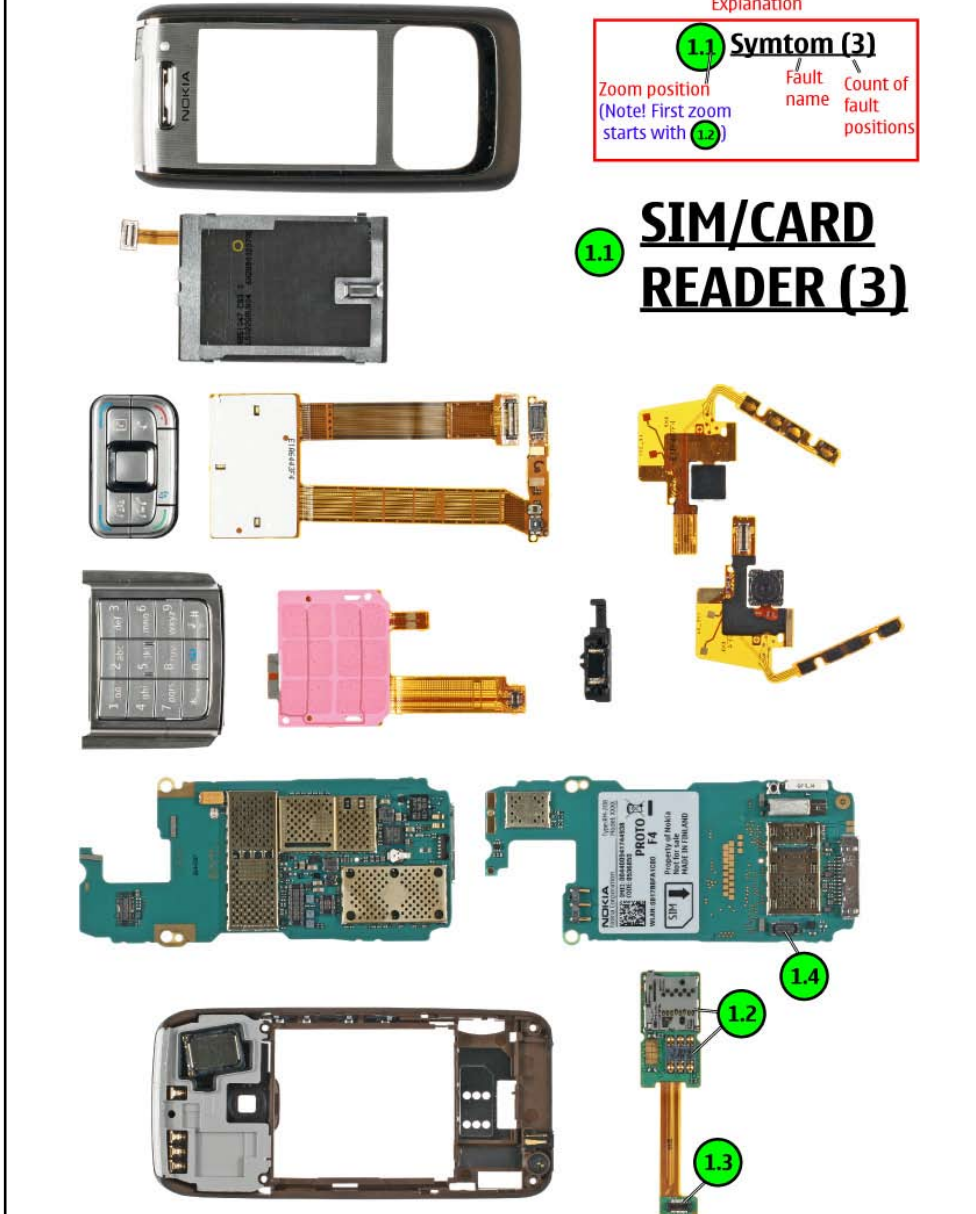


1.4


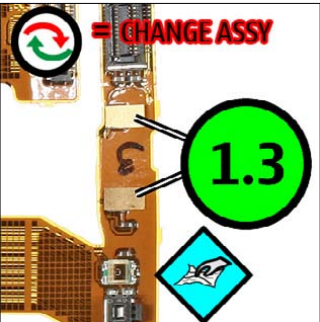
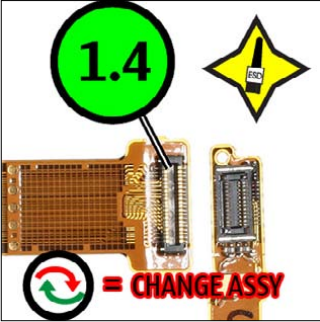
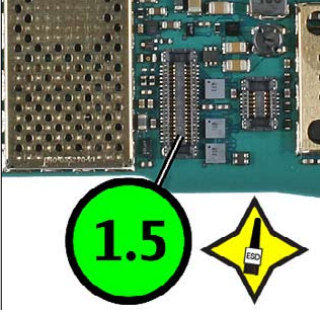
Explanation

Symtom (3)	Fault name	Count of fault positions
Zoom position (Note! First zoom starts with 1.2)		

SIM/CARD READER (3)



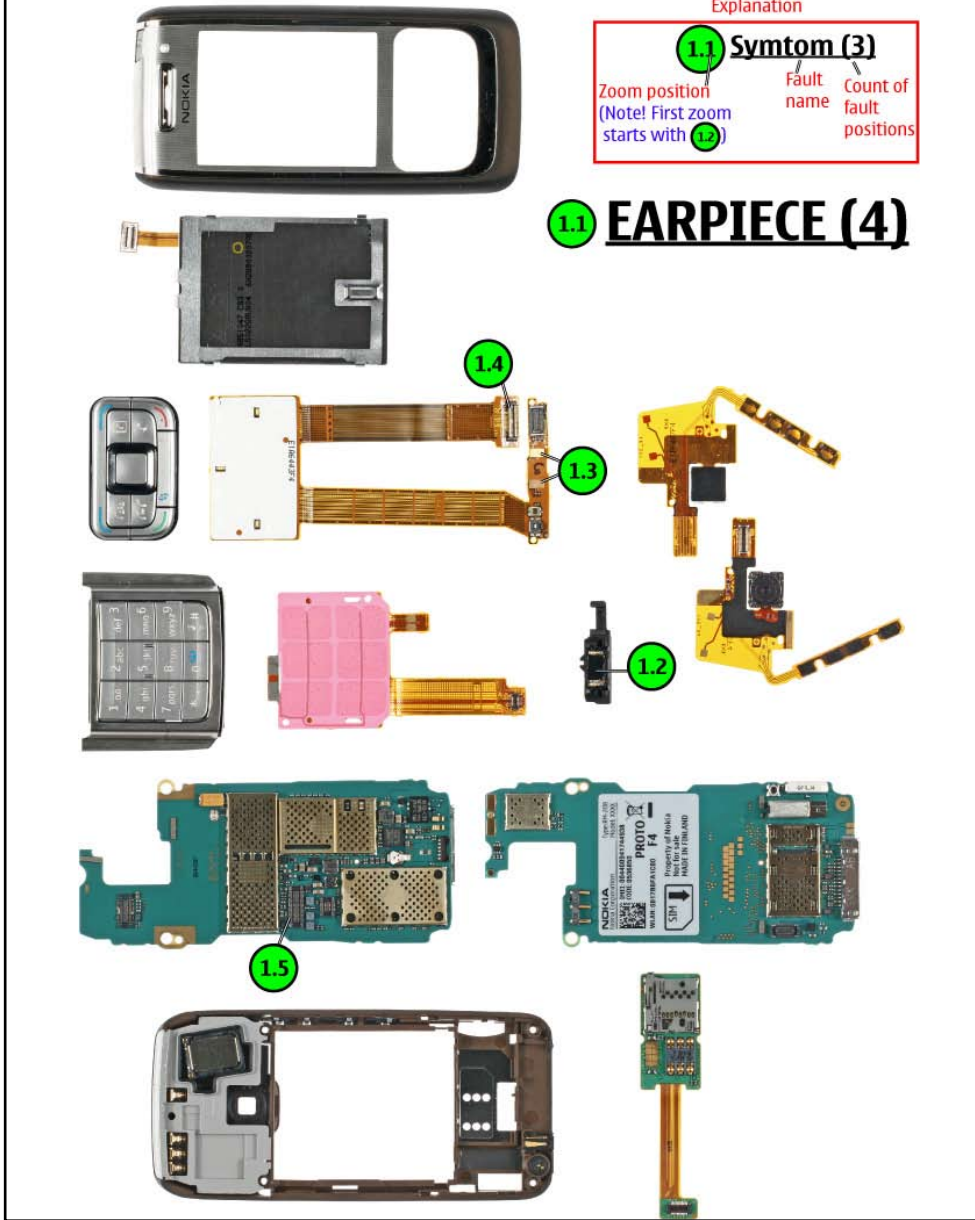
18. QUICK TROUBLE SHOOTER - EARPIECE

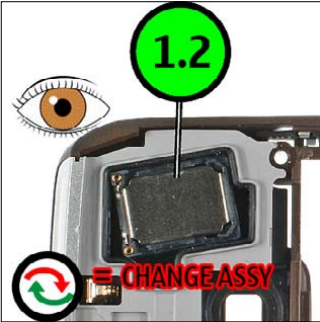


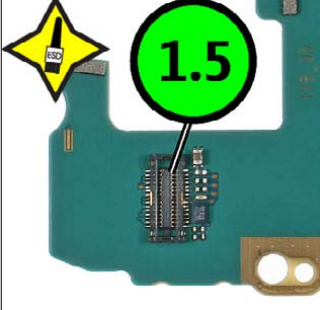
Explanation

Symtom (3)	Fault name	Count of fault positions
Zoom position (Note! First zoom starts with 1.2)		

1.1 EARPIECE (4)



19. QUICK TROUBLE SHOOTER - IHF SPEAKER

Explanation

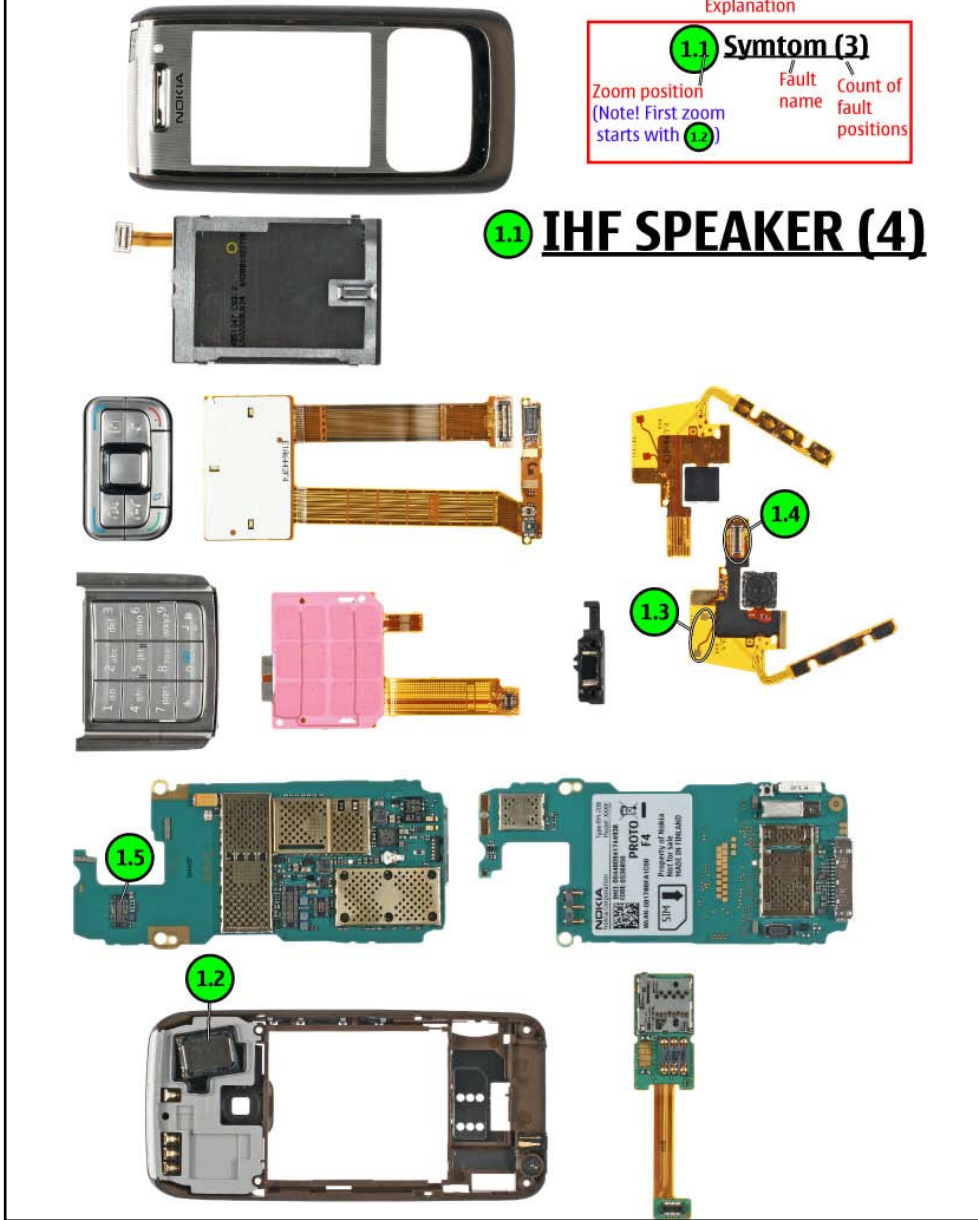
1.1 Symtom (3)

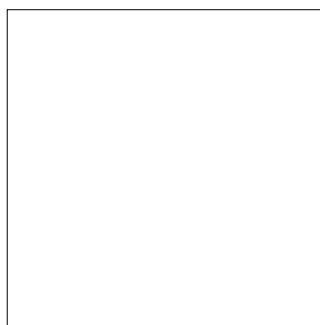
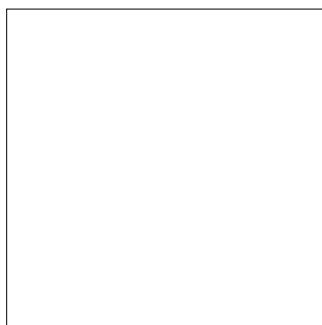
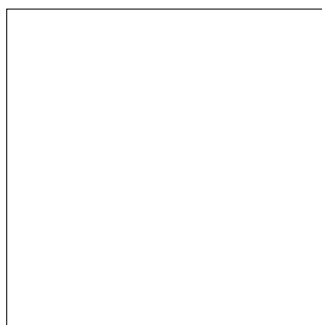
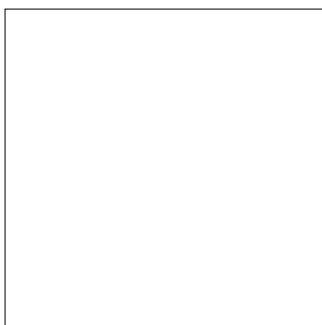
Zoom position (Note! First zoom starts with 1.2)

Fault name

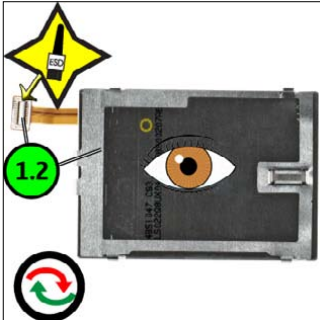
Count of fault positions

1.1 IHF SPEAKER (4)





20. QUICK TROUBLE SHOOTER - DISPLAY

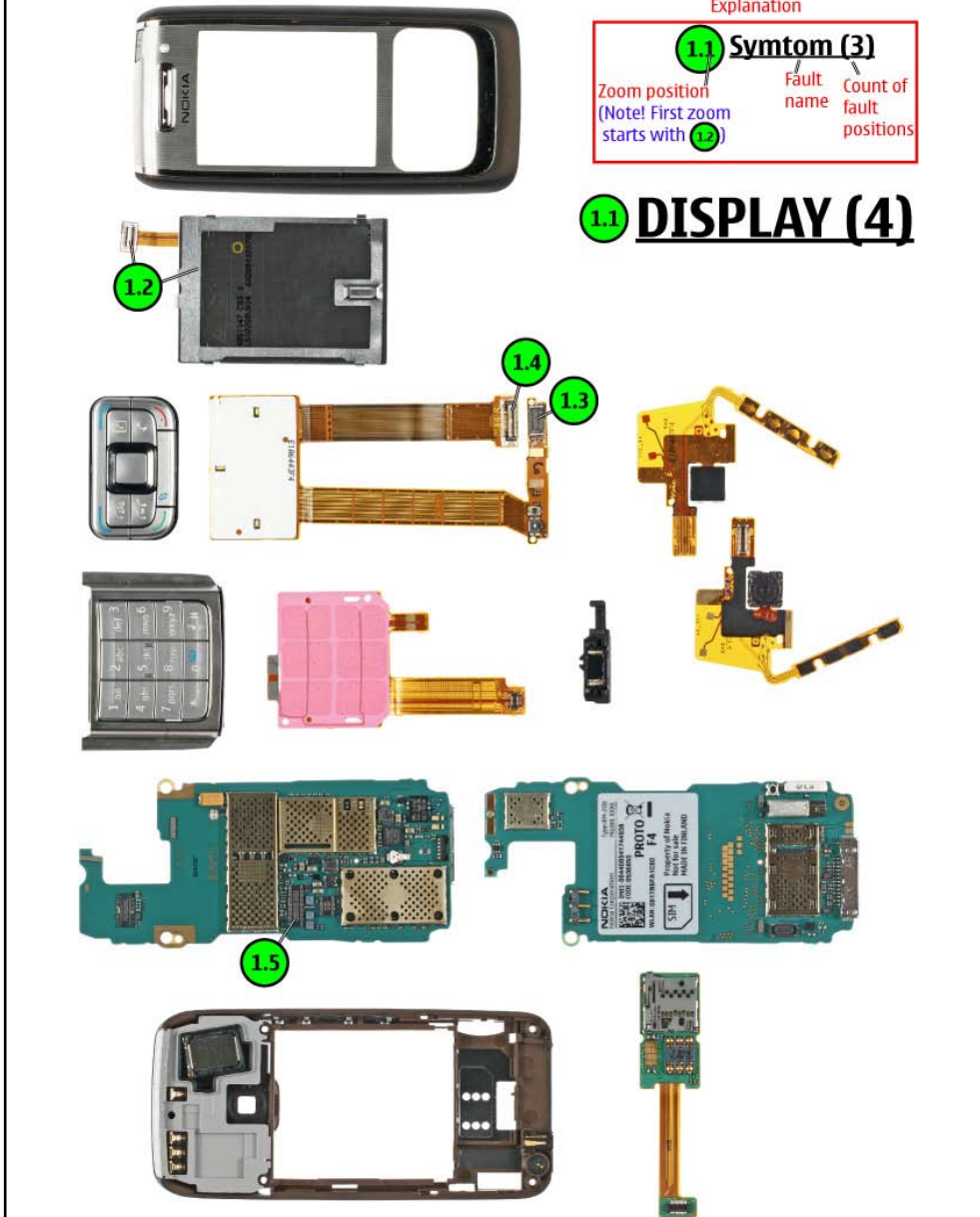


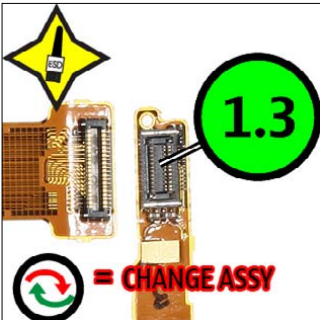
1.2

Explanation

1.1 Symtom (3)	Fault name	Count of fault positions
Zoom position (Note! First zoom starts with 1.2)		


1.1 DISPLAY (4)



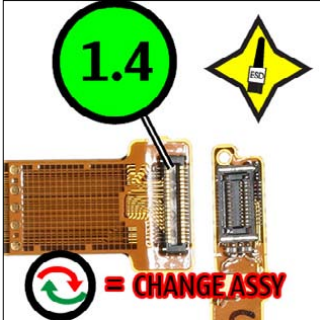


1.3

= CHANGE ASSY




1.4

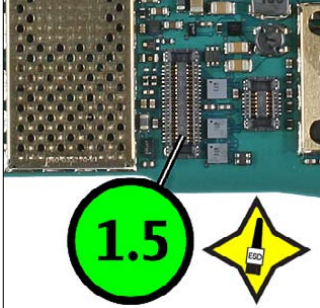


1.4

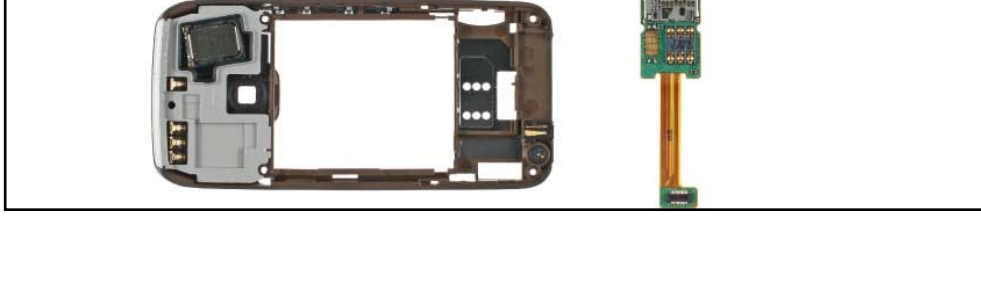
= CHANGE ASSY



1.5



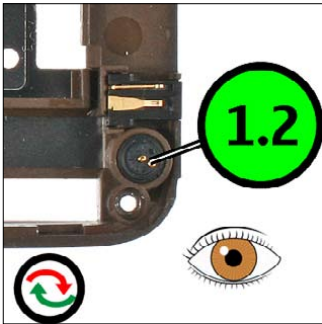

1.5



1.5

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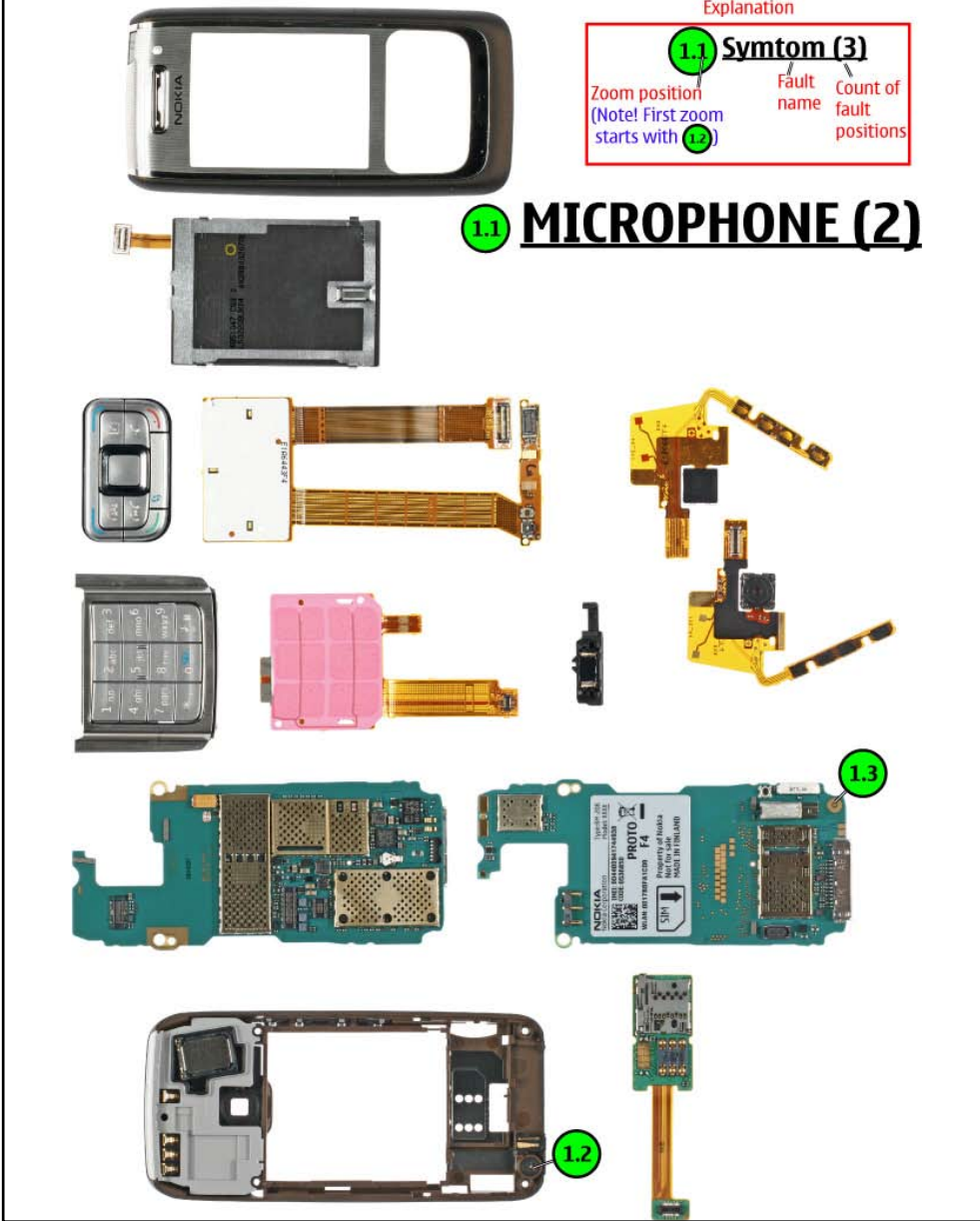
21. QUICK TROUBLE SHOOTER - MICROPHONE

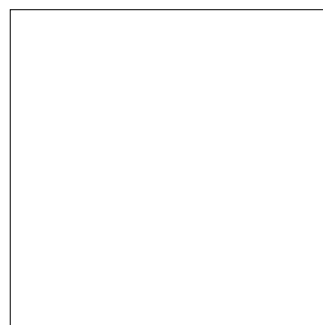
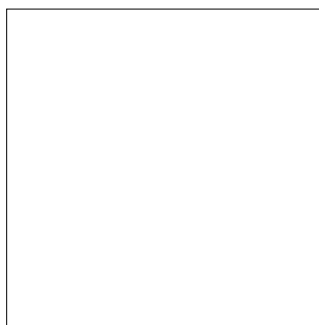
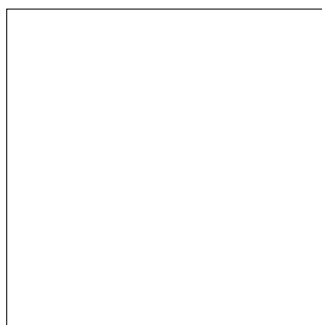
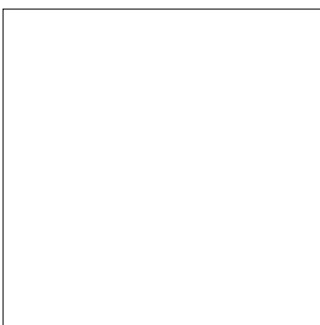
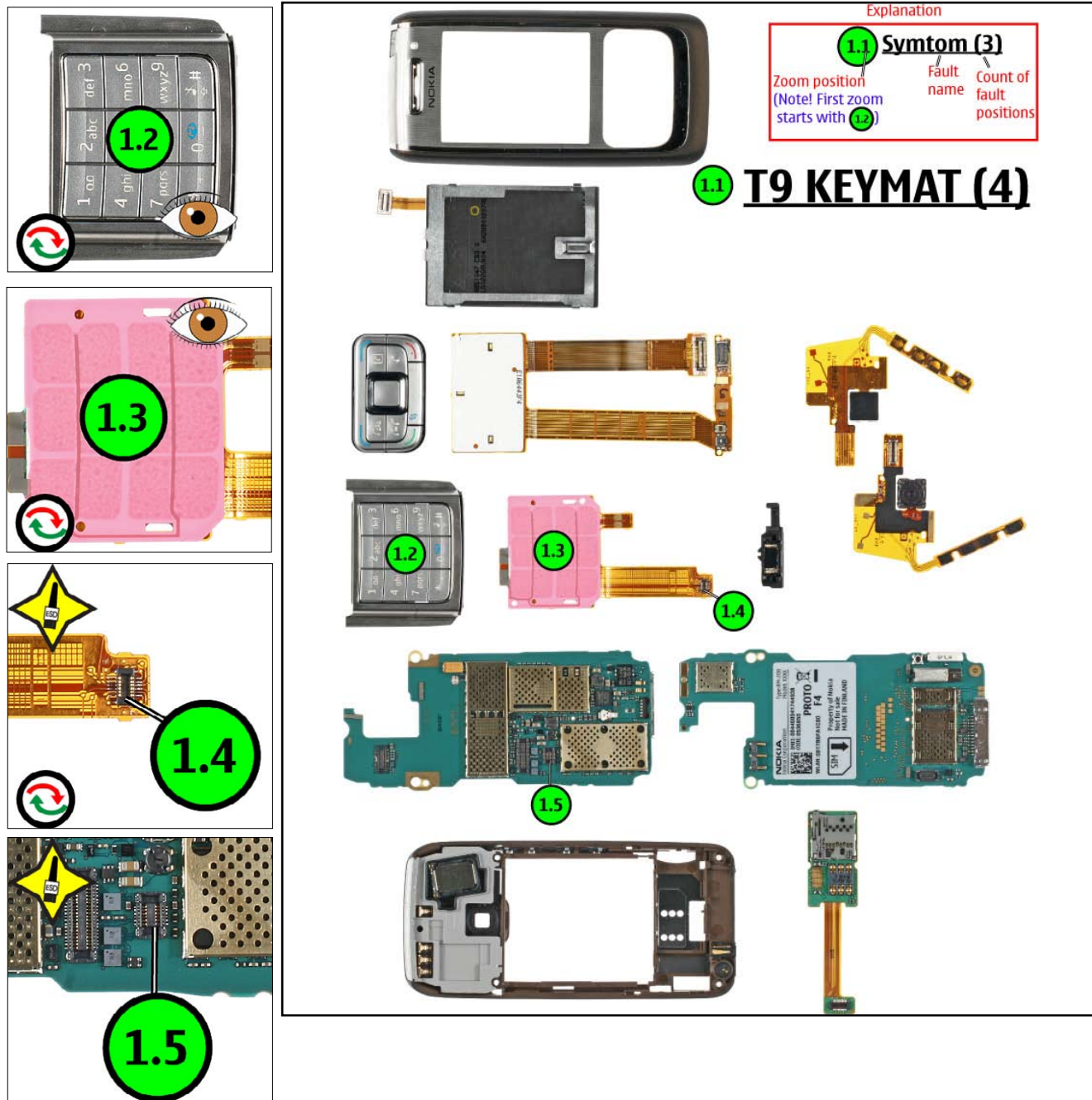
Explanation

1.1 Symtom (3)	Fault name	Count of fault positions
Zoom position (Note! First zoom starts with 1.2)		

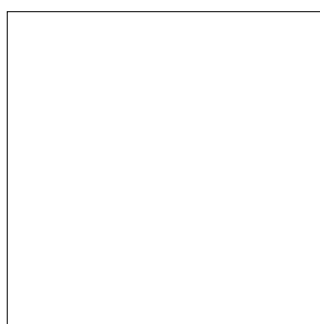
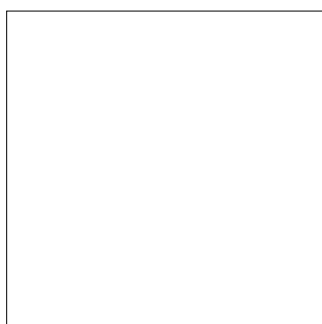
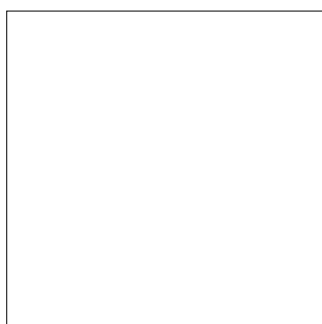
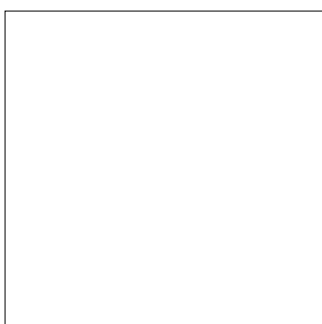
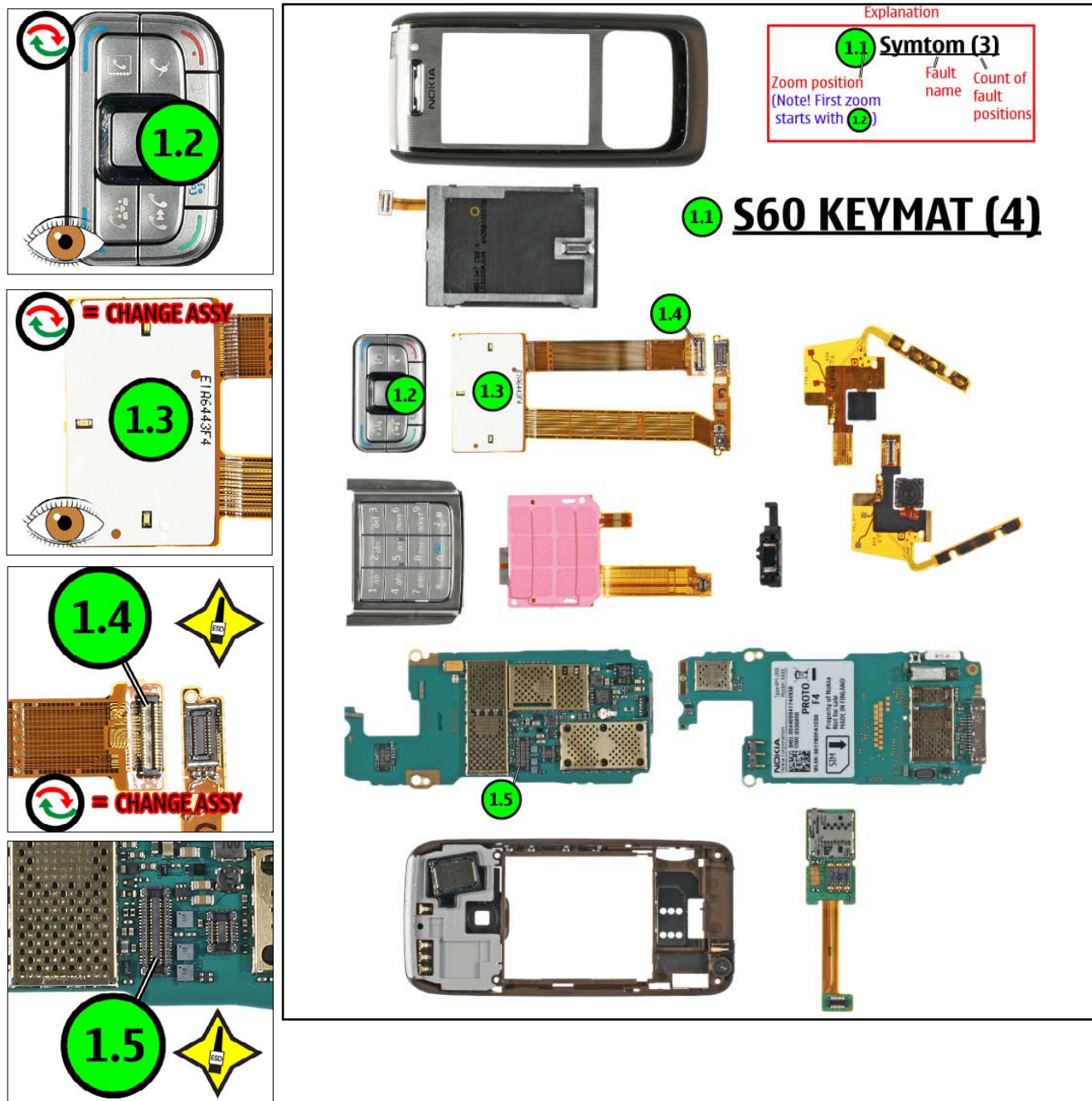
1.1 MICROPHONE (2)



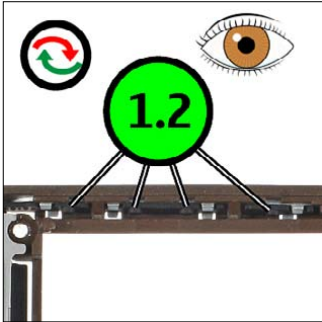
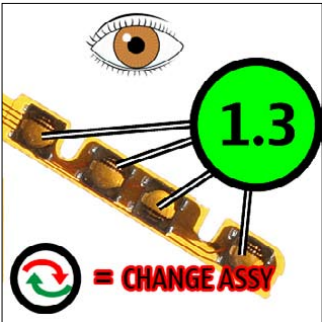

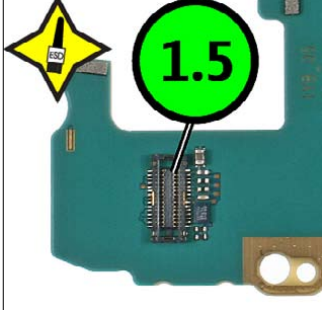
22. QUICK TROUBLE SHOOTER - T9 KEYMAT







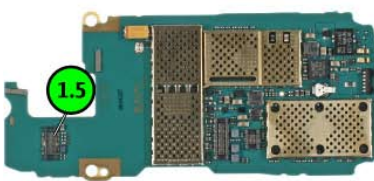

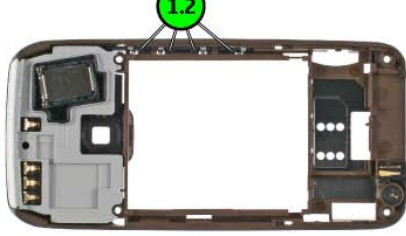



23. QUICK TROUBLE SHOOTER - S60 KEYMAT



24. QUICK TROUBLE SHOOTER - VOLUME KEYS/ EDIT/VOICE KEY

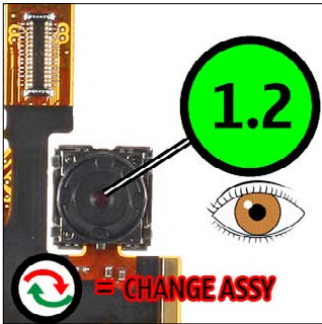

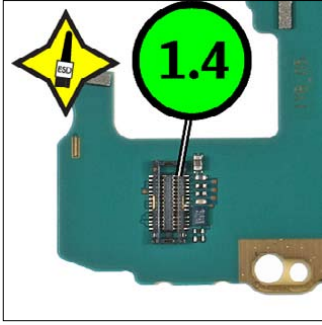











Explanation

1.1 Symtom (3)	Fault name	Count of fault positions
Zoom position (Note! First zoom starts with 1.2)		





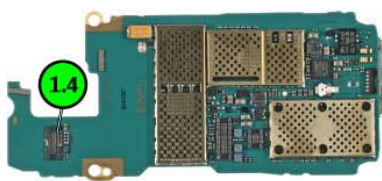

1.1 VOLUME KEYS/ EDIT/VOICE KEY (4)

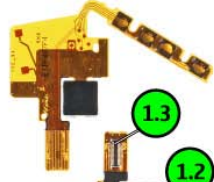



25. QUICK TROUBLE SHOOTER - CAMERA

Explanation

Symtom (3)	Fault name	Count of fault positions
Zoom position (Note! First zoom starts with 1.2)		

1.1 CAMERA (3)

26.GONOGO TEST

To test the Camera, Bluetooth WLAN and IRDA functionality refer to the phone

User`s guide.

The User`s Guide is available on www.nokia.com.

Before starting the
GoNoGo test, check that
camera window is clean.
If not, clean the window
with cloth.



Bluetooth test

You need another Bluetooth device (e.g. 6230) to do a GoNoGo test.

Make sure that Bluetooth is activated in the reference unit. The distance of the devices should be not more than 5m from each other.

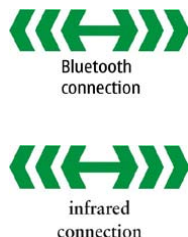
Infrared test

You need another infrared device (e.g. 6230) to do a GoNoGo test. The infrared windows of the devices must be directed to each other and should have a distance of approximate 15 cm. Make sure that infrared is activated in receiver device.

Warning: Do not point the IR (infrared) beam at anyone's eye or allow it to interfere with other IR devices. This device is a Class 1 Laser product.



Reference unit, Bluetooth /infrared activated



Test unit

27.BATTERY TEST

A battery tester lets you test the capacity of NOKIA batteries.

Please refer to the actual information on NOKIA Online.



<http://www.astratec.co.uk/>



<http://www.cadex.com/>