



Working Instruction, Mechanical

Applicable for J100i, J100a and J100c

CONTENTS

1	Introduction	2
1.1	Equipment.....	3
1.2	General cautions	4
2	Disassembly	5
2.1	Overview	5
2.1.1	Battery Cover & Battery.....	6
2.1.2	Front Cover	7
2.1.3	Keypad	8
2.1.4	PBA	9
2.1.5	Antenna ass'y.....	10
3	Replacements.....	11
3.1	Battery Cover.....	12
3.2	Front Cover	12
3.3	Keypad	12
3.4	Antenna ass'y	12
3.5	Rear Cover	12
3.6	Dome Foil	13
3.7	System Connector.....	14
3.8	Earphone ass'y.....	15
3.9	Loudspeaker ass'y	17
3.10	Loudspeaker Gasket	18
3.11	Microphone	19
3.12	Vibrator.....	20
3.13	RF Cover	21
3.14	Name Plate	22
3.15	Label.....	23
4	Reassembly	24
4.1	Overview	24
4.1.1	Antenna ass'y.....	25
4.1.2	PBA	26
4.1.3	Keypad	27
4.1.4	Front Cover	28
4.1.5	Battery & Battery Cover.....	29
5	Revision history	30

1 Introduction

J100



1.1 Equipment

SPECIAL TOOLS

No new special tools are introduced

- NTZ 122 459 Torque screwdriver (or equivalent)
- NTZ 112 302/2 Front opening tool



STANDARD TOOLS

Standard tools have to be locally purchased

- Torx bit no. 5
- Dentist hook
- Blunt pair of tweezers
- Guitar pick



ESD EQUIPMENT

Protect the phone from ESD damages whenever it has been opened by using:

- ESD-wristband
- ESD-gloves



LABEL EQUIPMENT

The following special equipment is required when replacing or installing a new label:

- Hot air flow solder station
- Zebra printer connected to computer



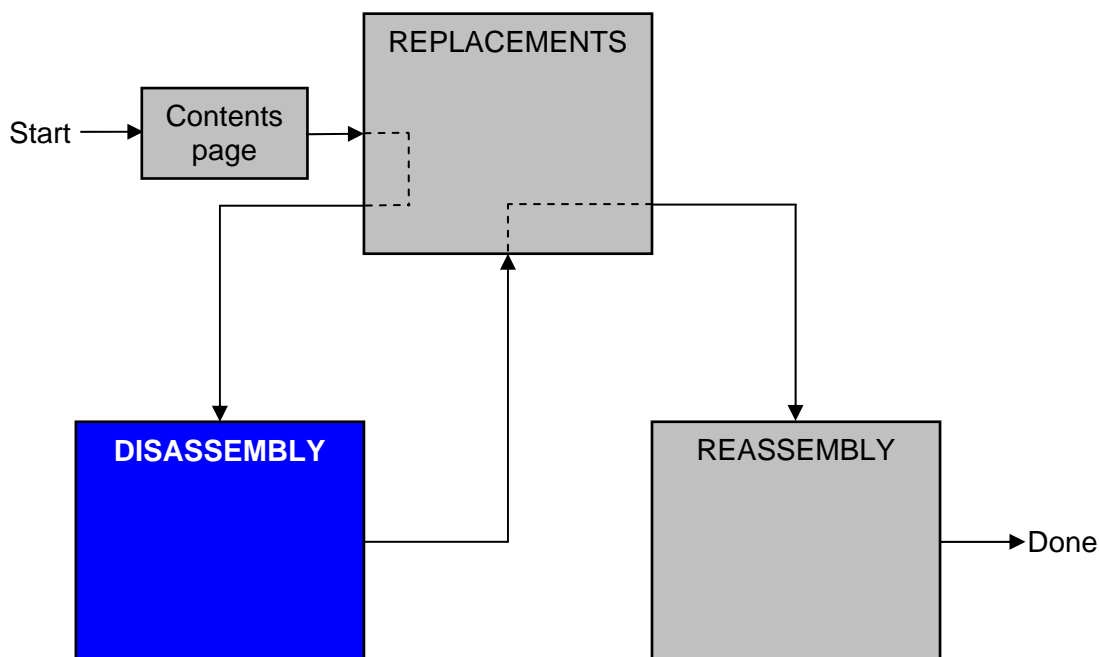


1.2 General cautions

- ***Switch off the phone before the disassembly is begun!***
- ***Keep all contact surfaces clean!***
- ***Be careful when using tools like the dentist hook, tweezers, opening tools, guitar pick etc. to avoid scratches or damages to the exterior and interior parts of the phone!***
- ***Be careful not to damage any contact springs!***
- ***Remember to remove the protection foils on new parts such as the front cover and the LCD!***
- ***Never touch the display glass!***
- ***Use air blow equipment to keep the front window and display module dust free!***

2 Disassembly

When you are going to replace a part being listed in *Replacements*, the instruction of that section usually begins by directing you to this *Disassembly* section with a specification of the instructions you have to carry out in order to disassemble the phone as far as needed before returning to *Replacements* for the actual replacement.



2.1 Overview

The disassembly of the phone is done in the following sequence:

1. Battery Cover (a) and Battery (b)
2. Front Cover
3. Keypad
4. PBA
5. Antenna ass'y

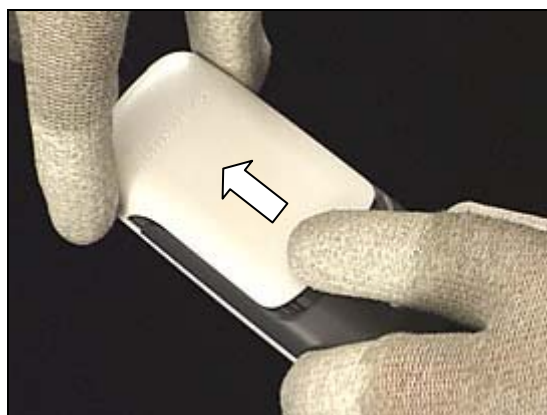


2.1.1 Battery Cover & Battery

Push on the bulge of the *battery cover* ...



and slide the *battery cover* until it becomes released and can be removed.



Put your finger here ...



to raise and remove the *battery*.



2.1.2 Front Cover

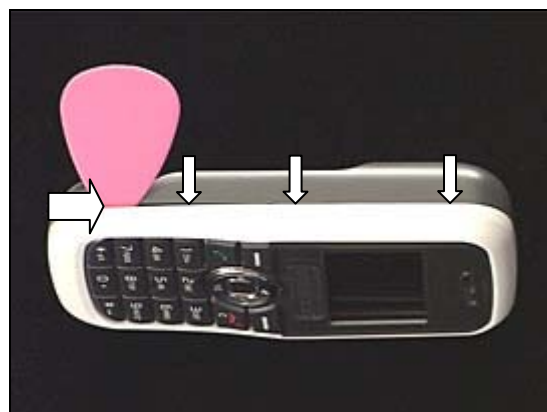
Remove the two screws using torx bit no. 5 (T5).
THE SCREWS CANNOT BE REUSED!



Insert the guitar pick at the bottom of the phone and slide it towards the top to release the three snap hooks.



Repeat the procedure on the opposite side.



Gently wiggle the *front cover* and then remove it.



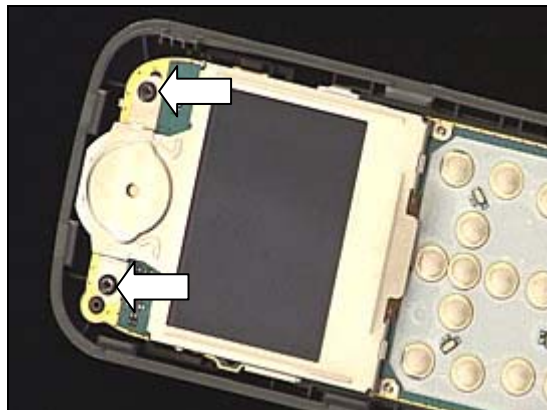
2.1.3 Keypad

Remove the *keypad* by lifting it straight up.



2.1.4 PBA

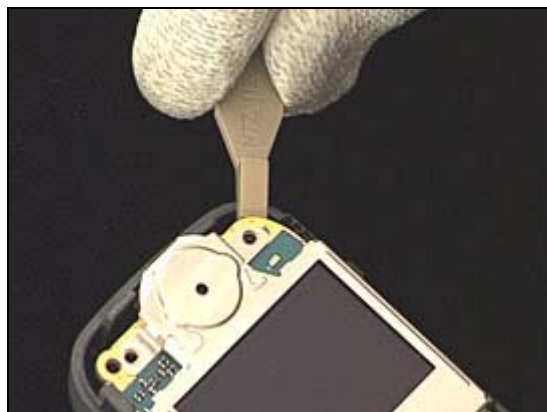
Remove the two screws using torx bit no. 5 (T5).
THE SCREWS CANNOT BE REUSED!



Insert the 'front opening tool' next to the snap hook (at the arrow) and bend to release the *PBA* from the snap hook.



Release the *PBA* at the top right corner.

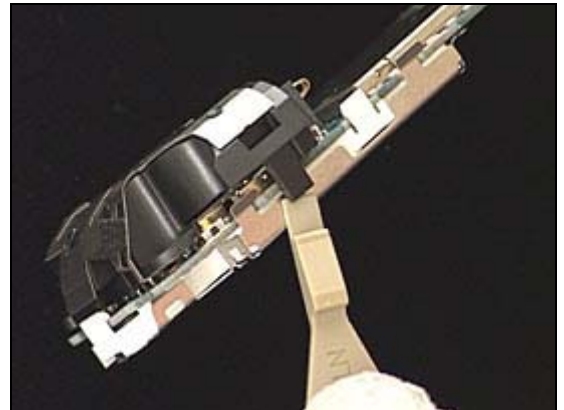


Gently wiggle the *PBA* and then remove it.

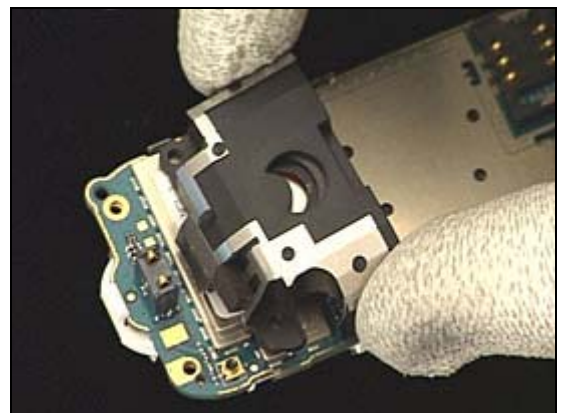


2.1.5 Antenna ass'y

Release the snap hook with the 'front opening tool' and, if necessary, do the same on the opposite side.



Carefully lift off the *antenna ass'y*.



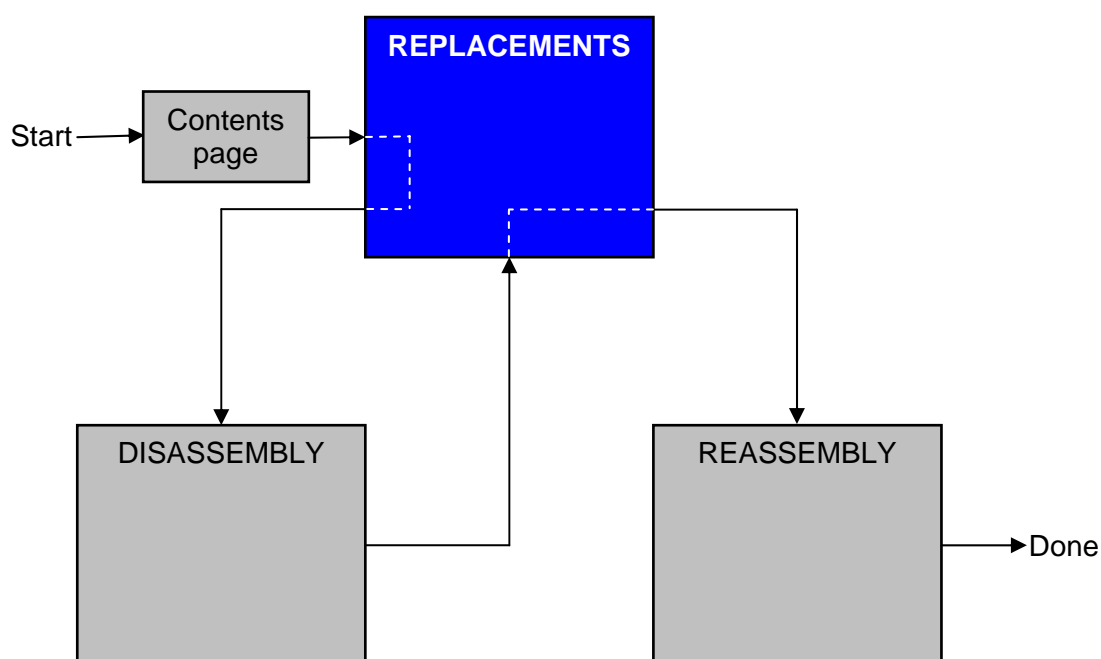
3 Replacements

Search for the part to be replaced on the Contents page and go to that instruction to be found in this *Replacements* section.

The instruction usually begins by directing you to the *Disassembly* section with a specification of the instructions you have to carry out in order to disassemble the phone as far as needed before the actual replacement.

Go back to this *Replacements* section and carry out the instruction.

The instruction usually ends by directing you to the *Reassembly* section with a specification of the instructions you have to carry out in order to reassemble the phone.



3.1 Battery Cover

Follow the 2.1.1 Disassembly instructions!

Prepare the new *battery cover*.

Follow the 4.1.5 Reassembly instructions!

3.2 Front Cover

Follow the 2.1.1 – 2.1.2 Disassembly instructions!

Prepare the new *front cover*.

Attach a name plate as described in 3.14 *Name Plate*.

Follow the 4.1.4 – 4.1.5 Reassembly instructions!

3.3 Keypad

Follow the 2.1.1 – 2.1.3 Disassembly instructions!

Prepare the new *keypad*.

Follow the 4.1.3 – 4.1.5 Reassembly instructions!

3.4 Antenna ass'y

Follow the 2.1.1 – 2.1.5 Disassembly instructions!

Prepare the new *antenna ass'y*.

Install a loudspeaker as described in 3.9 *Loudspeaker ass'y*.

Follow the 4.1.1 – 4.1.4 Reassembly instructions!

3.5 Rear Cover

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

Prepare the new *rear cover*.

Install the loudspeaker gasket as described in 3.10 *Loudspeaker Gasket*.

Install the microphone as described in 3.11 *Microphone*.

Install the vibrator as described in 3.12 *Vibrator*.

Install the RF cover as described in 3.13 *RF Cover*.

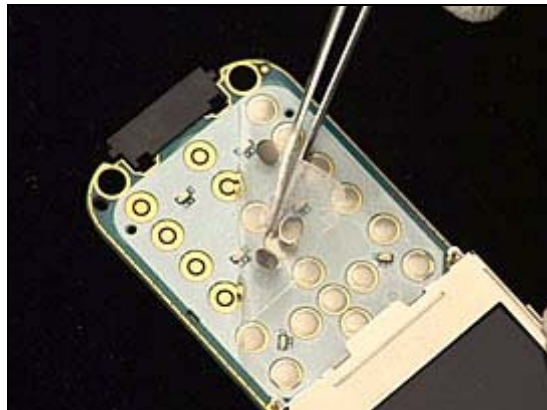
Attach a label as described in 3.15 *Label*.

Follow the 4.1.4 – 4.1.5 Reassembly instructions!

3.6 Dome Foil

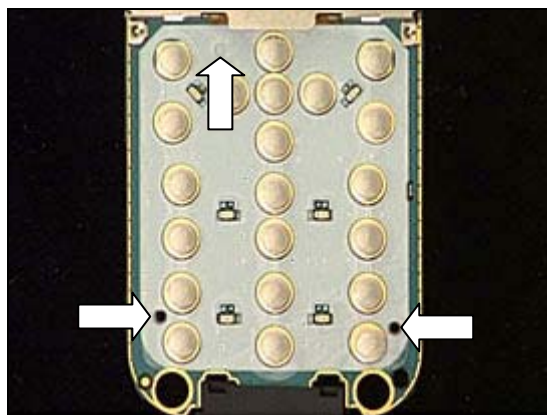
Follow the 2.1.1 – 2.1.4 Disassembly instructions!

Use the tweezers to peel off the *dome foil* from the PBA.



Attach the new *dome foil* so that the three holes of the PBA and the *dome foil* are perfectly aligned.

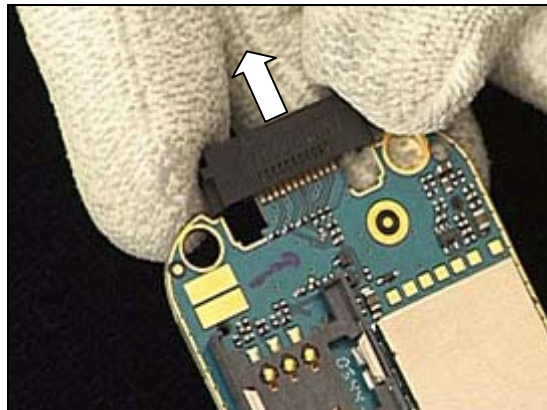
Follow the 4.1.2 – 4.1.5 Reassembly instructions!



3.7 System Connector

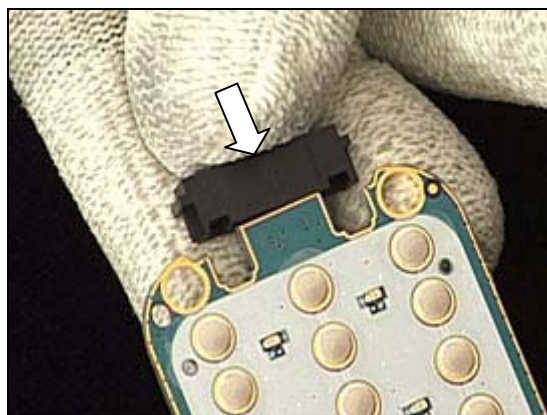
Follow the 2.1.1 – 2.1.4 Disassembly instructions!

Pull the *system connector* away from the PBA.



Push the *system connector* onto the PBA.

Follow the 4.1.2 – 4.1.5 Reassembly instructions!

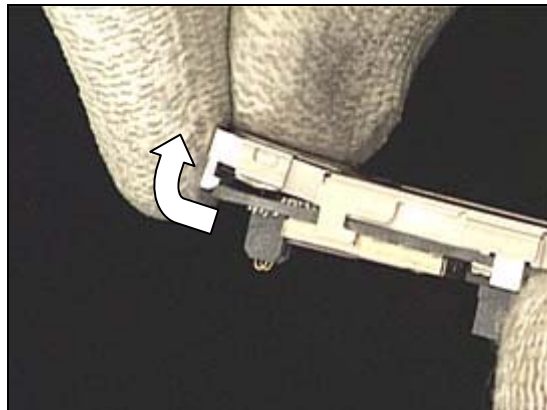


3.8 Earphone ass'y

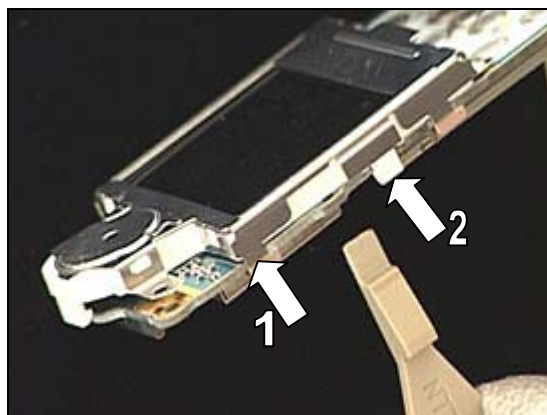
Follow the 2.1.1 – 2.1.5 Disassembly instructions!

HANDLE THE TOP HOOK WITH UTMOST CARE TO AVOID DAMAGES TO THE SIDE HOOKS!

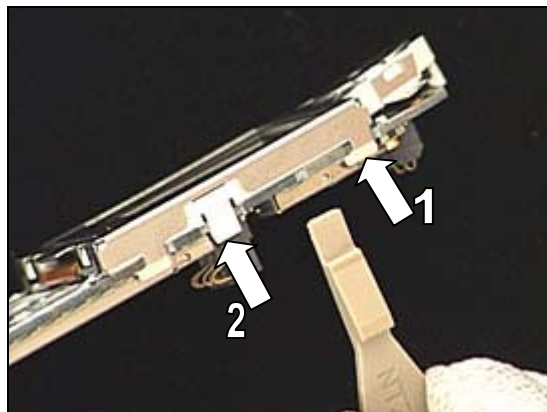
Gently unsnap the top hook by using your fingers.



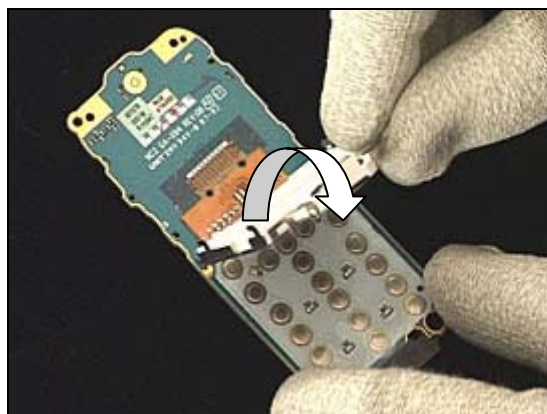
Unsnap side hook no. 1 with the 'front opening tool' followed by hook no. 2.



Do the same on the opposite side.

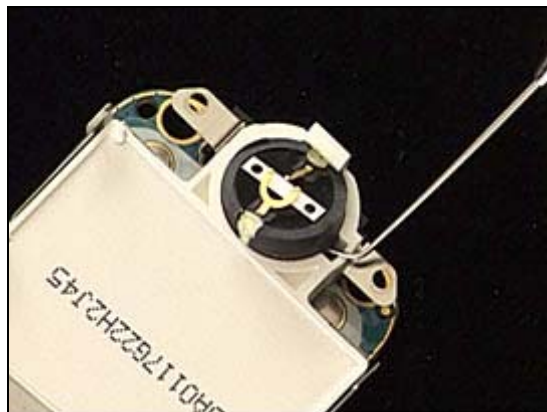


Turn the LCD unit to make it rest on the dome switches.



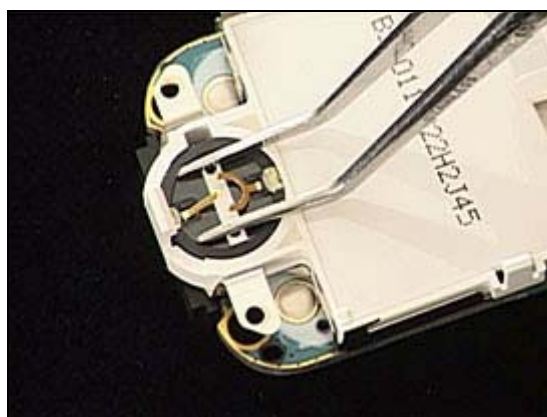
Earphone *continued*

Use the dentist hook to raise the *earphone ass'y* out of its cavity and remove it with the tweezers.



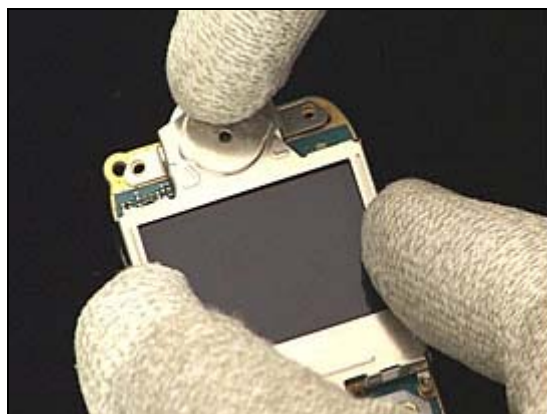
BE CAREFUL NOT TO TOUCH THE GOLDEN CONTACT SPRINGS OF THE EARPHONE ASS'Y!

Use the tweezers to place the *earphone ass'y* in its proper position and press gently until it reaches the bottom of the cavity.



Turn the LCD unit back to its original position and press simultaneously on both sides and on the top to make the LCD unit snap onto the PBA.

Follow the 4.1.1 – 4.1.5 Reassembly instructions!



3.9 Loudspeaker ass'y

Follow the 2.1.1 – 2.1.5 Disassembly instructions!

Insert one leg of the tweezers underneath the golden contacts and push to raise the *loudspeaker ass'y* out of its cavity until it can be removed.



Use the tweezers to place the *loudspeaker ass'y* in its proper position and press gently to secure its position without touching the golden contacts.

Follow the 4.1.1 – 4.1.5 Reassembly instructions!



3.10 Loudspeaker Gasket

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

Remove the *gasket* with a dentist hook and the tweezers.
Clean the surface with isopropyl alcohol.
Then attach the new *loudspeaker gasket*.

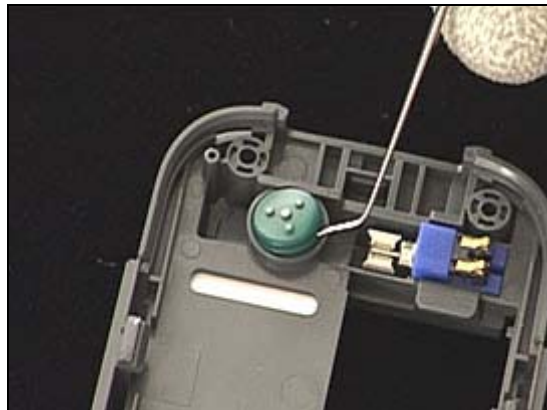
Follow the 4.1.2 – 4.1.5 Reassembly instructions!



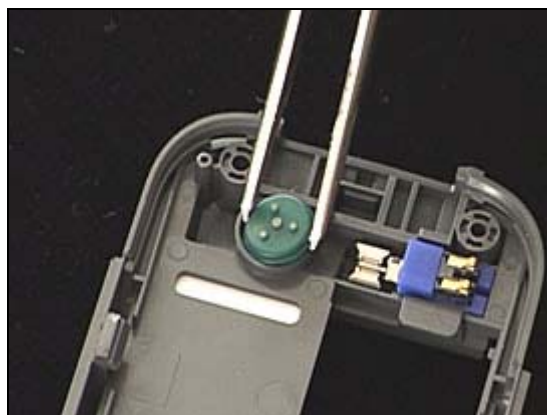
3.11 Microphone

Follow the 2.1.1 – 2.1.4 Disassembly instructions!

Use the dentist hook to raise the *microphone* out of its cavity and then remove it with the tweezers.

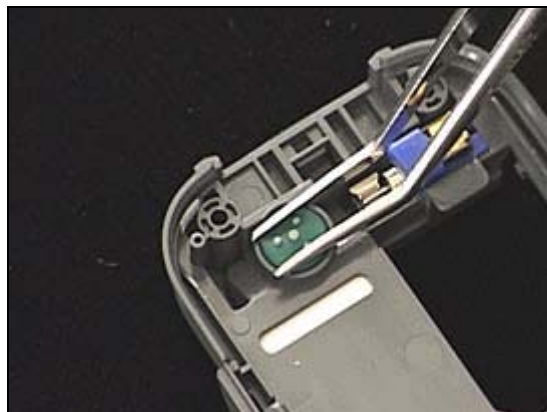


Use the tweezers to place the *microphone* in its proper position ...



and press gently until it reaches the bottom of the cavity .

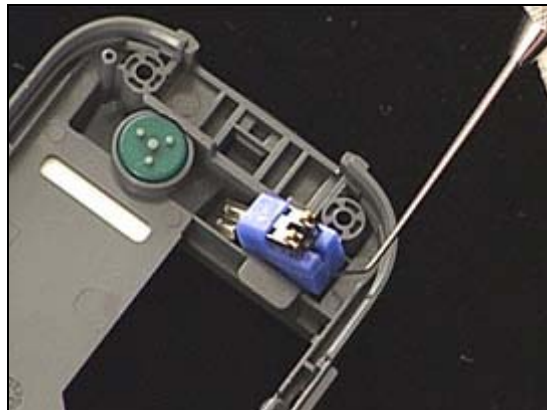
Follow the 4.1.2 – 4.1.5 Reassembly instructions!



3.12 Vibrator

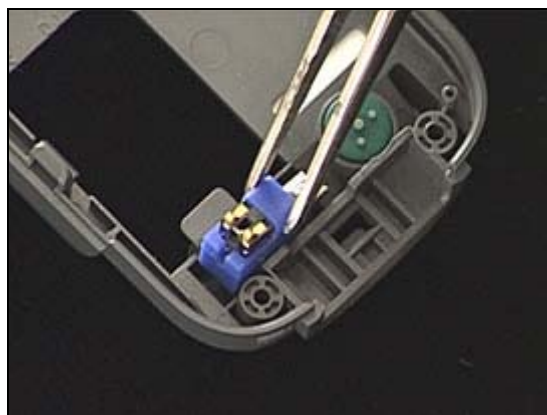
Follow the 2.1.1 – 2.1.4 Disassembly instructions!

Use the dentist hook to raise the *vibrator* out of its cavity and then remove it with the tweezers.



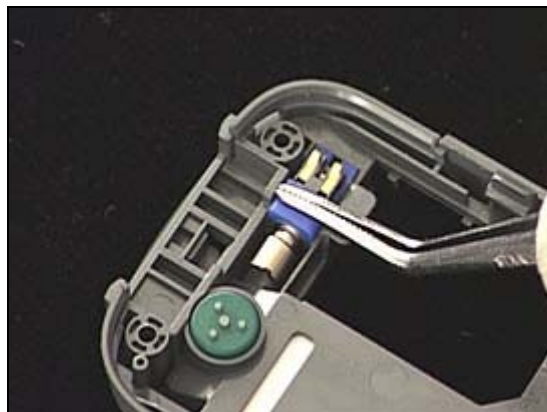
DO NOT TOUCH THE CONTACT SPRINGS!

Use the tweezers to place the *vibrator* in its proper position,



and press gently until it reaches the bottom of the cavity without touching the contact springs.

Follow the 4.1.2 – 4.1.5 Reassembly instructions!



3.13 RF Cover

Use the dentist hook to raise the *RF cover* out of its cavity and then remove it with the tweezers.



Use the tweezers to place the *RF cover* in its proper position, and press ...



until it reaches the bottom of the cavity.



3.14 Name Plate

Remove the *name plate* with a dentist hook and the tweezers.
Clean the surface with isopropyl alcohol.



Attach the new *name plate* using the tweezers and your fingers.



3.15 Label

Follow the 2.1.1 Disassembly instructions!

Read the old label and/or write the information into the
"Label make" program before removal

Note the position of the label before removal

Heat up the label by using hot air, if needed.

Carefully remove the label without causing scratches

If there still are residues, clean the surface with isopropyl
alcohol

Check that the proper label format is loaded in the Zebra
printer.

Write a new label by using the program "Label make" and
check that the printing is OK.

Take the new label and place it onto the frame as in the
adjacent picture.

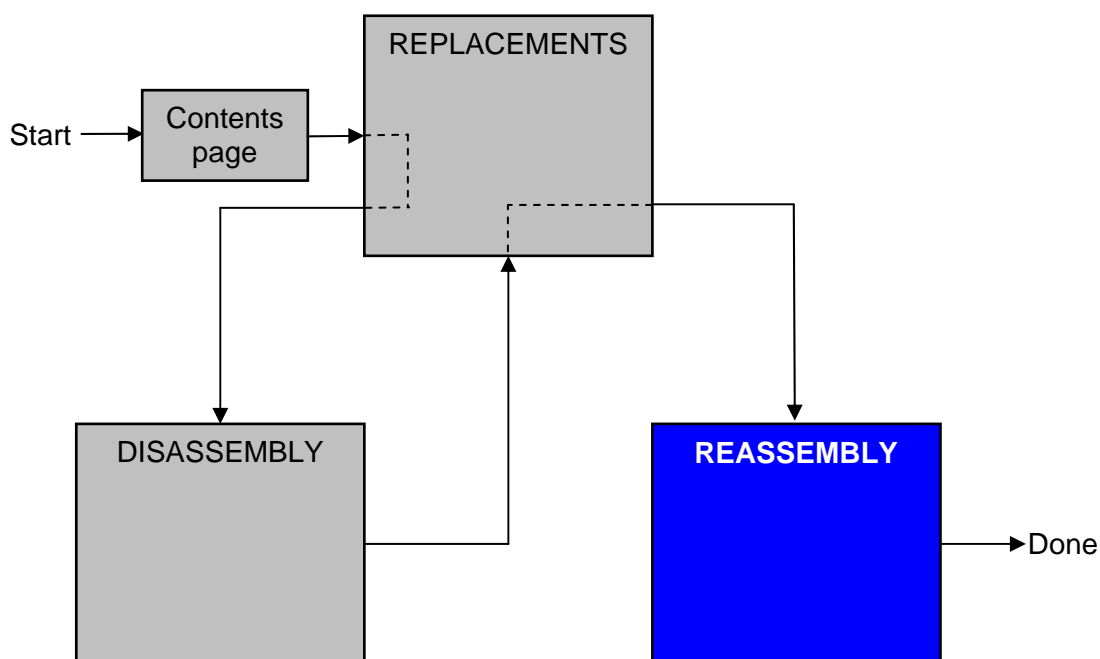
ONE LABEL ONLY IS ALLOWED!

Follow the 4.1.5 Reassembly instructions!



4 Reassembly

After replacing a part being listed in *Replacements*, the instruction of that section usually ends by directing you to this *Reassembly* section with a specification of the instructions you have to carry out in order to reassemble the phone.



4.1 Overview

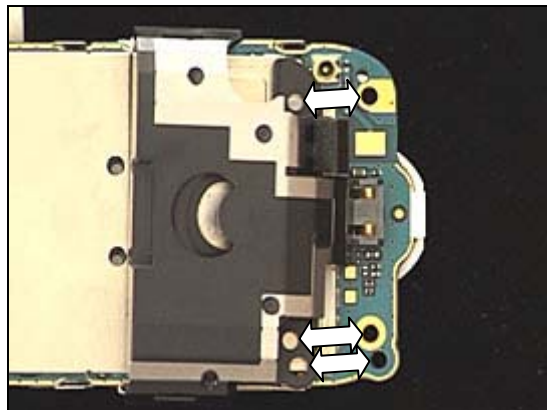
The reassembly is done in the following sequence:

1. Antenna ass'y
2. PBA
3. Keypad
4. Front Cover
5. Battery (a) and Battery Cover (b)

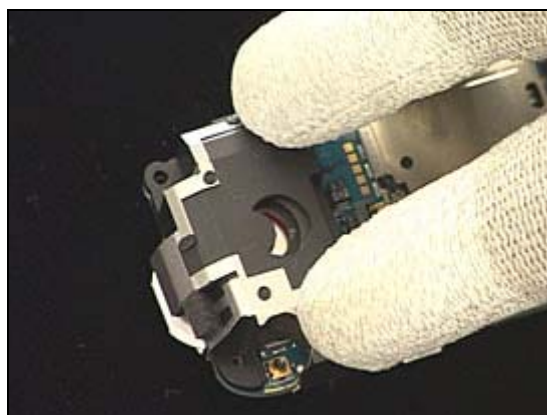


4.1.1 Antenna ass'y

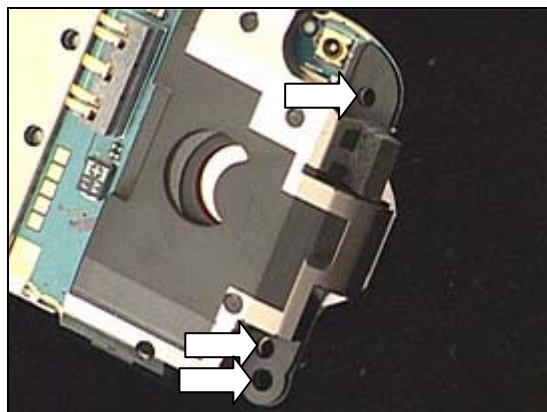
Place the *antenna ass'y* on the PBA so that the three holes on the *antenna ass'y* are placed on top of the three holes on the PBA.



Press simultaneously on both sides to make the *antenna ass'y* snap onto the PBA.



Check the alignment of the holes.



4.1.2 PBA

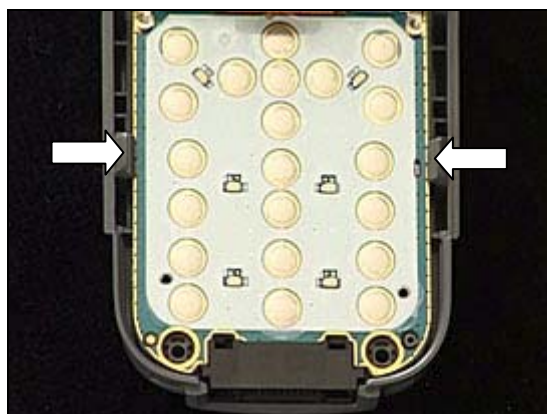
Place the *PBA* into the rear cover.



Press simultaneously on both sides of the *PBA* where the snap hooks of the rear cover are located.



Check that the *PBA* is secured by the two snap hooks.



Use 11 Ncm (± 0.6 Ncm) torque to tighten two **new** T5 screws.



4.1.3 Keypad

Place the *keypad* on the dome switches ...

like this.



4.1.4 Front Cover

Place the *front cover* on top of the rear cover.



Press simultaneously on these four spots.
Check on both sides that the *front cover* is snapped to the rear cover.



Use 11 Ncm (± 0.6 Ncm) torque to tighten two **new** T5 screws.



4.1.5 Battery & Battery Cover

Push the *battery* towards the battery connector ...



and press it down at the bottom.



Place the *battery cover* on top of the *battery* and push towards the top of the phone ...



until the *battery cover* is latched in this position.



5 Revision history

Rev.	Date	Changes / Comments
A	2006-04-10	First release