

# Working Instruction, Mechanical

Applicable for Z530i, Z530c, W300i, and W300c

## Contents

<b>1</b>	<b>General.....</b>	<b>3</b>
1.1	Phone Portions – Upper and Lower.....	3
1.2	Using Hand and ESD Protection .....	3
1.3	Protection of LCDs, Lenses, and Windows.....	3
1.4	Acceptable Pry Tools .....	3
1.5	When an “*” appears beside a Tool in “Tools Needed:” .....	3
<b>2</b>	<b>Lower Portion .....</b>	<b>4</b>
2.1	Lower Portion Disassembly .....	4
2.1.1	Battery Cover Removal.....	4
2.1.2	Battery Removal .....	4
2.1.3	Rear Speaker Cover Removal .....	4
2.1.4	Outer Lower Cover Removal .....	4
2.1.5	Circuit Board Removal .....	4
2.2	Lower Portion Reassembly.....	4
2.2.1	Circuit Board Installation.....	4
2.2.2	Outer Lower Cover Installation .....	4
2.2.3	Rear Speaker Cover Installation.....	4
2.2.4	Battery Installation .....	4
2.2.5	Battery Cover Installation .....	4
<b>3</b>	<b>Upper Portion.....</b>	<b>4</b>
3.1	Upper Portion Disassembly .....	4
3.1.1	Perform Lower Portion Disassembly .....	4
3.1.2	Lower Inner Cover Removal.....	4
3.1.3	Style-Up Cover Removal .....	4
3.1.4	Upper Inner Cover Removal .....	4
3.1.5	Upper Outer Cover Removal .....	4
3.1.6	LCD Removal .....	4
3.2	Upper Portion Reassembly .....	4
3.2.1	LCD Installation.....	4
3.2.2	Upper Outer Cover Installation .....	4
3.2.3	Upper Inner Cover Installation.....	4
3.2.4	Lower Inner Cover Installation .....	4
3.2.5	Style-Up Cover Installation.....	4
3.2.6	Perform Lower Portion Reassembly .....	4
<b>4</b>	<b>Part Replacement.....</b>	<b>4</b>
4.1	Battery Cover .....	4
4.2	Battery .....	4
4.3	Rear Speaker Cover.....	4
4.4	Label 4	

4.4.1	Label Removal .....	4
4.4.2	Label Installation.....	4
4.5	Lower Outer Cover.....	4
4.6	Antenna Assembly .....	4
4.7	Speaker Box .....	4
4.8	Rear Speaker Cloth.....	4
4.9	Vibrator .....	4
4.10	Bluetooth Antenna.....	4
4.11	Dome Array .....	4
4.11.1	Dome Array Removal .....	4
4.11.2	Dome Array Installation.....	4
4.12	System Connector.....	4
4.12.1	System Connector Removal .....	4
4.12.2	System Connector Installation .....	4
4.13	Lower Inner Cover .....	4
4.14	IR Window .....	4
4.15	Volume Key .....	4
4.16	Keypad.....	4
4.17	Bumper Strip and Microphone Mesh .....	4
4.18	Upper Outer Cover .....	4
4.19	Rubber Plugs that hold the Style-Up Cover .....	4
4.20	Magnet.....	4
4.20.1	Magnet Removal .....	4
4.20.2	Magnet Installation .....	4
4.21	LCD Assembly.....	4
4.22	Receiver.....	4
4.23	Hinge .....	4
4.24	Main Flex Film.....	4
4.25	Camera Module .....	4
4.26	Upper Inner Cover.....	4
4.27	Outer Co-Brand Label.....	4
4.27.1	Outer Co-Brand Label Removal .....	4
4.27.2	Outer Co-Brand Label Installation.....	4
4.28	Inner Co-Brand Label.....	4
4.28.1	Inner Co-Brand Label Removal .....	4
4.28.2	Inner Co-Brand Label Installation .....	4
4.29	Style-Up Cover.....	4
4.30	LCD Sub-frame .....	4
<b>5</b>	<b>Revision History .....</b>	<b>4</b>

# 1 General

## 1.1 Phone Portions – Upper and Lower

This document uses the hinge of the phone to divide the phone into two identifiable portions. The portion of the phone that contains the keypad will be referred to as the lower portion of the phone. The portion of the phone that contains the displays will be referred to as the upper portion of the phone. The basic disassembly and reassembly procedures will be structured based on these two distinct portions.



## 1.2 Using Hand and ESD Protection

When handling this product, keep all surfaces clean of dirt, dust, debris, and hand oil. Use appropriate ESD precautions when working on this product. The use of finger cots or gloves, an ESD mat, and an ESD wrist strap are required at minimum.

## 1.3 Protection of LCDs, Lenses, and Windows

Any time the screen portion of a display assembly, the windows of a display cover, or a camera lens is unprotected and will be exposed for an extended period of time, add a protective film over the exposed part to reduce the amount of dust, finger prints, debris, and/or damage that the part may obtain.

## 1.4 Acceptable Pry Tools

Whenever the phrase “pry tool” is used, a nylon pointer, an orangewood stick, or a front opening tool may be used, depending on the user’s preference.

## 1.5 When an “\*” appears beside a Tool in “Tools Needed:”

A “\*” beside a tool in a procedure’s list of tools indicates that the tool is not specifically called out in those instructions, but an operator may find it helpful to use that tool when performing some steps of that procedure.


## 2 Lower Portion

### 2.1 Lower Portion Disassembly

The following subsections make up the “Lower Portion Disassembly” procedure. These subsections are arranged in the order that they must be performed to properly disassemble the lower portion of this product. Before starting disassembly, check whether there is a protective film over the two display windows. If one or both of the windows lack a protective film, clean the unprotected window(s) and add a protective film.

#### 2.1.1 Battery Cover Removal




**Tools needed to perform the following steps:** • None

<b>Step-by-Step Instructions</b>	
1. Close the phone and orient it so that the battery door is towards you.	
2. Slide the battery cover towards the end of the phone that contains the system connector. The battery cover will slide 9 to 10 MM (~3/8 of an inch) in the specified direction and will not slide any further.	
3. Lift the battery cover off of the phone.	

## 2.1.2 Battery Removal

All of the sections of the lower portion disassembly preceding this section must be performed in sequential order before the steps listed below can be performed.


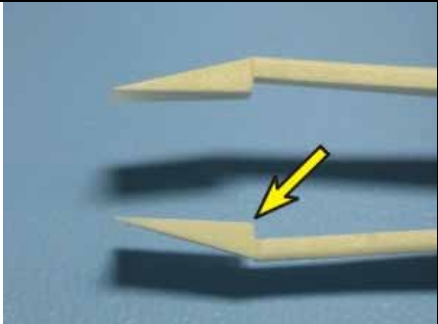
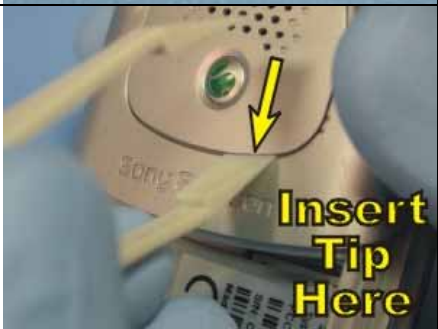

**Tools needed to perform the following steps:** • None

Step-by-Step Instructions	
<p><b>NOTE!</b> Do not tap the phone against a hard surface in an attempt to get the battery out. Damage to the phone may result!</p>	<p><b>Accessible Portion</b></p> 
<p>1. At the end of the battery closest to the system connector, catch the accessible portion of the battery and lift it away from the phone.</p>	
<p>2. Once the end of the battery that is being lifted is free from the battery cavity, slide the remainder of the battery out of the battery cavity.</p>	





### 2.1.3 Rear Speaker Cover Removal

Tools needed to perform the following steps:

- Nylon Pry Tool
- Rear Speaker Cover Removal Tool

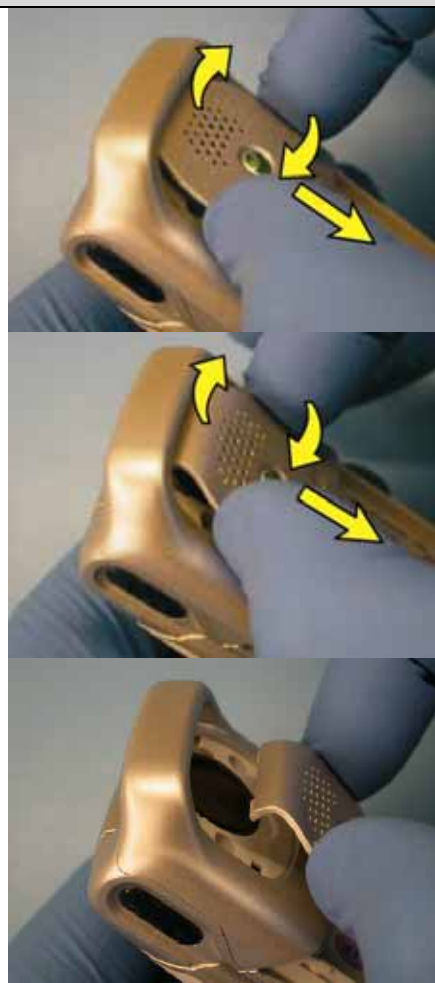
Step-by-Step Instructions	
<p>1. Close the phone and orient it so that the rear speaker port is toward you.</p> <p><b>NOTE!</b> It is very easy to scratch the lower outer cover when trying to remove the rear speaker cover so be careful and use the speaker cover removal tool to get the removal of the speaker cover started.</p>	 <p>The image shows the back of a Sony Ericsson phone with the rear speaker cover highlighted by a yellow arrow. The text "Rear Speaker Cover" is written in yellow at the top of the image.</p>
<p><b>NOTE!</b> Do not insert the speaker cover removal tool past the point indicated. If the tip is inserted too far under the speaker cover, there is a risk of damaging the rear speaker.</p>	 <p>The image shows a close-up of the speaker cover removal tool, which is a yellow plastic pry tool. A yellow arrow points to the tip of the tool.</p>
<p>2. Place one tip of a speaker cover removal tool in the seam between the rear speaker cover and the outer lower cover in the location indicated.</p>	 <p>The image shows the tip of the speaker cover removal tool being inserted into the seam between the rear speaker cover and the outer lower cover. A yellow arrow points to the tip, and the text "Insert Tip Here" is written in yellow at the bottom right of the image.</p>
<p>3. Gently rotate the removal tool towards the battery area while pushing the tip of the removal tool under the rear speaker cover.</p>	 <p>The image shows the speaker cover removal tool being rotated and pushed under the rear speaker cover. A yellow arrow indicates the direction of rotation and movement.</p>



Step-by-Step Instructions	
<p>4. Rotate the handle of the removal tool away from the phone until the latch on the right corner of the speaker cover comes free.</p>	 <p><b>Right Corner Latch</b></p>
<p>5. Use a nylon pry tool to release the latch on the left side of the rear speaker cover as shown.</p> <p><b>NOTE!</b> Do not insert the tool past the notch in the pry tool. If the tip is too far under the speaker cover, there is a risk of damaging the rear speaker when prying the cover free.</p>	 <p><b>Notch</b></p>
<p>6. Lift the freed edge of the speaker cover away from the phone to dislodge any remaining adhesive that maybe still be holding the speaker cover.</p>	
<p>7. Rotate the speaker cover back down onto the outer lower cover.</p>	 <p><b>Rotate Cover Back Down</b></p>

**Step-by-Step Instructions**

8. Grip the speaker cover by its sides and rotate the end of the speaker cover that is under the antenna loop away from the phone while moving the speaker cover towards the battery cavity.





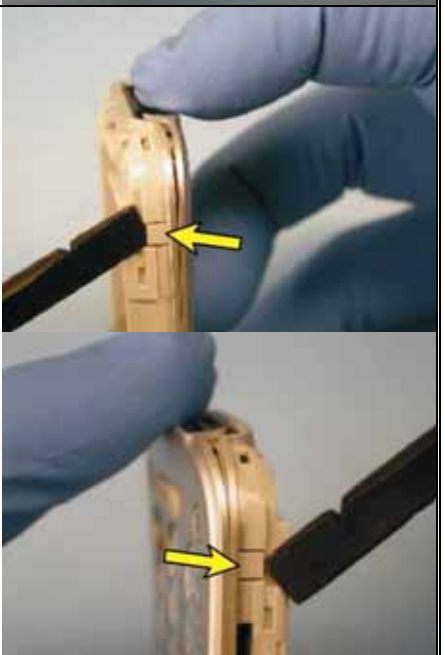



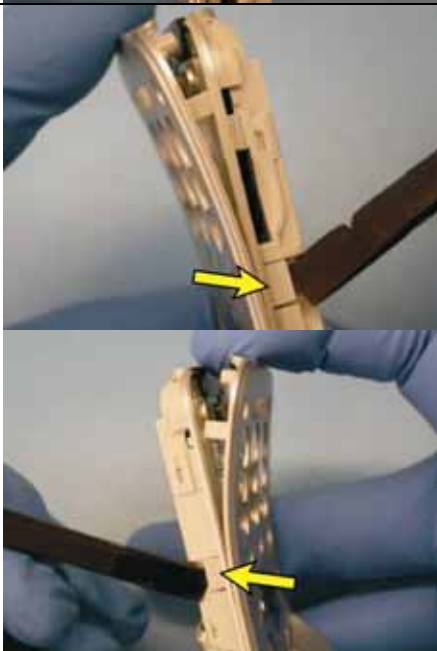

## 2.1.4 Outer Lower Cover Removal

All of the sections of the lower portion disassembly preceding this section must be performed in sequential order before the steps listed below can be performed.

**Tools needed to perform the following steps:**

- Torque screwdriver
- T6 Torx® bit
- Pry Tool

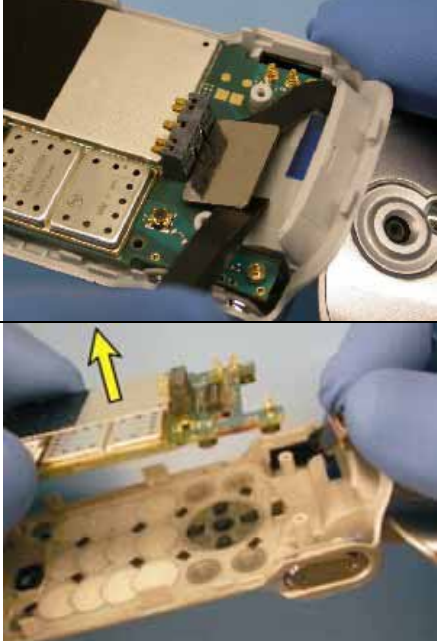
Step-by-Step Instructions	
1. With the phone closed, remove the four screws indicated from the outer lower cover using a torque driver with a T6 Torx® bit.	
2. Open the phone so that the keypad is accessible.	
3. Release the two latches indicated using a pry tool while pulling the inner lower cover away from the system connector.	

Step-by-Step Instructions	
<p>4. Continue to hold the inner lower cover away from the system connector so that the latches just released do not reengage.</p>	
<p>5. Release the next two latches located along the seam of the inner and outer lower covers using a pry tool.</p>	
<p>6. Rotate the end of the outer lower cover that is adjacent to the system connector away from the system connector until the outer lower cover separates from the phone.</p> <p><b>NOTE!</b> Sometimes the antenna assembly falls out when the lower outer cover is removed from the phone.</p>	

## 2.1.5 Circuit Board Removal

All of the sections of the lower portion disassembly preceding this section must be performed in sequential order before the disassembly steps listed below can be performed.

**Tools needed to perform the following steps:** • Pry Tool

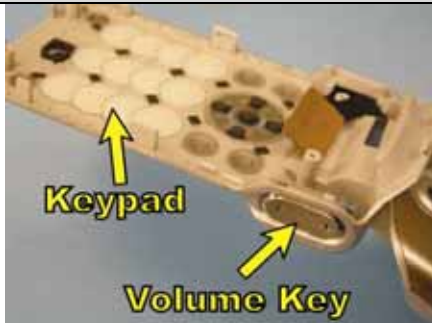
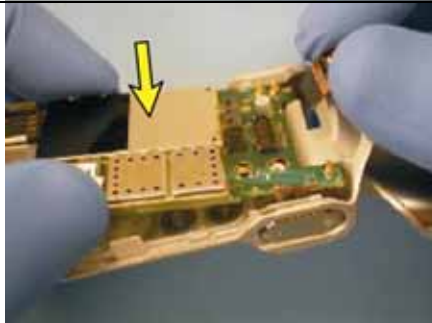

Step-by-Step Instructions	
1. Orient the phone so that the exposed portion of the circuit board is upward.	
2. Release the main flex film connection from the circuit board using a pry tool.	
3. Once the main flex film is disconnected, hold the main flex connection out of the way and lift the circuit board from the inner lower cover.	

## 2.2 Lower Portion Reassembly

The following subsections make up the “Lower Portion Reassembly” procedure. These subsections are arranged in the order that they must be performed to properly reassemble the lower portion of this product.

### 2.2.1 Circuit Board Installation


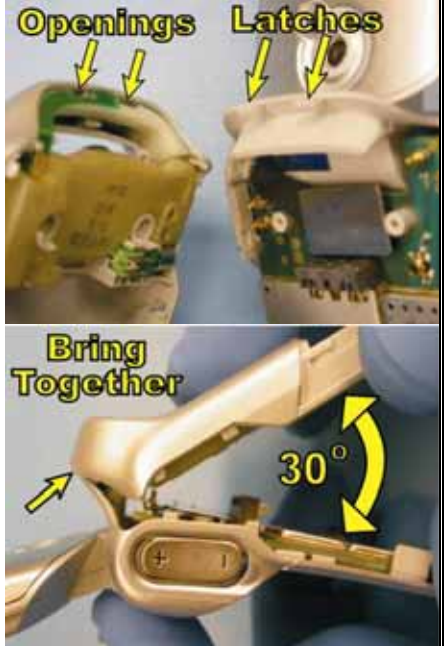

**Tools needed to perform the following steps:** None

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Orient the phone so that the inner surface of the lower inner cover is facing upward.</li> <li>2. Verify that the volume key and the keypad are present and correctly seated in the lower inner cover.</li> </ol>	
<ol style="list-style-type: none"> <li>3. Hold the end of the main flex film out of the way and place the dome array side of the circuit board down on top the keypad so that the circuit board is seated against the lower inner cover.</li> <li>4. Verify that the edge of the circuit board clears the top of the volume key.</li> </ol>	
<ol style="list-style-type: none"> <li>5. Connect the main flex film to its connector on the circuit board.</li> </ol>	



## 2.2.2 Outer Lower Cover Installation

Tools needed to perform the following steps:

- Torque screwdriver
- T6 Torx® bit

Step-by-Step Instructions	
1. Obtain the lower outer cover and verify that the antenna assembly, the Bluetooth antenna, the rear speaker box, and the vibrator are in their correct positions.	
2. Bring the antenna loop portion of the two lower covers together at ~ a 30 degree angle and insert the two latches located on the antenna loop portion of the inner cover into the corresponding openings in the edge of the antenna loop portion of the outer cover.	
3. While holding the edges of the antenna loop portion of the two covers flush together, rotate the raised portion of the outer cover down onto the circuit board so that it mates to the inner cover.	
<p><b>NOTE!</b> You may have to guide the latch feature on each side of the inner cover into their slots on the lower outer cover so that the two covers will snap together correctly.</p>	




<b>Step-by-Step Instructions</b>	
<p>4. Finish snapping the lower inner and outer covers together by squeezing around the seam where the two covers connect.</p> <p><b>NOTE!</b> Inspect the keypad to verify it is still correctly positioned.</p> <p><b>NOTE!</b> Test the volume key to make sure that the response of the key feels correct.</p>	
<p>5. Close the phone so that the keypad is not accessible.</p> <p>a. Using a torque screwdriver set to 19 N·cm with a T6 Torx® bit, install a 1.7 X 4.5mm screw in each of the four locations indicated.</p>	

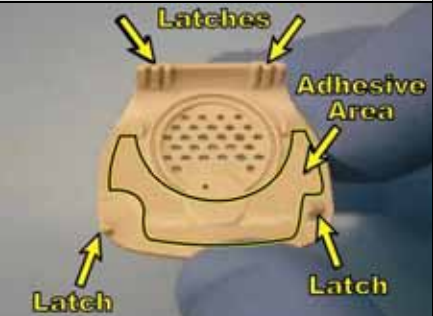



All of the sections of the lower portion reassembly following this section must be performed in sequential order to reassemble the lower portion of the phone.

### 2.2.3 Rear Speaker Cover Installation




**Tools needed to perform the following steps:** • Nylon pointer

<b>Step-by-Step Instructions</b>	
<p>1. With the phone closed, orient the phone so that the rear speaker is towards you.</p> <p>2. Clean the indicated portion of the rear speaker cover's cavity with alcohol and a lint-free wipe.</p>	



Step-by-Step Instructions	
3. Evaluate the latches of the rear speaker cover for damage and evaluate the adhesive for contamination. If any of the latches are damaged or the adhesive is contaminated, use a new rear speaker cover.	
4. Insert the rear speaker cover's curved edge under the antenna loop.	 <p><b>Insert Curved Portion under Antenna Loop</b></p>
5. Let go of the speaker cover so that it lies loosely over the top of its opening.	
6. Gently push the edge of the speaker cover that is adjacent to the battery cavity towards the antenna loop until the portion of the speaker cover that is being pushed drops into its cavity and is flush with the rest of the phone's surrounding outer surface.	






Step-by-Step Instructions	
7. Slide the flat end of a nylon pointer between the speaker cover and the antenna loop	
8. Snap the curved edge of the speaker cover into place by rotating the nylon pointer towards the battery cavity.	
9. Using your thumbs, apply pressure over the area indicated to help bond the rear speaker cover to the lower outer cover.	

All of the sections of the lower portion reassembly following this section must be performed in sequential order to reassemble the lower portion of the phone.

## 2.2.4 Battery Installation

Tools needed to perform the following steps: None

Step-by-Step Instructions	
1. With the label side of the battery oriented away from the phone, insert the end of the battery with contact pads into the slotted end of the battery cavity.	
2. While pushing the battery towards the antenna loop, press the end of the battery you are pushing on down into the battery cavity.	 

All of the sections of the lower portion reassembly following this section must be performed in sequential order to reassemble the lower portion of the phone.

## 2.2.5 Battery Cover Installation

Tools needed to perform the following steps: None

### Step-by-Step Instructions

1. Place the battery cover over the battery.
2. Slide the battery cover towards the antenna loop until the battery cover snaps into place.



## 3 Upper Portion

### 3.1 Upper Portion Disassembly

The following subsections make up the “Upper Portion Disassembly” procedure. These subsections are arranged in the order that they must be performed to properly disassemble the upper portion of this product.

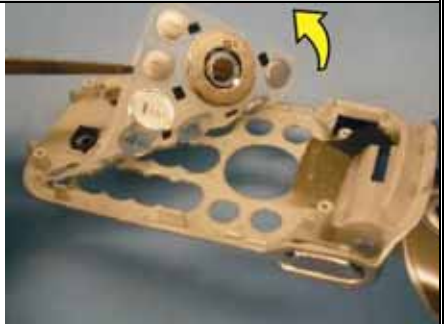
#### 3.1.1 Perform Lower Portion Disassembly

The lower portion of this phone must be disassembled before the upper portion’s disassembly procedure can be performed.

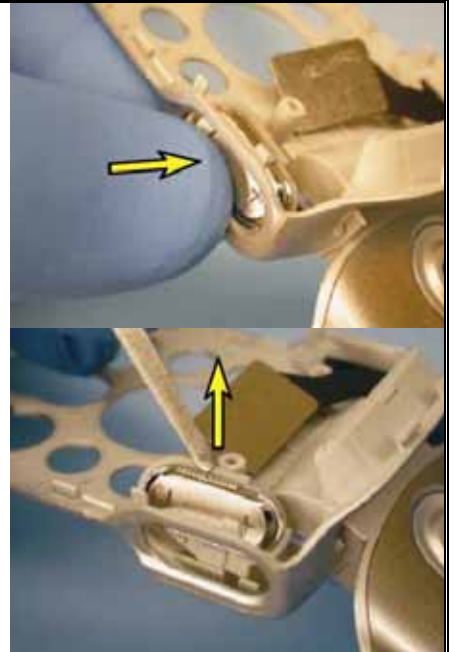
#### 3.1.2 Lower Inner Cover Removal

The sections of the upper portion disassembly preceding this section must be performed in sequential order before the disassembly steps listed below can be performed.

**Tools needed to perform the following steps:** • Style 2A ESD tweezers

Step-by-Step Instructions	
1. Remove the keypad from the lower inner cover and set it aside.	

2. Remove the volume key from its opening in the lower inner cover.



3. Remove the hinge tape by gripping the colored portion of the tape and peeling it off.



**NOTE!** The tip of your style 2A tweezers may become damaged when pushing on the hinge pin.

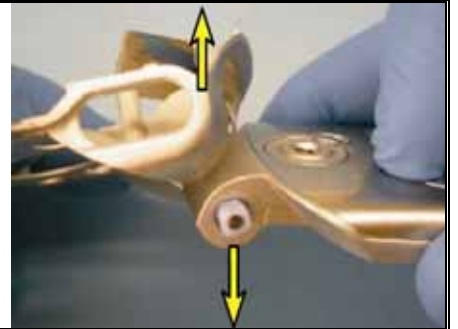
4. Using style 2A tweezers, press the pin portion of the hinge into its opening while pushing on the shoulder of the lower inner cover as shown so that the hinge pin becomes dislodged from its pin hole.







5. Once the hinge pin is dislodged, continue to rotate the side of the lower inner cover in which the hinge pin inserts away from the upper portion of the phone until the hinge joint separates.






6. Work the main flex film through the slot in the lower inner cover so that the lower inner cover is completely separated from the upper portion of the phone.



### 3.1.3 Style-Up Cover Removal

Tools needed to perform the following steps: • Nylon Pointer

Step-by-Step Instructions	
1. Insert the flat edge of a nylon pointer in the location shown in the seam between the style-up cover and upper outer cover.	
2. Rotate the nylon pointer towards the large display while pushing the pointer into the seam so that approximately 1MM of the nylon pointer's tip is under the edge of the style-up cover.	
3. Slide the nylon pointer along the seam until the latch holding that side of the style-up cover disengages.	
4. Repeat the previous three steps to release the other side of the style-up cover from the phone.	

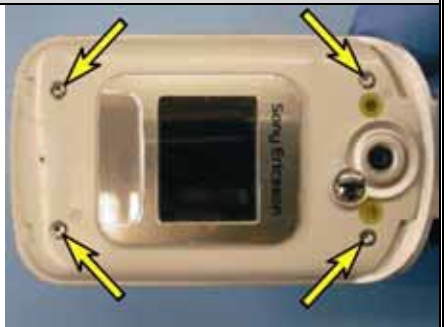
Step-by-Step Instructions	
<p>5. Slightly lift the freed end of the style-up cover and slide the cover away from the hinge to remove the cover from the phone.</p>	

### 3.1.4 Upper Inner Cover Removal

The sections of the Upper Portion Disassembly preceding this section must be performed in sequential order before the disassembly steps listed below can be performed.

**Tools needed to perform the following steps:**

- Torque screwdriver
- T6 Torx® bit
- Nylon Pointer

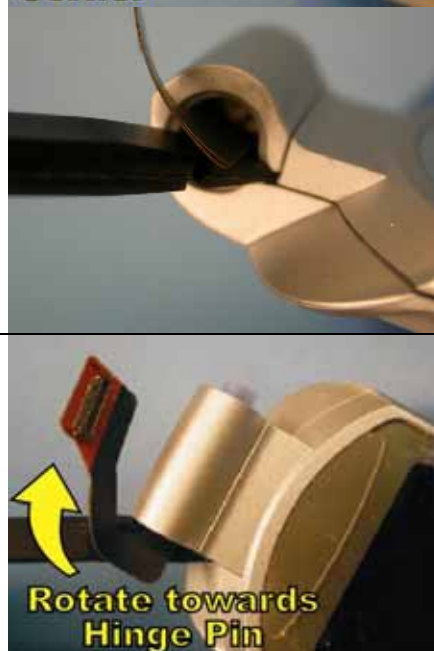
Step-by-Step Instructions	
<p>1. Using a torque driver with a T6 Torx® bit, remove the four screws from the upper outer cover.</p>	

**NOTE!** Do not use a heavily worn nylon pointer when performing the following two steps.

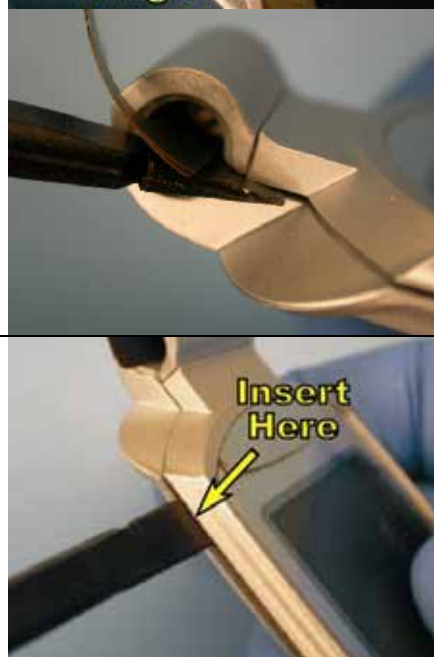
2. Insert the flat end of the nylon pointer in the slot behind the accessible corner of the upper inner cover as shown.



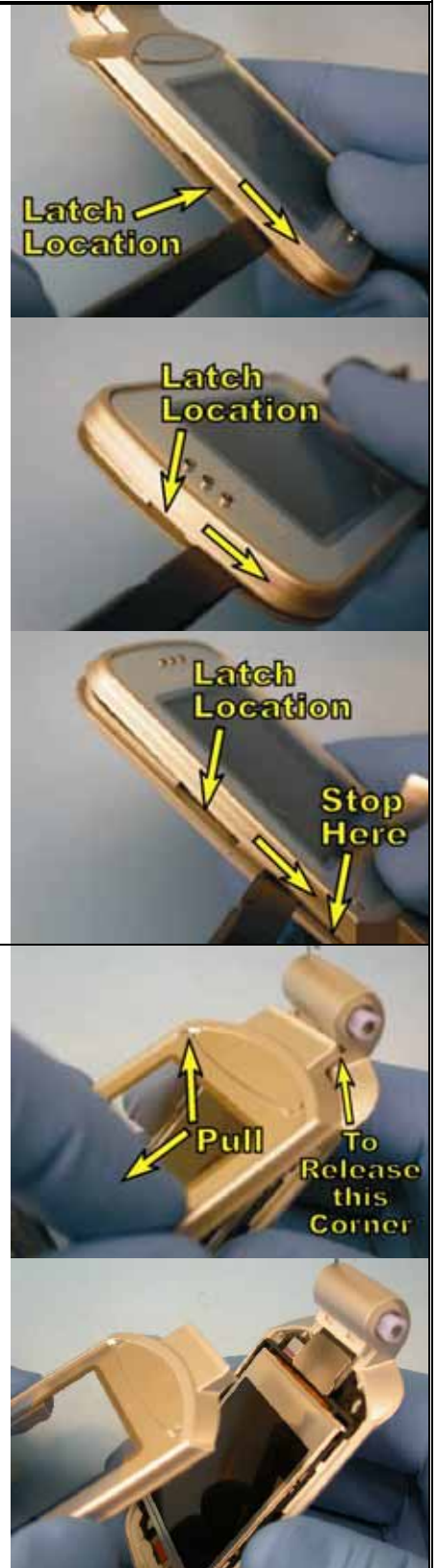
3. Rotate the nylon pointer towards the hinge pin to release the latch holding that corner of the upper inner cover.



4. Insert the flat end of a nylon pointer in the location indicated in the seam where the upper inner cover and the upper outer cover come together.



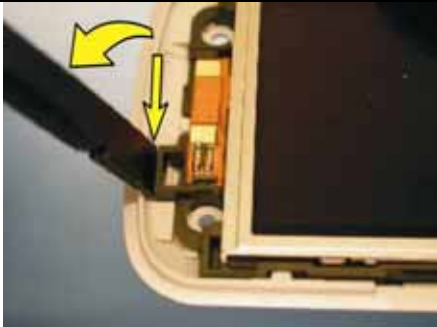

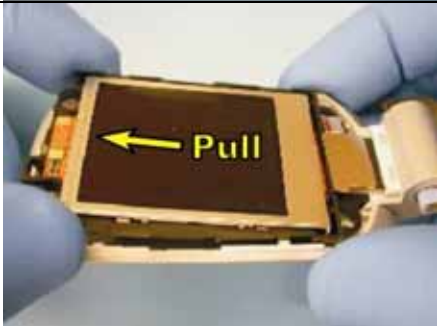

5. Slide the flat end of a nylon pointer along the seam while firmly pressing the tip of the pointer into the seam until the latch located about midway the side releases.
6. Continuing along the seam, repeat the previous step along the other two sides until you reach the location in the seam opposite of where you started.
7. To release the remaining corner of the upper inner cover, lift the upper inner cover directly away from the display and while pulling the upper inner cover directly away from the hinge.
8. Place a protective film over the large display and the inner surface of the upper inner cover's display window.



### 3.1.5 Upper Outer Cover Removal

The sections of the Upper Portion Disassembly preceding this section must be performed in sequential order before the disassembly steps listed below can be performed.

**Tools needed to perform the following steps:** • Pry tool

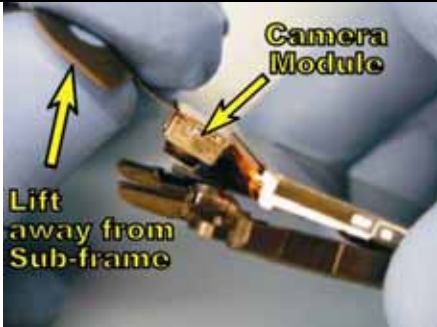


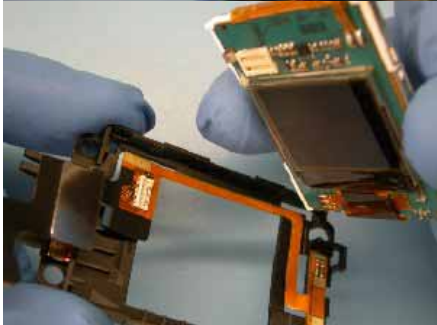
Step-by-Step Instructions	
1. Using a pry tool, lift the end of the LCD frame indicated up out of the upper outer cover so that grip on it can be obtained.	 
2. Pull the gripped end of the LCD frame away from the hinge until LCD frame assembly separates from the upper outer cover.	 



### 3.1.6 LCD Removal

The sections of the Upper Portion Disassembly preceding this section must be performed in sequential order before the disassembly steps listed below can be performed.

**Tools needed to perform the following steps:** • Pry tool

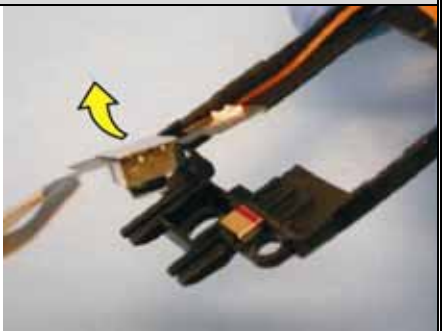
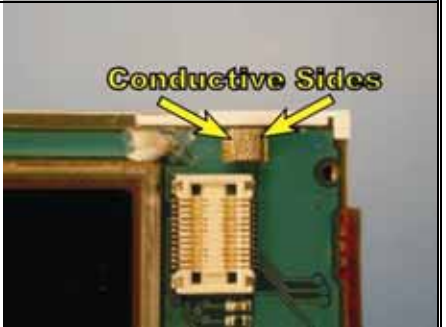
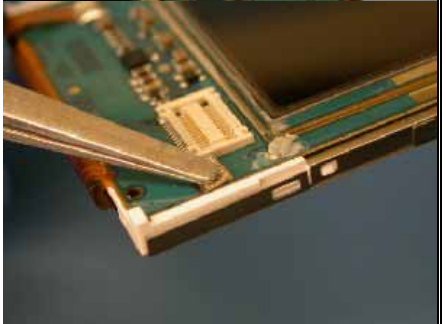
Step-by-Step Instructions	
<p>1. Lift camera module portion of the flex film out of its cavity in the LCD sub-frame.</p> <p><b>NOTE!</b> The end of the LCD assembly closest to the camera module will lift out of the sub-frame when the camera module portion of the flex film is lifted.</p>	
<p>2. Keep the lifted end of the LCD assembly separated from the sub-frame as shown.</p>	
<p>3. Using a pry tool, disconnect the LCD from the flex film and set the LCD aside.</p>	 

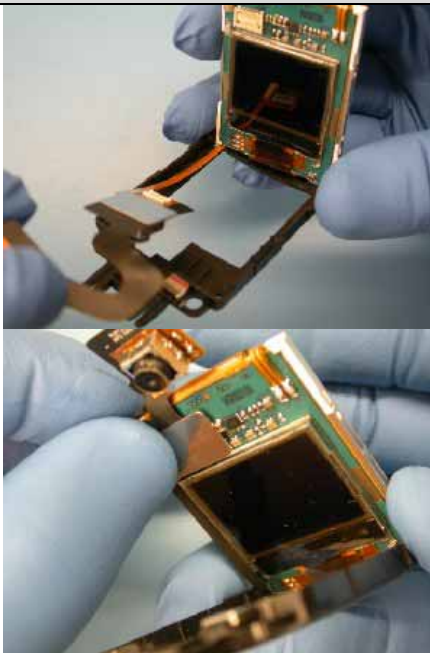

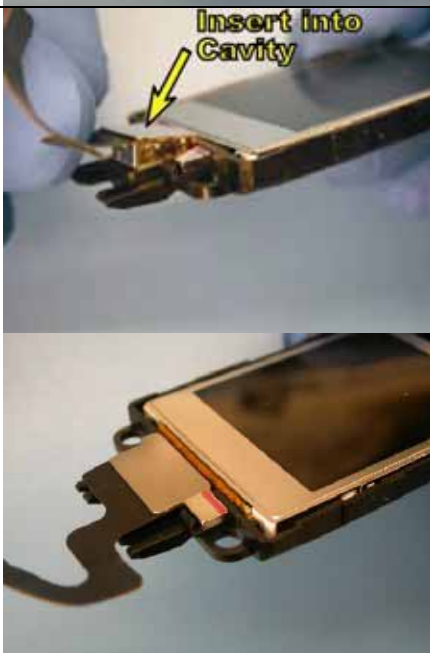
## 3.2 Upper Portion Reassembly


The following subsections make up the “Upper Portion Reassembly” procedure. These subsections are arranged in the order that they must be performed to properly reassemble the upper portion of this product

### 3.2.1 LCD Installation

**Tools needed to perform the following steps:** • Style 2A ESD Tweezers

Step-by-Step Instructions	
1. Obtain the sub-frame/flex film assembly and lift camera module portion of the flex film out of its cavity in the LCD sub-frame.	
2. Obtain the LCD assembly and verify that a conductive gasket is attached to the conductive pad adjacent to the LCD's main flex film connector. If a conductive gasket is not installed: <ol style="list-style-type: none"> <li>Obtain a conductive gasket.</li> <li>Orient the gasket so that its side containing adhesive is towards the conductive pad and the two conductive sides of the gasket are parallel to the shorter sides of the conductive pad.</li> <li>Place conductive gasket centered on the conductive pad.</li> <li>Using tweezers, press the conductive gasket against the conductive pad so that a good bond forms.</li> </ol>	 

Step-by-Step Instructions	
3. Orient the LCD assembly relative to the LCD sub-frame as shown.	
4. Connect the flex film assembly to the LCD assembly as shown.	
5. Insert the LCD assembly into its cavity in the sub-frame.	
6. Insert the camera module into its cavity in the sub-frame.	


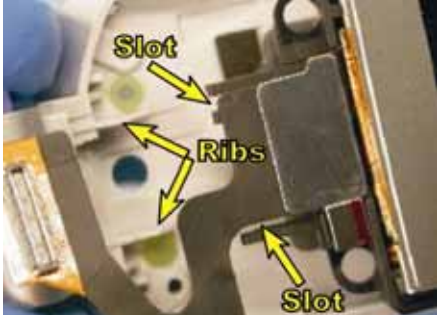
Step-by-Step Instructions	
7. Verify that the camera lenses passes through its hole in the LCD sub-frame.	

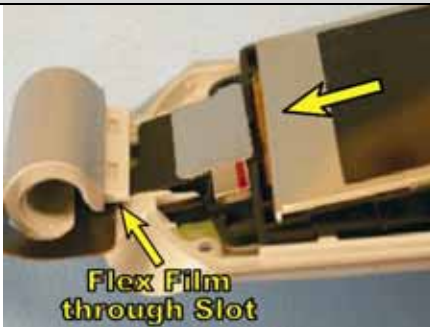
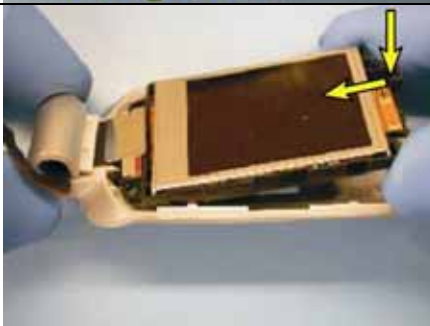

The sections of the upper portion reassembly following this section must be performed in sequential order to reassemble the lower portion of the phone.

### 3.2.2 Upper Outer Cover Installation

If a new part is being used, perform steps of the outer upper cover replacement procedure before performing the following instructions.

**Tools needed to perform the following steps:** None

Step-by-Step Instructions	
1. Obtain an upper outer cover.  <b>NOTE!</b> If present, remove the protective film from its window's inner surface.	
2. Obtain the LCD/sub-frame/flex film assembly.  <b>NOTE!</b> If present, remove the protective films for the small display and the camera lenses.	
3. Align the slots in the sub-frame that are located on each side of the camera module with the corresponding ribs extending from the hinge portion of the upper outer cover.	

Step-by-Step Instructions	
<p>4. Slide the camera end of the sub-frame assembly towards the hinge portion of the upper outer cover so that the slots and the ribs between the two components mate while making sure that the flex film passes through the slot in the wall of the hinge area.</p>	 <p>Flex Film through Slot</p>
<p>5. Insert the other end of the sub-frame assembly inside the upper outer cover.</p>	
<p><b>NOTE!</b> The four screw holes in the upper outer cover should be centered in the four holes located around the edge of the sub-frame.</p>	 <p>Screw Holes in Outer Cover and Sub-frame Should be aligned</p>

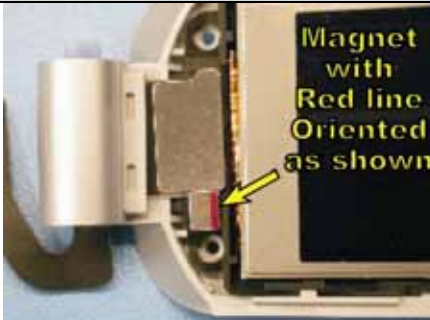





### 3.2.3 Upper Inner Cover Installation

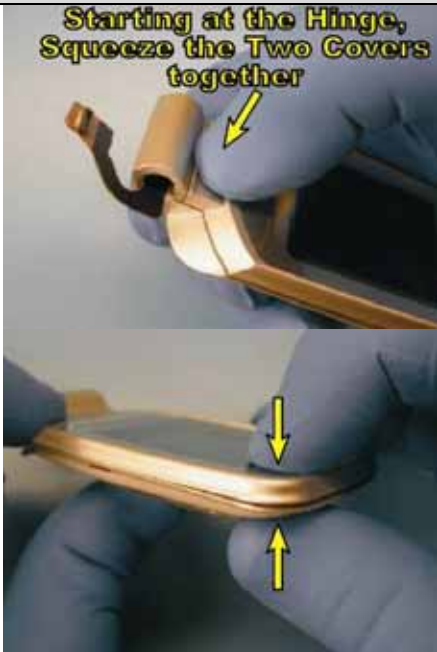


If a new part is being used, perform the steps of the outer upper cover replacement procedure before performing the following instructions.

**Tools needed to perform the following steps:**

- Torque screwdriver
- T6 Torx® bit
- Nylon Pointer

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Verify that a magnet is installed in the sub-frame in the location indicated. If no magnet is present, install one with the red line oriented as shown.</li> <li>2. Remove the protective film for the LCD assembly's large display.</li> </ol>	
<ol style="list-style-type: none"> <li>3. Obtain an upper inner cover and remove the protective film from its window's inner surface.</li> </ol>	
<p><b><i>For W300i and W300c only:</i></b></p> <p>Verify that a piece of mylar tape is installed as shown. If the mylar tape is not present install a piece.</p>	
<ol style="list-style-type: none"> <li>4. Place the upper inner cover on top of the upper outer cover assembly as shown.</li> </ol>	


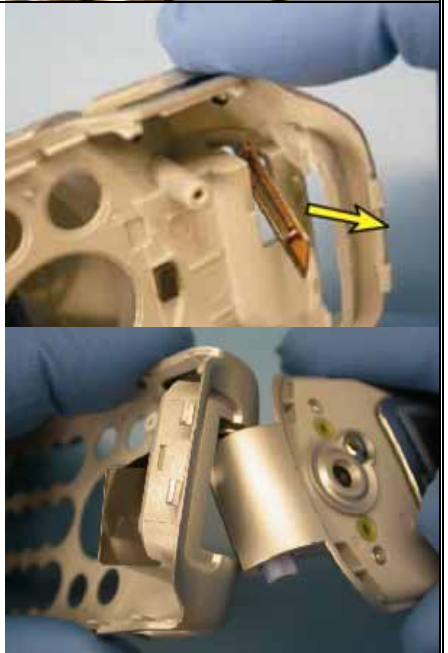



Step-by-Step Instructions	
<p>5. Starting at the hinge, snap together the two covers by squeezing together the seam where the two covers mate.</p>	
<p>6. Insert the flat end of the nylon pointer in the slot behind the accessible corner of the upper inner cover and squeeze together the corner where the two covers first come together so that the latch at that corner engages.</p> <p><b>NOTE!</b> When the two covers are correctly snapped together, the seam should be a consistent size all the way around.</p>	
<p>7. Install a 1.7x4.5mm screw in each of the four screw locations using a torque screwdriver set to 19 N·cm and a T6 Torx® bit.</p> <p>8. If either of the display windows is lacking a protective film, clean the exposed window(s) and add a protective film.</p>	

### 3.2.4 Lower Inner Cover Installation

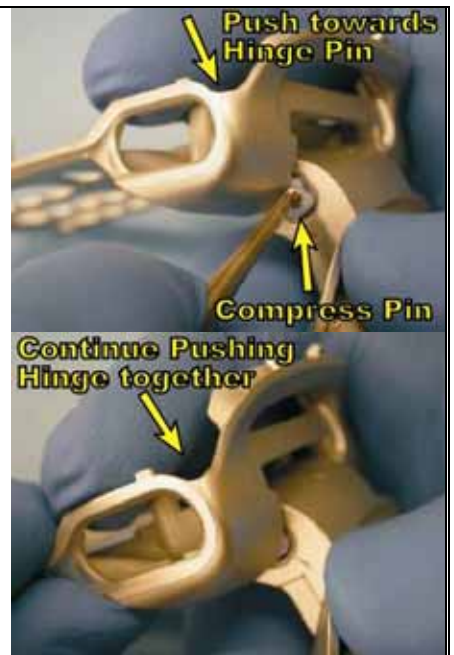
If a new part is being used, perform steps of the lower inner cover replacement procedure before performing the following instructions.

**Tools needed to perform the following steps:**      • Style 2A ESD tweezers

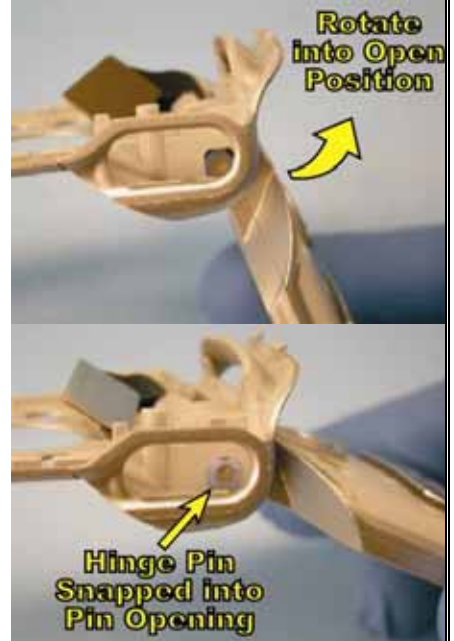
Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Obtain a lower inner cover and the upper half of the phone.</li> <li>2. Position the two components so that their hinge portions are towards one another and the hinge pin and the hinge opening are adjacent as shown.</li> </ol>	 <p>Hinge Pin Hinge Opening</p>
<ol style="list-style-type: none"> <li>3. Work the main flex film through the slot in the lower inner cover until the side of the upper outer cover's hinge portion is against the shoulder portion of the lower inner cover as shown.</li> </ol>	
<ol style="list-style-type: none"> <li>4. Flex the two shoulder portions of the inner lower cover and work the edge of the free end of the upper outer cover's hinge portion between the two shoulders.</li> </ol>	



5. Using the tip of a pair of style 2A tweezers, press in the pin portion of the hinge and finish pushing the hinge portion of the upper assembly between the two shoulders of the lower inner cover.





6. Rotate the upper portion of the phone so that the phone is in the open position and the hinge pin snaps into its pin opening.



7. Install a hinge tape by positioning the colored portion of the tape over the slot in the lower inner cover through which the flex film was inserted.
8. Apply pressure to the tape once it is positioned so that a good bond between tape and the lower inner cover is formed.




<p>9. Obtain the volume key and insert the fin like portion of the volume key's rubber edge into the slot directly below the key opening in the lower inner cover.</p>	
<p>10. Press the exterior portion of the key into the key opening.</p>	

### 3.2.5 Style-Up Cover Installation





**NOTE!** This part does not have to be installed before assembling the lower portion of the phone.

If this part is being replaced, a new part should be used in the place of the old part when performing the following procedure.

**Tools needed to perform the following steps:** None

Step-by-Step Instructions	
<p><b>Note!</b> If the old style-up cover is being reused, inspect the two side latches to verify that they are not broken. If either of the latches are damaged to the point that they will not function, use a new style-up cover.</p>	



Step-by-Step Instructions	
<ol style="list-style-type: none"><li>1. Locate the two tabs on the style-up cover indicated.</li><li>2. Insert these two tabs into the corresponding notches in the end of the upper outer cover indicated and push the end of the style up cover that has just been placed on the upper outer cover towards the hinge portion of the phone.</li></ol>	 
<ol style="list-style-type: none"><li>3. Press the style-up cover onto the upper outer cover until the style-up cover is completely snapped into place.</li></ol>	 

### 3.2.6 Perform Lower Portion Reassembly

The lower portion of this phone must be reassembled to complete the reassembly of a phone.





## **4 Part Replacement**

### **4.1 Battery Cover**

#### **Replacement Procedure**

- Remove the old part by performing section 2.1.1 of the lower portion disassembly.
- Obtain a new part.
- Using the new part, perform section 2.2.5 of the lower portion reassembly.

### **4.2 Battery**

#### **Replacement Procedure**

- Remove the old part by performing sections 2.1.1 – 2.1.2 of the lower portion disassembly.
- Obtain a new part.
- Using the new part, perform sections 2.2.4 - 2.2.5 of the lower portion reassembly.

### **4.3 Rear Speaker Cover**

#### **Replacement Procedure**

- Remove the old part by performing section 2.1.3 of the lower portion disassembly.
- Obtain a new part.
- Using the new part, perform section 2.2.3 of the lower portion reassembly.



## 4.4 Label

### 4.4.1 Label Removal


- Perform sections 2.1.1 – 2.1.2 of the lower portion disassembly procedure

**Tools needed to perform the following steps:**

- \* Style 2A ESD tweezers


- \* Pry tool

- Lint-free wipes

Step-by-Step Instructions	
<p>1. Before removing the label from a phone, print a new label.</p> <p><b>NOTE!</b> The text on the new label must be fully readable and all barcodes must be scannable.</p>	
<p><b>NOTE!</b> The label being replaced only has to be removed if there are two or more labels already on the phone.</p> <p>2. Carefully peel the old label from the bottom of the battery cavity.</p> <p><b>NOTE!</b> Avoid damaging the battery cavity.</p> <p><b>NOTE!</b> Make sure that all adhesive residue is removed. Carefully clean off any remaining residue with alcohol and a lint-free wipe.</p>	

## 4.4.2 Label Installation

Tools needed to perform the following steps: • Style 2A ESD tweezers

Step-by-Step Instructions	
<p><b>NOTE!</b> No more than two labels are allowed stacked on top of each other. If there are already two labels on the phone, perform the label removal procedure before continuing.</p>	
1. If a new label has not been created yet, then do so at this time.	
2. Using tweezers, position the new label in the location indicated.	
3. Once the label is correctly positioned, carefully smooth the label into place.	

- Perform sections 2.2.4 – 2.2.5 of the lower portion reassembly procedure




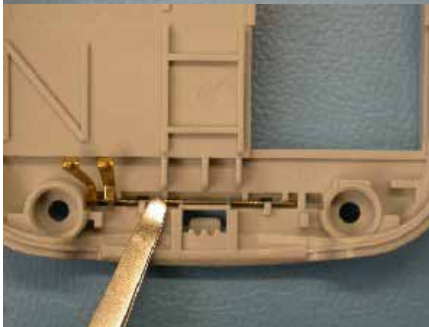
## 4.5 Lower Outer Cover

### Replacement Procedure

- Remove the old part by performing sections 2.1.1 - 2.1.4 of the lower portion disassembly procedure.

#### Tools needed to perform the following steps:

- Style 2A ESD tweezers
- Pry tool

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>Obtain a new lower outer cover.</li> <li>Position the new and old lower outer covers so that their inner surfaces are towards you and the SIM opening is to the lower right.</li> </ol>	
<p><b>NOTE!</b> When installing a Bluetooth antenna, the two tabs that are located along the long portion of the Bluetooth antenna should be located on the left side of the two placement features that overhang the slot.</p>	
<ol style="list-style-type: none"> <li>Obtain a new Bluetooth antenna and insert it into the slot between the two screw holes below the SIM card opening in the new lower outer cover as shown.</li> </ol>	
	



### Step-by-Step Instructions

4. Locate the antenna assembly in the old lower outer cover.

**NOTE!** The antenna assembly may have fallen out of place when the lower outer cover was removed from the phone.

5. Insert a pry tool between the antenna assembly and the lower outer cover at the notch indicated. This releases the antenna assembly from the two latches holding it and slightly lifts the antenna out of the lower outer cover.

6. Grip the lifted portion of the antenna assembly and remove it from the old lower outer cover.

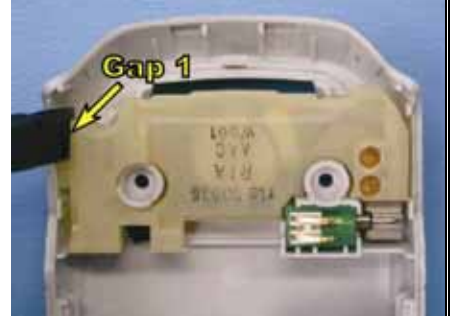
7. Temporarily set the antenna assembly aside.





### Step-by-Step Instructions

8. Insert the flat end a nylon pointer in the gap between the speaker box and the wall of the lower outer cover labeled gap 1.



9. Rotate the nylon pointer away from the speaker box. The latch holding that side of the speaker box in place should release.



10. Insert the flat end a nylon pointer in the gap between the speaker box and the wall of the lower outer cover labeled gap 2.



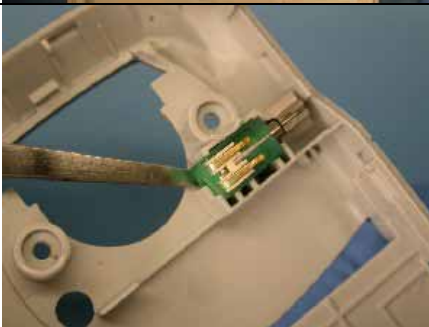



11. Rotate the nylon pointer away from the speaker box. The latch holding that side of the speaker box in place should release.

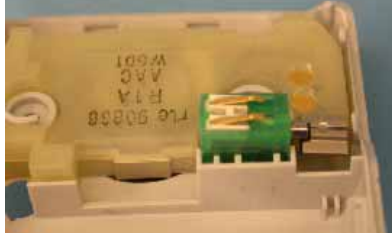
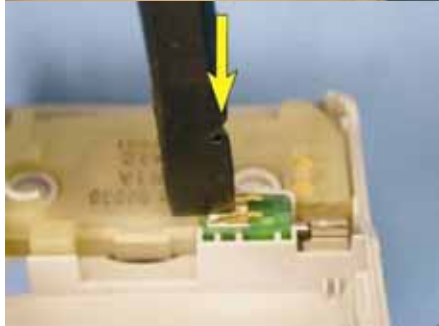



12. Lift the speaker box from the old lower outer cover.



Step-by-Step Instructions	
13. Place the speaker box on top of the new lower outer cover as shown.	
14. Press each end of the speaker box down into the lower outer cover until the latch on each end of the speaker box snaps into place.	
<p><b>NOTE!</b> Be careful not to damage the vibrator contacts when handling the new vibrator.</p> <p>15. Using the tip of a pair of style 2A tweezers lift up on the accessible corner of the vibrator.</p>	
16. Once the vibrator is slightly lifted, slide the tip of the tweezers under the vibrator and lift it out of its cavity.	



Step-by-Step Instructions	
<p>17. Place the vibrator in the vibrator cavity of the new lower outer cover as shown.</p> <p>18. Press the vibrator down into its cavity until it is completely seated.</p>	 
<p>19. Obtain the antenna assembly and insert it in the antenna area of the new lower outer cover as shown.</p>	

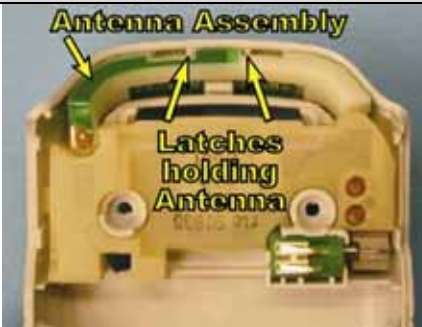



- Perform sections 2.2.2 - 2.2.3 of the lower portion reassembly procedure.
- Create and install a new label. Refer to label installation procedure for detailed instructions.
- If necessary, perform the battery and the battery cover installation procedures (sections 2.2.4 - 2.2.5 of the lower portion reassembly procedure).

## 4.6 Antenna Assembly

### Replacement Procedure

- Perform sections 2.1.1 - 2.1.4 of the lower portion disassembly procedure

**Tools needed to perform the following steps:** • Pry tool

Step-by-Step Instructions	
<p>1. Locate the antenna assembly in the lower outer cover.</p> <p><b>NOTE!</b> The antenna assembly may have fallen out of place when the lower outer cover was removed from the phone.</p>	 <p>Antenna Assembly</p> <p>Latches holding Antenna</p>
<p>2. Insert a pry tool between the antenna assembly and the lower outer cover at the notch indicated. This releases the antenna assembly from the two latches holding it and slightly lifts the antenna out of the lower outer cover.</p>	
<p>3. Grip the lifted portion of the antenna assembly and remove it from the old lower outer cover.</p>	 <p>Grip Lifted Portion</p>
<p>4. Obtain a new antenna assembly and insert it in the antenna area of the lower outer cover.</p>	

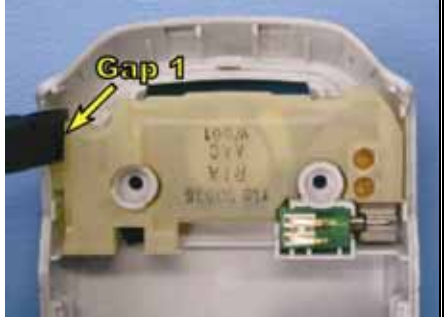



- Perform sections 2.2.2 - 2.2.5 the lower portion reassembly procedure.

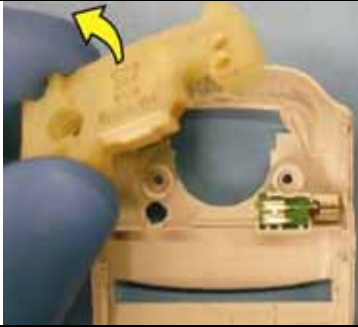


## 4.7 Speaker Box

### Replacement Procedure

- Perform sections 2.1.1 - 2.1.4 of the lower portion disassembly procedure

**Tools needed to perform the following steps:** • Nylon Pointer

Step-by-Step Instructions	
1. Insert the flat end a nylon pointer in the gap between the speaker box and the wall of the lower outer cover labeled gap 1.	
2. Rotate the nylon pointer away from the speaker box. The latch holding that side of the speaker box should release.	
3. Insert the flat end a nylon pointer in the gap between the speaker box and the wall of the lower outer cover labeled gap 2.	
4. Rotate the nylon pointer away from the speaker box. The latch holding that side of the speaker box should release.	

Step-by-Step Instructions	
5. Lift the speaker box from the lower outer cover.	
6. Obtain a new speaker box and place it on top of the lower outer cover as shown.	
7. Press each end of the speaker box down into the lower outer cover until the latch on each end of the speaker box snaps into place.	

- Perform sections 2.2.2 - 2.2.5 the lower portion reassembly procedure.


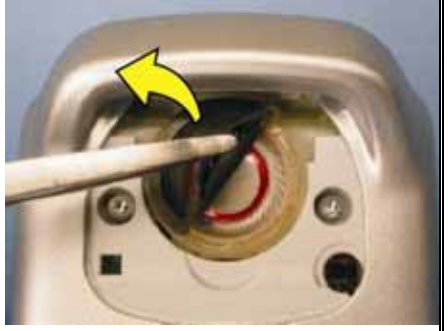
## 4.8 Rear Speaker Cloth


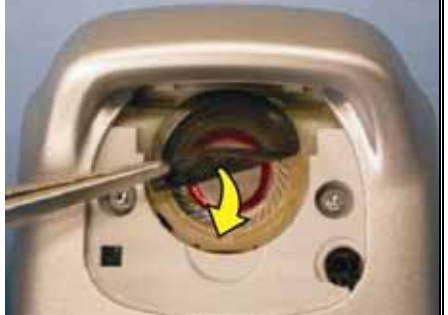

### Replacement procedure

- Perform section 2.1.3 of the lower portion disassembly procedure

**Tools needed to perform the following steps:**

- Style 2A ESD tweezers

Step-by-Step Instructions	
1. Locate the rear speaker cloth.	
<p><b>NOTE!</b> When removing the speaker cloth, be careful not to damage the speaker.</p> <p>2. Using style 2A tweezers, grip the edge of the speaker cloth and peel it off of the phone.</p> <p><b>NOTE!</b> The foam portion of the speaker cloth is likely to separate leaving the adhesive portion of the speaker cloth on the phone.</p>	
3. Remove any portion of the speaker cloth that remained adhered to the phone.	
4. Clean the speaker cloth attachment area with alcohol and a lint-free wipe.	

Step-by-Step Instructions	
<p>5. Obtain a new rear speaker cloth and remove the protective backing.</p> <p>6. Orient the rear speaker cloth so that its adhesive side is towards the phone.</p> <p>7. Place the speaker cloth over the rear speaker using the circular recessed area around the speaker to correctly position the speaker cloth.</p>	 
<p>8. Gently and carefully apply pressure to the foam gasket portion of the speaker cloth so that the speaker cloth forms a good bond.</p>	

- Perform section 2.2.3 of the lower portion reassembly procedure



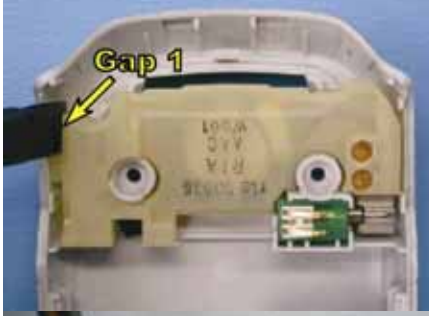

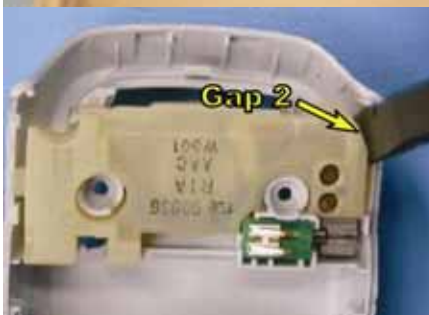

## 4.9 Vibrator


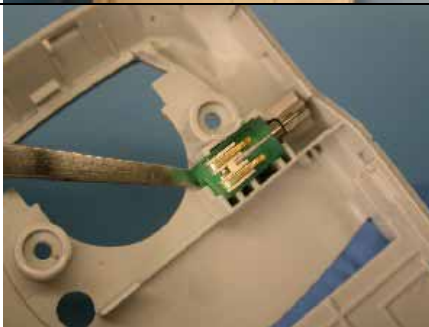



### Replacement Procedure

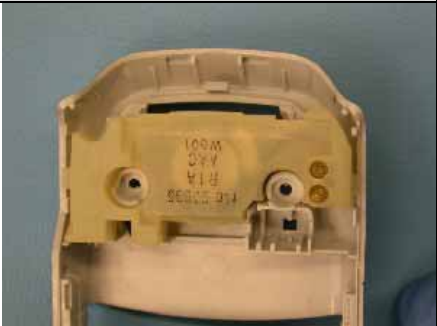

- Perform sections 2.1.1 - 2.1.4 of the lower portion disassembly procedure

#### Tools needed to perform the following steps:

- Nylon Pointer
- Style 2A ESD tweezers

Step-by-Step Instructions	
1. Insert the flat end a nylon pointer in the gap between the speaker box and the wall of the lower outer cover labeled gap 1.	
2. Rotate the nylon pointer away from the speaker box. The latch holding that side of the speaker box in place should release.	
3. Insert the flat end of a nylon pointer in the gap between the speaker box and the wall of the lower outer cover labeled gap 2.	
4. Rotate the nylon pointer away from the speaker box. The latch holding that side of the speaker box in place should release.	

<b>Step-by-Step Instructions</b>	
5. Lift the speaker box from the lower outer cover and set it aside.	
6. Using the tip of a pair of style 2A tweezers, lift up on the accessible corner of the vibrator.	
7. Once the vibrator is slightly lifted, slide the tip of the tweezers under the vibrator and lift it out of its cavity.	
<b>NOTE!</b> Be careful not to damage the vibrator contacts when handling the new vibrator.	
8. Obtain a new vibrator and place it in the vibrator cavity of the lower outer cover.	
9. Press the vibrator down into its cavity until it is completely seated.	

Step-by-Step Instructions	
10. Place the speaker box on top of the lower outer cover as shown.	
11. Press each end of the speaker box down into the lower outer cover until the latch on each end of the speaker box snaps into place.	

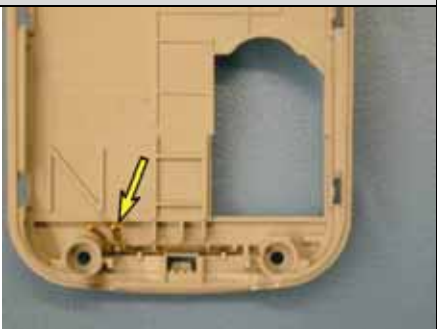
- Perform sections 2.2.2 - 2.2.5 the lower portion reassembly procedure.

## 4.10 Bluetooth Antenna

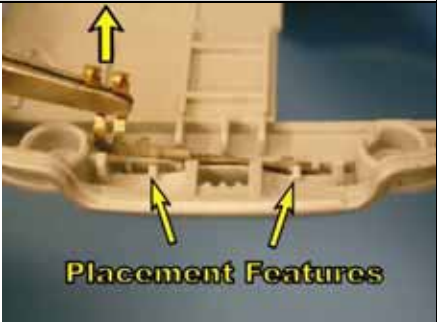



### Replacement Procedure

- Perform sections 2.1.1 - 2.1.4 of the lower portion disassembly procedure.

**Tools needed to perform the following steps:** \* Style 2A ESD tweezers

Step-by-Step Instructions	
1. Position the lower outer cover so that their inner surface is towards you and the SIM opening is to the lower right.	
2. Locate the Bluetooth antenna in the lower outer cover.	



Step-by-Step Instructions	
<p><b>NOTE!</b> When removing the Bluetooth antenna avoid damaging the two placement features that overhang the slot in which the antenna inserts.</p> <p>3. Work the Bluetooth antenna out of its slot.</p>	
<p>4. Obtain a new Bluetooth antenna and orient it so that its contact fingers are located towards the end of the slot furthest away from the SIM card opening.</p>	
<p><b>NOTE!</b> When installing a Bluetooth antenna, the two tabs that are located along the long portion of the Bluetooth antenna should be located on the left side of the two placement features that overhang the slot.</p>	
<p>5. Insert the new Bluetooth antenna into the slot between the two screw holes as shown.</p>	

- Perform sections 2.2.2 - 2.2.5 the lower portion reassembly procedure.

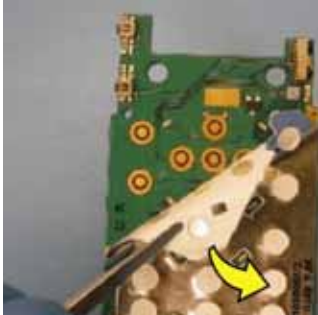
## 4.11 Dome Array

### 4.11.1 Dome Array Removal

- Perform sections 2.1.1 - 2.1.5 of the lower portion disassembly procedure.

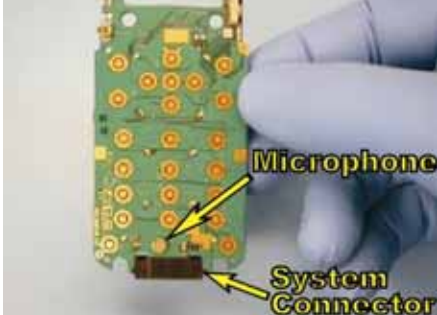
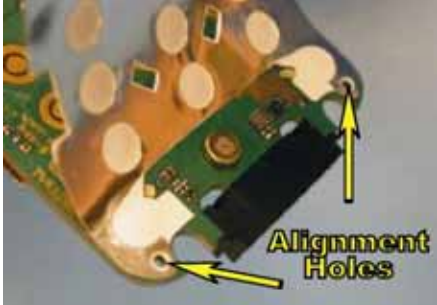
**Tools needed to perform the following steps:**

- \* Style 2A ESD tweezers
- Lint-free wipes

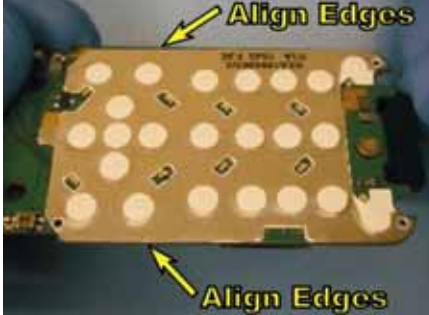
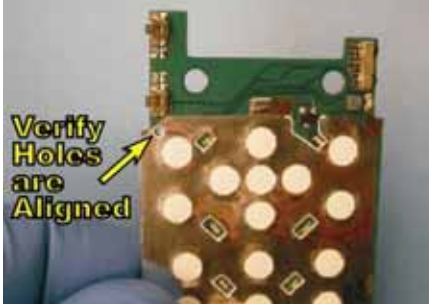
Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Carefully peel off the dome array.</li> </ol> <p><b>NOTE!</b> Be careful not to damage the circuit board.</p> <ol style="list-style-type: none"> <li>2. Clean off any adhesive residue remaining on the board using alcohol and a lint-free wipe.</li> </ol>	

### 4.11.2 Dome Array Installation

**Tools needed to perform the following steps:** None

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Orient the circuit board so that the microphone is located on the side of the circuit board that is towards you and the end of the circuit board containing the system connector is pointing downward.</li> </ol>	
<ol style="list-style-type: none"> <li>2. Obtain a new dome array and remove the protective backing from it.</li> <li>3. Align the two holes in the dome array, that are indicated, with the corresponding holes in the circuit board and place that end of the dome array on the circuit board</li> </ol>	



<b>Step-by-Step Instructions</b>	
<p>4. Using the side edges of the circuit board for alignment, carefully place the remainder of the dome array down onto the circuit board.</p>	
<p>5. Verify the third alignment hole in the dome array is aligned with its corresponding hole in the circuit board.</p> <p>6. Smooth out any air bubbles that may be trapped under the dome array.</p>	

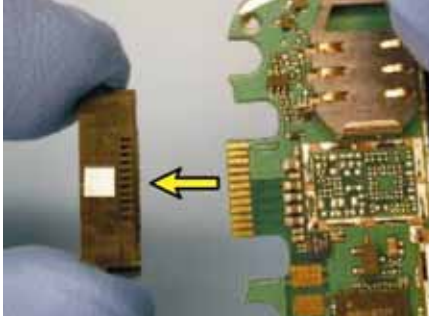
- Perform sections 2.2.1 - 2.2.5 the lower portion reassembly procedure.

## 4.12 System Connector

### 4.12.1 System Connector Removal

- Perform sections 2.1.1 - 2.1.5 of the lower portion disassembly procedure.

**Tools needed to perform the following steps:** None



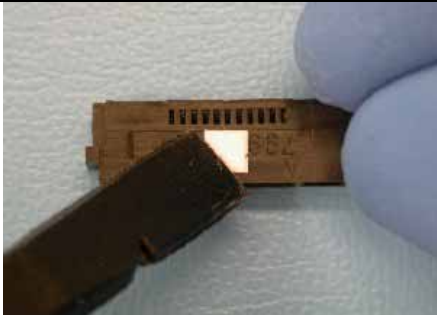
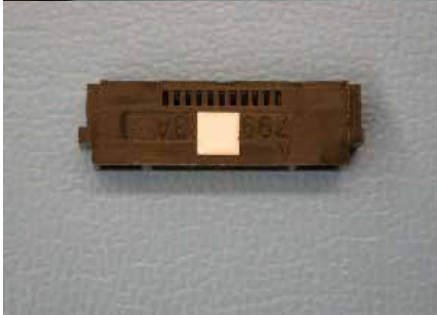
<b>Step-by-Step Instructions</b>	
<p>1. Pull the system connector away from the end of the circuit board.</p>	

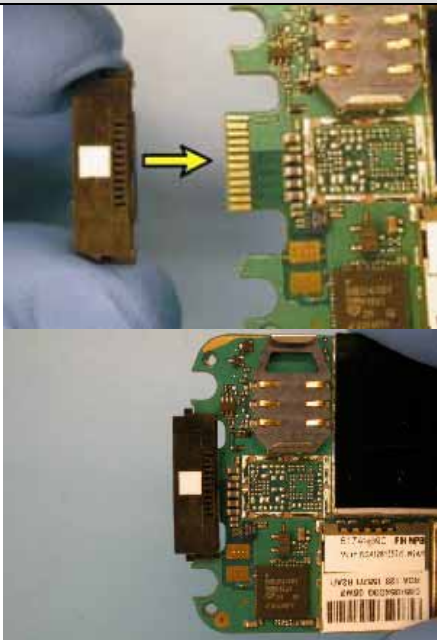


## 4.12.2 System Connector Installation

Tools needed to perform the following steps:

- Pry tool
- Style 2A ESD tweezers

Step-by-Step Instructions	
1. Obtain a new system connector and orient it so that the side of the connector with the row of small holes is oriented towards you and the portion of the connector that is end user accessible is oriented downward.	
2. Using tweezers, obtain a liquid intrusion indicator.	
3. Place the liquid intrusion indicator so that its top edge is just below the row of small holes on the system connector and the indicator is centered on the part from left to right.	
<p><b>NOTE!</b> Do not use your finger to apply pressure to the liquid intrusion indicator. Using a finger to apply pressure may cause partial activation of the label.</p>	
4. Using the flat end of a pry tool, apply gentle pressure to the liquid intrusion indicator to ensure a good adhesive bond to the system connector.	
	

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>5. Orient the circuit board so the contact pads for the system connector are towards you.</li> <li>6. Orient the system connector relative to the circuit board so that side of the system connector with the row of small holes is towards you and the end user accessible portion of the system connector is pointed away from the circuit board.</li> <li>7. Align the row of small holes in the system connector with the row of contact pads on the circuit board and push the connector onto the circuit board until it is completely seated.</li> </ol>	

- Perform sections 2.2.1 - 2.2.5 the lower portion reassembly procedure.

## 4.13 Lower Inner Cover

### Replacement Procedure




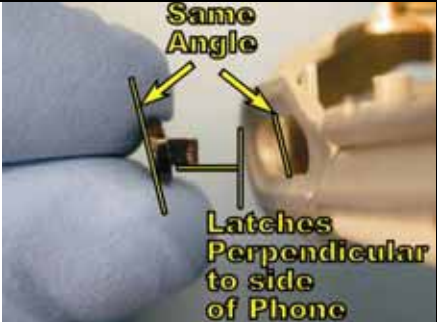
- Perform sections 2.1.1 – 2.1.5 of the lower portion disassembly.
- Perform section 3.1.2 of the upper portion disassembly to remove the old part.
- Obtain a new part.
- Using the new part, perform section 3.2.4 of the upper portion reassembly.
- Perform sections 2.2.1 - 2.2.5 of the lower portion reassembly.

## 4.14 IR Window

### Replacement Procedure

- Perform sections 2.1.1 - 2.1.5 of the lower portion disassembly procedure

**Tools needed to perform the following steps:** • Style 2A ESD tweezers

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Orient the phone so that the hinge portion of the phone is up and the inner surface of the lower inner cover is towards you.</li> <li>2. Locate the two latches holding the IR window in the lower outer cover.</li> </ol>	 <p>Latches holding IR Window</p>
<ol style="list-style-type: none"> <li>3. Using the tip of a pair of style 2A tweezers, release the latches holding the IR window by pressing each of them towards the center of the window.</li> </ol>	 <p>Release Latches Using Style 2A Tweezers</p>
<ol style="list-style-type: none"> <li>4. Once the latches are disengaged, push on the inner surface of the window until it comes out of its opening in the lower inner cover.</li> </ol>	 <p>Push on IR Window once Latches are Released</p>
<ol style="list-style-type: none"> <li>5. Obtain a new IR window.</li> <li>6. Orient the new IR window so that its latch portions are perpendicular to the side of the phone and the angle of the IR window's outer surface corresponds to the angle of the IR window's opening.</li> </ol>	 <p>Same Angle Latches Perpendicular to side of Phone</p>

**Step-by-Step Instructions**

7. Insert the IR window into its opening and press on the IR window until it snaps into its opening.

**NOTE!** When the IR window is correctly installed the contour of the exposed portion of the IR window should correspond to the contour of the lower inner cover around it.






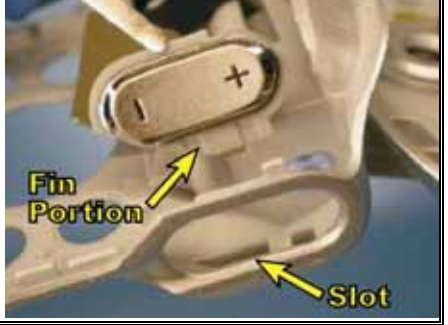
- Perform sections 2.2.1 - 2.2.5 the lower portion reassembly procedure.

## 4.15 Volume Key


### Replacement Procedure

- Perform sections 2.1.1 - 2.1.5 of the lower portion disassembly procedure

**Tools needed to perform the following steps:** • Style 2A ESD tweezers

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Orient the phone so that the inner surface of the lower inner cover is towards you.</li> <li>2. Locate the volume key in the lower outer cover.</li> </ol>	 <p>Volume Key</p>
<ol style="list-style-type: none"> <li>3. Push inward on the outer surface of the volume key.</li> </ol>	
<ol style="list-style-type: none"> <li>4. Using tweezers, grip the rubber portion of the volume key and lift it from the phone.</li> </ol>	
<ol style="list-style-type: none"> <li>5. Obtain a new volume key.</li> <li>6. Orient the new volume key so that the large fin like portion of its rubber edge is towards the lower inner cover and the exterior portion of the key is oriented away from the hinge pin.</li> <li>7. Insert the fin like portion of the volume key's rubber edge into the slot directly below the key opening in the lower inner cover.</li> </ol>	 <p>Fin Portion</p> <p>Slot</p>



Step-by-Step Instructions	
8. Press the exterior portion of the key into the key opening.	 <p>Press the key's exterior portion into its opening</p>


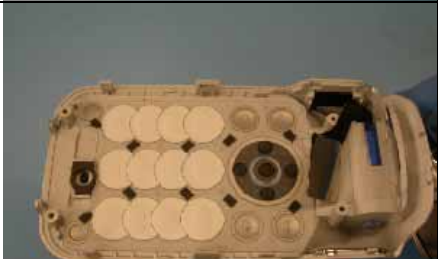
- Perform sections 2.2.1 - 2.2.5 the lower portion reassembly procedure.

## 4.16 Keypad

### Replacement Procedure

- Perform sections 2.1.1-2.1.5 of the lower portion disassembly procedure

**Tools needed to perform the following steps:** \* Style 2A ESD tweezers

Step-by-Step Instructions	
1. Lift the keypad from the inner surface of the lower inner cover.	
1. Obtain a new keypad and place it inside the lower inner cover so that the keys on the keypad insert into their corresponding opening in the lower inner cover.	




- Perform sections 2.2.1-2.2.5 of the lower portion reassembly procedure



## 4.17 Bumper Strip and Microphone Mesh

### Replacement Procedure

Tools needed to perform the following steps: • Style 2A ESD tweezers

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Using style 2A tweezers, peel the bumper strip and microphone mesh from the lower inner cover.</li> <li>2. Remove any remaining adhesive film located at the bumper strip attachment area.</li> <li>3. Clean the bumper strip attachment area with alcohol and a lint-free wipe.</li> </ol>	 <p>Remove Bumper Strip</p>  <p>Clean recess area of adhesive residue</p> <p>Remove Microphone Mesh</p>
<ol style="list-style-type: none"> <li>4. Orient the new bumper strip assembly so that the microphone mesh will cover the microphone opening in the lower inner cover when the bumper strip is installed.</li> </ol>	

### Step-by-Step Instructions

5. Using tweezers place one end of the new bumper strip into its recessed area on the lower inner cover.

**NOTE!** Make sure when placing the end of the new bumper strip that the placement features between the bumper strip and the lower inner cover are properly aligned.

6. Place the remainder of the new bumper strip into its recessed area and make sure that the placement features are properly aligned.
7. Apply pressure to the bumper strip so that a good bond forms.



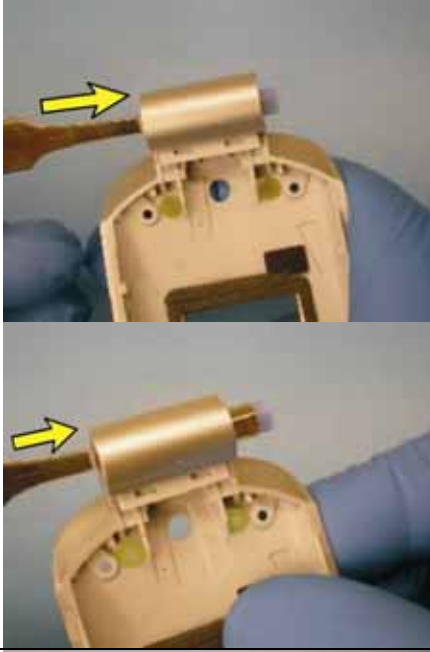

- No other reassembly required




## 4.18 Upper Outer Cover

### Replacement Procedure

- Perform sections 3.1.1 – 3.1.5 of the upper portion disassembly.

**Tools needed to perform the following steps:** • Style 2A ESD tweezers

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Locate the hinge in the old upper outer cover.</li> <li>2. Push the hinge out of the cavity in which it is located by pressing on the accessible portion of the back end of the hinge using a pair of style 2A tweezers.</li> </ol>	
<ol style="list-style-type: none"> <li>3. Obtain a new upper outer cover and locate its hinge cavity.</li> </ol>	

Step-by-Step Instructions	
<p>4. Insert the nonrectangular end of the hinge into the upper outer cover's hinge cavity.</p>	
<p>5. Press the hinge into the hinge cavity until the only portion of the hinge outside of the hinge cavity is the rectangular hinge pin.</p>	
	



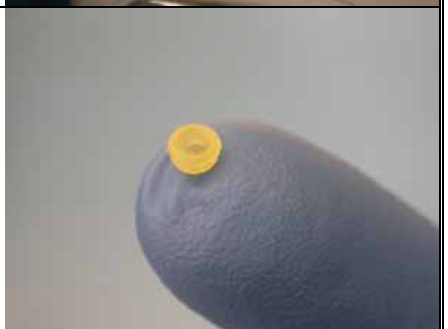
- Perform sections 3.2.2 - 3.2.6 of the upper portion reassembly.

## 4.19 Rubber Plugs that hold the Style-Up Cover

### Replacement Procedure

- Perform section 3.1.3 of the upper portion disassembly.

**Tools needed to perform the following steps:** • Style 2A ESD tweezers

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Orient the phone so that the upper outer cover is towards you.</li> <li>2. Locate the two rubber plugs on each side of the camera lens.</li> </ol>	
<ol style="list-style-type: none"> <li>3. Using style 2A tweezers, remove the rubber plug(s) that needs replacement.</li> </ol>	
<ol style="list-style-type: none"> <li>4. Obtain a new rubber plug and orient it so that the side of the plug with the hole in it is pointed away from the upper outer cover.</li> </ol>	

**Step-by-Step Instructions**

5. Insert the rubber plug in the upper outer cover's unoccupied plug hole.
6. Press the plug down into the hole until the rubber plug is seated in the upper outer cover as shown.

**NOTE!** When the plug is installed correctly, the visible portion of the plug should appear round in shape.

7. If both rubber plugs are being replaced, repeat the previous three steps to install the other rubber plug.



- Perform section 3.2.5 of the upper portion reassembly.

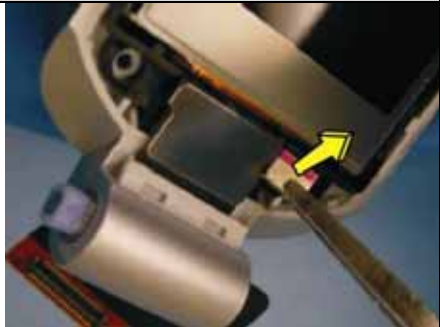


## 4.20 Magnet

### 4.20.1 Magnet Removal

- Perform sections 3.1.1 - 3.1.4 of the Upper portion Disassembly

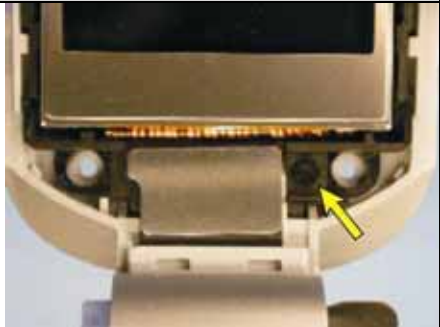
**Tools needed to perform the following steps:** • ESD tweezers

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Locate the magnet and remove it from its cavity in the LCD sub-frame using tweezers.</li> </ol> <p><b>NOTE!</b> When handling the magnet, avoid contaminating the adhesive film that is on one side of the magnet.</p>	

### 4.20.2 Magnet Installation

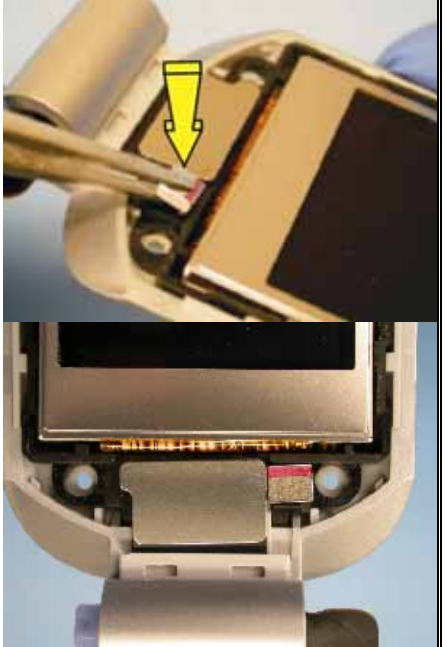
If this part is being replaced, a new part should be used in the place of the old part when performing the following steps.

**Tools needed to perform the following steps:** • ESD tweezers

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Locate the cavity for the magnet in the LCD sub-frame.</li> </ol>	



Step-by-Step Instructions	
<b>NOTE!</b>	Avoid contaminating the magnet's adhesive film when handling the magnet.
<b>NOTE!</b>	If a new magnet is being used, remove the protective covering from the adhesive on the magnet.
2.	Insert the magnet into its cavity so that the stripped edge is towards the LCD as shown.
3.	Press on the magnet so that it forms a good bond to the LCD sub-frame.



- Perform sections 3.2.3 - 3.2.6 of the Upper Portion Reassembly procedure.

## 4.21 LCD Assembly

### Replacement Procedure

- Remove the old LCD assembly by performing sections 3.1.1– 3.1.6 of the upper portion disassembly.
- Obtain a new LCD assembly.
- Install the new LCD Assembly by performing sections 3.2.1– 3.2.6 of the upper portion reassembly.




## 4.22 Receiver




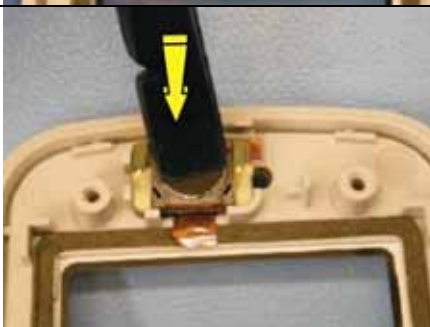
### Replacement Procedure

- Perform sections 3.1.1-3.14 of the upper portion disassembly.

#### Tools needed to perform the following steps:

- Pry tool
- ESD tweezers

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Place a protective film over the inner surface of the upper inner cover's display window, if one is not already present.</li> <li>2. Using a pry tool, pry the old receiver from its location on the upper inner cover.</li> </ol>	
<ol style="list-style-type: none"> <li>3. Remove the conductive foil to which the old receiver was attached from the upper inner cover.</li> </ol> <p><b>NOTE!</b> Be careful not to damage the gasket around the display window when removing the conductive foil.</p>	
<ol style="list-style-type: none"> <li>4. Clean the area that the conductive foil was just removed from with alcohol and a lint-free wipe to remove any remaining adhesive.</li> <li>5. Install a new conductive foil in the area of the upper inner cover where the old foil was located.</li> <li>6. Wipe the top of the conductive foil with alcohol.</li> </ol>	

Step-by-Step Instructions	
<p><b>NOTE!</b> Avoid damaging the receiver's contact springs when placing the receiver.</p> <p>7. Obtain a new receiver and remove the protective film from its adhesive ring.</p> <p>8. Position the receiver over the conductive foil so that receiver's adhesive gasket is towards the upper inner cover and the tips of receiver's spring fingers are pointing towards the display window.</p> <p>9. Place the receiver within its positioning features on the upper inner cover.</p>	   <p>Positioning Features</p>
<p>10. Press the receiver against the upper inner cover to ensure a good adhesive bond between the parts.</p>	

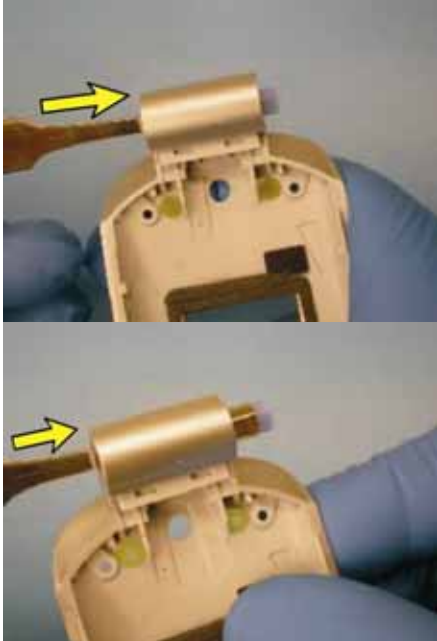
- Perform sections 3.2.3-3.2.6 of the upper portion reassembly.

## 4.23 Hinge

### Replacement Procedure

- To remove the old part, perform sections 3.1.1 – 3.1.5 of the upper portion disassembly.

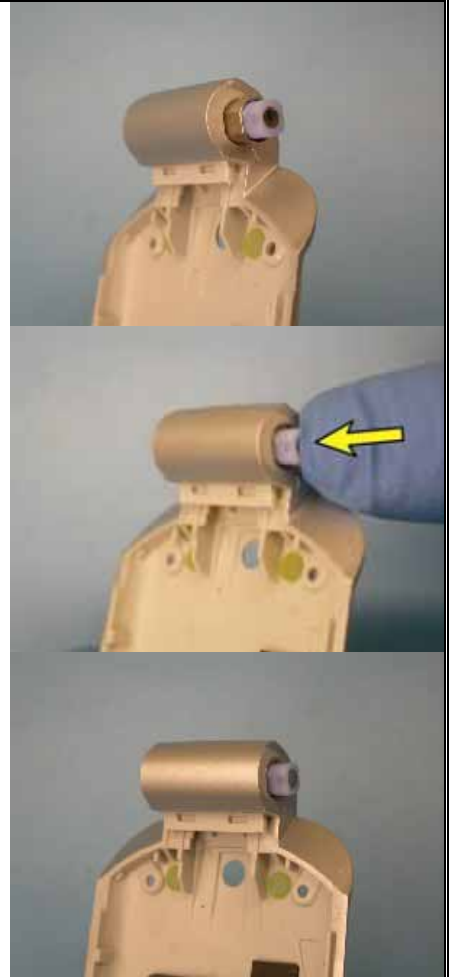
**Tools needed to perform the following steps:**      • Style 2A ESD tweezers

Step-by-Step Instructions	
<ol style="list-style-type: none"><li>1. Locate the hinge in the upper outer cover.</li><li>2. Push the hinge out of the cavity in which it is located by pressing on the accessible portion of the back end of the hinge using a pair of style 2A tweezers.</li></ol>	



### Step-by-Step Instructions

3. Obtain a new hinge and insert the nonrectangular end of the hinge into the upper outer cover's hinge cavity.
4. Press the hinge into the hinge cavity until rectangular end of the hinge is the only portion outside of the hinge cavity.



- Perform sections 3.2.2 - 3.2.6 of the upper portion reassembly.






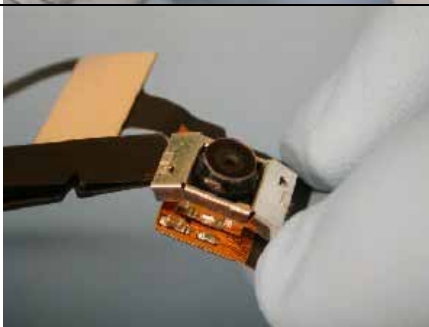
## 4.24 Main Flex Film

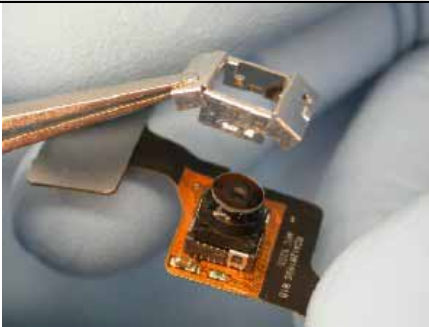
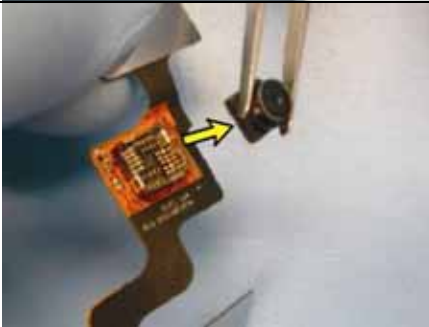
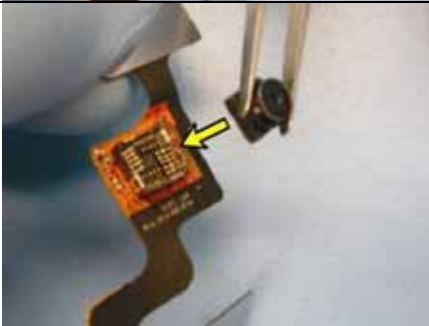
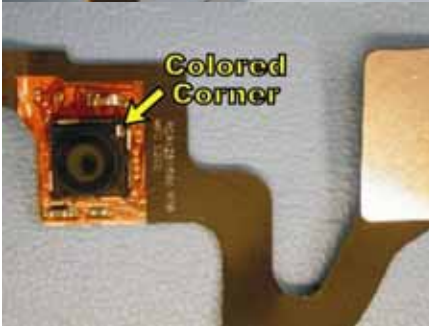

### Replacement Procedure

- Perform sections 3.1.1 - 3.1.6 of the Upper Portion Disassembly Procedure.

#### Tools needed to perform the following steps:

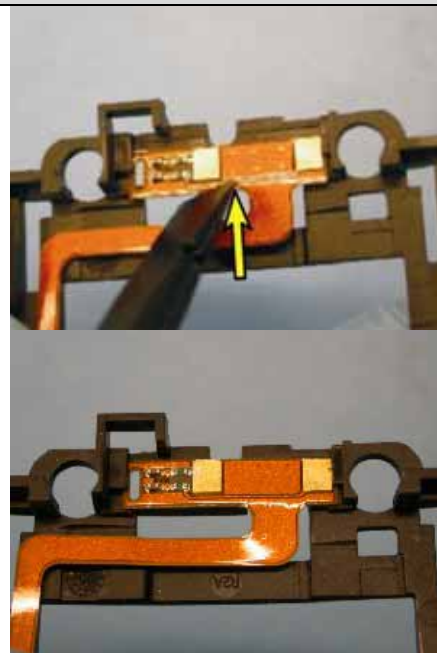
- Pry Tool
- ESD tweezers

Step-by-Step Instructions	
1. Slide the flat end of a pry tool between the receiver portion of the main flex film and the LCD sub frame and pry the two components apart.	 
2. Once the main flex film is disconnected, lift main flex film from the LCD assembly.	
3. Carefully unfold the camera shield cover to release it from the camera connector.  <b>NOTE!</b> The camera shield cover should not be reused.	

Step-by-Step Instructions	
4. Lift the unfolded shield cover from over the camera module.	
5. Remove the camera module from the old flex film.	
6. Obtain a new main flex film and a new shield cover.	
7. Place the camera module in the camera socket of the new flex film so that the colored corner of the camera module is positioned as shown.	
8. Place the new shield cover over the camera module and press down on it so that it snaps over the camera socket.	

**Step-by-Step Instructions**

9. Using a pry tool, slide the receiver connection portion of the flex film under the ledges located at each end of its slot in the sub-frame.



- Perform sections 3.2.1 - 3.2.6 of the Upper Portion Reassembly Procedure.



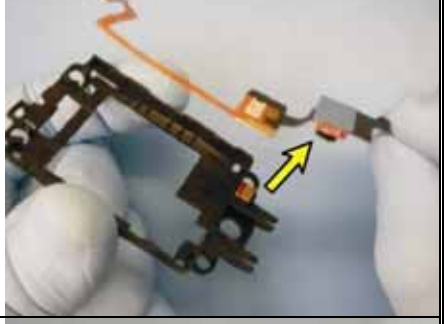
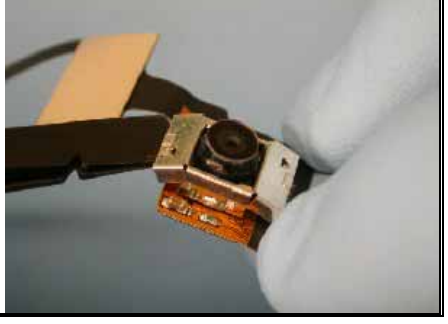
## 4.25 Camera Module

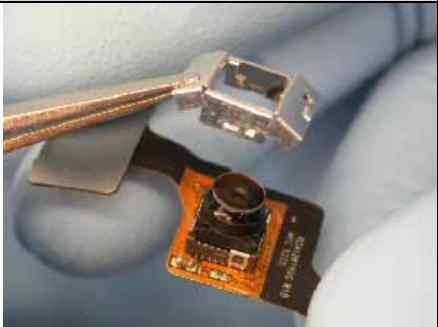
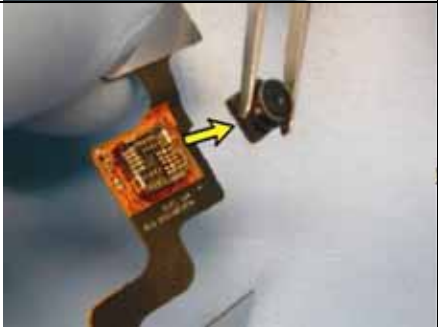
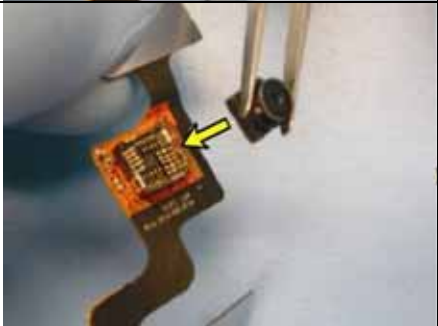
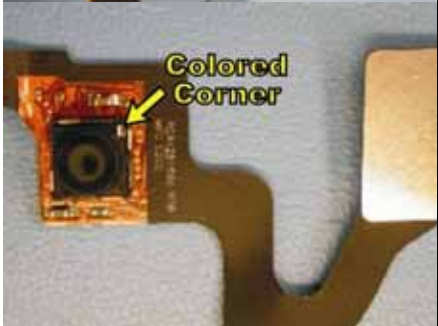

### Replacement Procedure

- Perform sections 3.1.1 - 3.1.6 of the Lower portion Disassembly Procedure.

**Tools needed to perform the following steps:**

- Pry Tool
- ESD tweezers

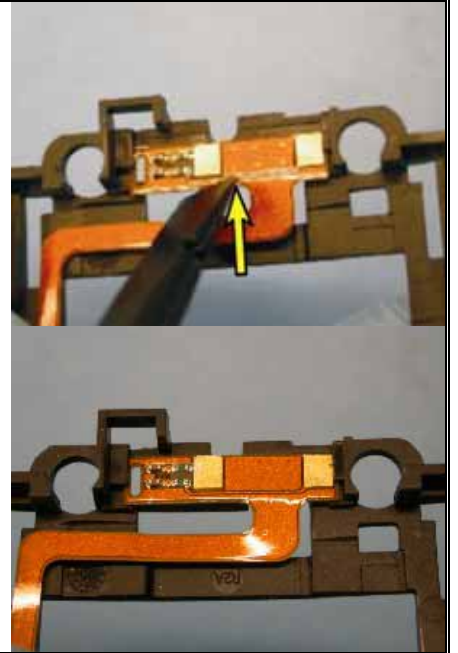
Step-by-Step Instructions	
1. Slide the flat end of a pry tool between the receiver portion of the main flex film and the LCD sub frame and pry the two components apart.	 
2. Once the main flex film is disconnected, lift main flex film from the LCD assembly.	
3. Carefully unfold the camera shield cover to release it from the camera connector. <b>NOTE!</b> The camera shield cover should not be reused.	

Step-by-Step Instructions	
4. Lift the unfolded shield cover from over the camera module.	
5. Remove the camera module from the flex film.	
6. Obtain a new camera module and a new shield cover.	
7. Place the new camera module in the camera socket so that the colored corner of the camera module is positioned as shown.	
8. Place the new shield cover over the camera module and press down on it so that it snaps over the camera socket.	



### Step-by-Step Instructions

9. Using a pry tool, slide the receiver connection portion of the flex film under the ledges located at each end of its slot in the sub-frame.



- Perform sections 3.2.1 - 3.2.6 of the Upper Portion Reassembly Procedure.




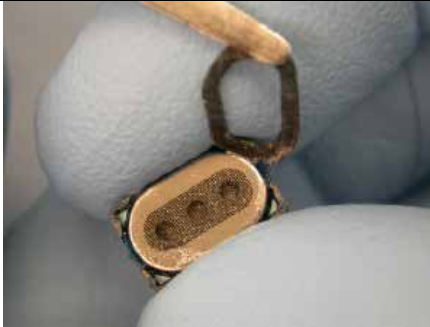
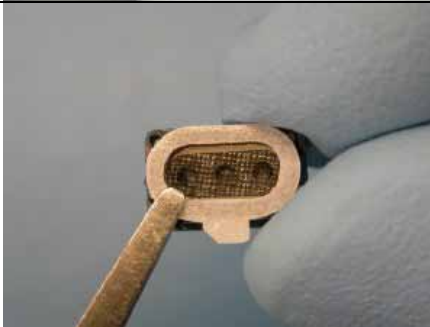

## 4.26 Upper Inner Cover

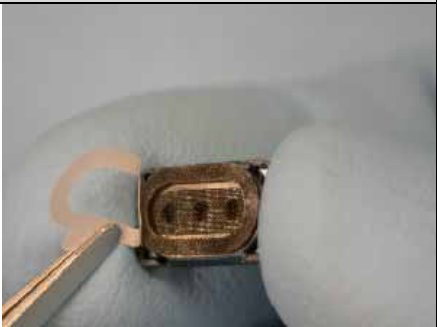


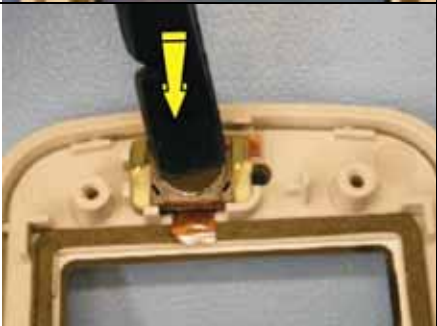
### Replacement Procedure

- Perform sections 3.1.1 - 3.1.4 of the Upper Portion Disassembly Procedure.

#### Tools needed to perform the following steps:

- Style 2A ESD tweezers
- Pry tool

Step-by-Step Instructions	
<p><b>NOTE!</b> Avoid damaging the receiver's contact springs when handling the receiver.</p> <p>1. Using a pry tool, carefully pry the receiver from its location on the old upper inner cover.</p>	
<p>2. Using tweezers, carefully remove the portion of the receiver gasket remaining on the receiver.</p> <p>3. Remove any remaining adhesive from the area on the receiver where the receiver gasket mounts.</p>	
<p>4. Install a new receiver gasket on receiver as shown.</p>	
<p>5. Obtain a new upper inner cover.</p> <p>6. Place a protective film over the inner surface of the upper inner cover's display window, if one is not present.</p> <p>7. Wipe the top of the conductive foil with alcohol.</p>	

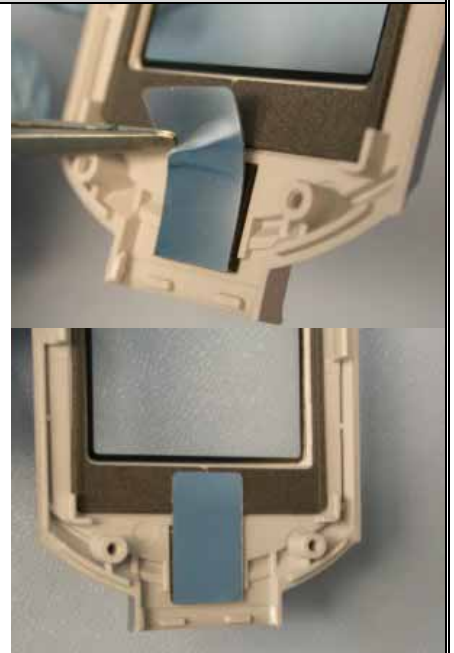
Step-by-Step Instructions	
8. Remove the protective film from receiver gasket.	
9. Position the receiver over the conductive foil so that receiver gasket is towards the upper inner cover and the tips of receiver's spring fingers are pointing towards the display window.	
10. Place the receiver within its positioning features on the new upper inner cover.	
11. Press the receiver against the upper inner cover to ensure a good adhesive bond between the parts.	



### Step-by-Step Instructions

*For W300i and W300c only:*

Install a piece of mylar tape over the two gaskets on the upper inner cover as shown.




- Perform sections 3.2.3 - 3.2.6 of the Upper Portion Reassembly Procedure.

## 4.27 Outer Co-Brand Label

### 4.27.1 Outer Co-Brand Label Removal

Tools needed to perform the following steps:



- \* Style 2A ESD-safe tweezers
- \* Pry tool
- Lint-free wipes

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Locate the co-brand label area on the upper outer cover.</li> <li>2. Peel the co-brand label from its recessed area on the upper outer cover.</li> </ol> <p><b>NOTE!</b> Be careful not to scratch the upper outer cover when removing the co-brand label.</p>	

### 4.27.2 Outer Co-Brand Label Installation

Tools needed to perform the following steps:

- Style 2A ESD tweezers

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Using alcohol and a lint-free wipe, clean the co-brand label area on the upper outer cover.</li> </ol> <p><b>NOTE!</b> Use tweezers to handle the new co-brand label to avoid contamination of its adhesive.</p>	
<ol style="list-style-type: none"> <li>2. Using tweezers, mount a new co-brand label in the designated area.</li> </ol> <p><b>NOTE!</b> Make sure that all edges of the co-brand label are within the recessed area designated for it.</p>	
<ol style="list-style-type: none"> <li>3. Once the co-brand label is correctly positioned, carefully smooth the label into place.</li> </ol>	

- No other reassembly required


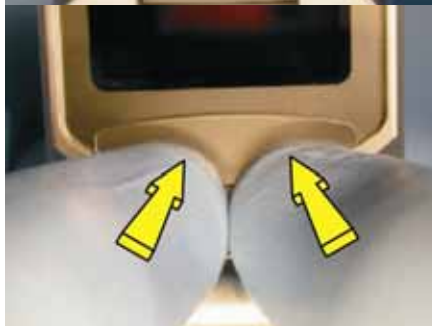

## 4.28 Inner Co-Brand Label

### 4.28.1 Inner Co-Brand Label Removal

The inner co-brand label cannot be removed without damaging the upper inner cover's display window. Therefore, if the inner co-brand label requires replacement, a new upper inner cover must be installed and then a new inner co-brand label can be installed.

### 4.28.2 Inner Co-Brand Label Installation

Tools needed to perform the following steps: None

Step-by-Step Instructions	
<ol style="list-style-type: none"> <li>1. Using alcohol and a lint-free wipe, clean the co-brand label area on the upper inner cover.</li> <li>2. Remove the protective backing from the inner co-brand label.</li> <li>3. Insert the new inner co-brand label in the indicated area.</li> </ol>	
<p><b>NOTE!</b> When the inner co-brand label is correctly installed, the surface of the co-brand will be flush with the surface of the display window adjacent to it.</p>	
<ol style="list-style-type: none"> <li>4. Once the co-brand label is correctly placed, carefully apply pressure over the entire label so that a good bond forms.</li> </ol>	

- No other reassembly required

## 4.29 Style-Up Cover

### Replacement Procedure

- Remove the old part by performing section 3.1.3 of the upper portion disassembly.
- Obtain a new part.
- Using the new part, perform section 3.2.5 of the upper portion reassembly.

## 4.30 LCD Sub-frame

### Replacement Procedure

- Remove the old LCD sub-frame by performing sections 3.1.1– 3.1.6 of the upper portion disassembly.
- Obtain a new LCD sub-frame.
- Remove the magnet from the old LCD sub-frame by following the magnet removal procedure.
- Install the magnet in to the new sub-frame by following the magnet installation procedure.
- Using the new LCD sub-frame, perform sections 3.2.1– 3.2.6 of the upper portion reassembly.

## 5 Revision History

Rev.	Date	Changes / Comments
A	2006-March 20	Initial Release
B	2006-March 27	Document size decreased
C	2006-April 26	<ul style="list-style-type: none"> <li>• Added W300i and W300c to the “Applicable for” section</li> <li>• Included a step to add Mylar tape to upper inner cover when replacing it on a W300 product.</li> <li>• Changed rear speaker cover removal to use new rear speaker cover removal tool.</li> </ul>
D	2006-June 19	<ul style="list-style-type: none"> <li>• Fixed minor typos</li> <li>• Change the screw descriptions from 1.6x6.1MM to 1.7x4.5MM</li> </ul>