

Working Instruction, Mechanical

Applicable for Z520a, Z520i, and Z520c

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1 General

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 throughout this document as the base portion of the phone. The portion of the phone that contains the displays will be referred to as the flip portion of the phone. The basic disassembly and reassembly procedures will be structured based on these two distinct portions.

General Notes:

- When handling this product take care to keep all surfaces clean of dirt, dust, debris, and hand grease. 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.
- Any time one of the screen portions of the display assembly, the window portion of the interior flip cover, or the camera lens is unprotected and will be exposed in this unprotected fashion for an extended period of time, a protective film should be added over the exposed part(s) to reduce the amount of dust, finger prints, debris, and/or damage that the part(s) may obtain during its period of exposure.
- The display tape that is attached to the edge of the LCD assembly to protect the camera flex film is not shown in some of the pictures of sections that do not pertain to the verification and/or installation of the display tape. Note that the display tape is required and should be installed on the LCD assembly.


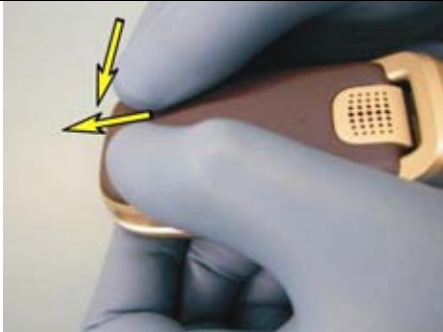

2 Base


2.1 Base Disassembly

The disassembly of the base portion of this product is broken down into sections by the components that need to be removed to perform the disassembly. The sections that make up the “Base Disassembly” procedure are arranged in the order that they must be performed to properly disassemble the base portion of this product. If your task is to replace one of the components that is removed during the base disassembly, just perform the sections of the base disassembly through to the point that the part you are trying to replace is removed.

2.1.1 Battery Cover Removal

Tools needed to perform the following steps: • Front opening tool

Step-by-Step Instructions	
1. Close the phone so that the keypad is not accessible.	
2. Dislodge the battery cover from the outer base cover by applying force downward and outward simultaneously to the end of the battery door that is nearest the system connector.	
<p>NOTE! The battery door can be very difficult to remove. If the battery door will not move, insert the angled tip of a front opening tool into the seam where the battery cover and the bottom edge of the speaker port come together. Do not twist or rotate the front opening tool once it is inserted. Just remove the front opening tool and repeat step 2.</p>	



Step-by-Step Instructions	
3. Once dislodged, lift the battery cover away from the phone.	


2.1.2 Battery Removal

All of the sections of the Base 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

NOTE! 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.

Step-by-Step Instructions	
<p>NOTE! Do not tap the phone against a hard surface in an attempt to get the battery out. Damage to the phone may result!</p>	
1. At the end of the battery closest to the hinge, catch the flat end of a pry tool on the accessible portion of the battery that is adjacent to the speaker port.	
2. Using the pry tool, push the battery towards the system connector while simultaneously lifting the end of the battery. The end being lifted should come free from the battery cavity.	

Step-by-Step Instructions	
3. Once the end of the battery is free from the battery cavity, lift the battery away from the phone.	

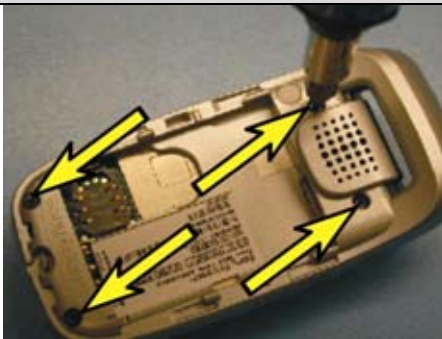

2.1.3 Outer Base Cover Removal




All of the sections of the Base 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
- Pry Tool

NOTE! 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.

Step-by-Step Instructions	
1. With the phone closed, remove the four screws indicated from the base portion of the phone using a torque driver with a T6 Torx® bit.	
2. Open the phone so that the keypad is accessible.	

Step-by-Step Instructions	
<p>NOTE! Be careful not to scratch the inner and outer base cases when prying them apart.</p> <p>3. On each side of the system connector, the inner and outer base covers come together to form seams on each side of the phone. Work the flat end of a pry tool into one of the seams adjacent to the system connector.</p>	
<p>4. Using a method of sliding and twisting the pry tool, separate the seam between the inner and outer base covers until just before reaching the portion of the inner base cover that conceals the hinge.</p>	
<p>NOTE! Be very careful when performing the next step over the camera key. Damage to the side key flex film can occur.</p> <p>5. Insert the flat end of the pry tool into the seam at the point where inner base cover transitions into its hinge concealing portion.</p> <p>6. Gently rotate the pry tool towards the phone's keypad. The latch that is holding the inner base cover in place should disengage from the outer base cover.</p> <p>NOTE! Some times repeating this step is required to get the latch to disengage.</p>	
<p>7. Repeat the four previous steps on the inner/outer base cover seam that has not been separated.</p>	



Step-by-Step Instructions	
<p>NOTE! The camera key falls out of its opening when performing the next step.</p> <p>8. Gently and slowly rotate the flip portion of the phone away from the keypad until the inner portion of the base separates from the outer base cover.</p> <p>9. Locate the camera key and set it aside.</p>	

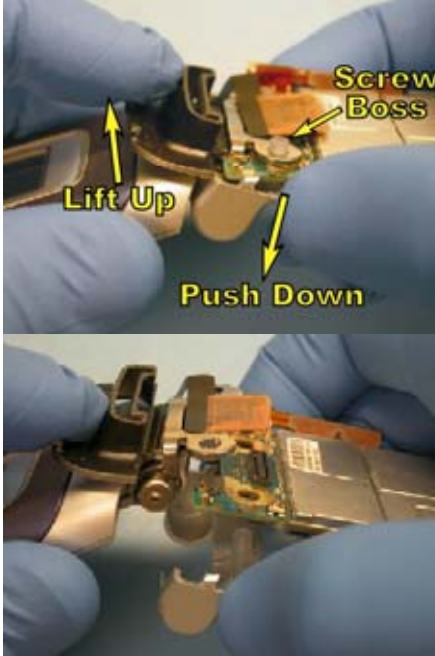
2.1.4 Flip Assembly Removal

All of the sections of the Base 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


NOTE! 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.

Step-by-Step Instructions	
<p>1. Turn the flip/inner base assembly so that the side of the circuit board with the SIM holder is upward.</p>	
<p>2. Release the main flex film connection from the circuit board using a pry tool.</p>	

Step-by-Step Instructions	
<p>3. Once the main flex film is disconnected, lift up on the flip assembly while pulling down on each side of the inner base cover in the locations that are in line with the screw bosses that protrude through the board. The flip assembly, including the hinge and the antenna cover should easily lift away from the circuit board.</p>	

2.1.5 Circuit Board Removal

Tools needed to perform the following steps: None



Step-by-Step Instructions	
<p>1. Lift the circuit board from the inner base cover.</p>	

2.2 Base Reassembly

The reassembly of the base portion of this product is broken down into sections by the components that need to be installed to perform the reassembly of the base portion. The sections that make up the “Base Reassembly” procedure are arranged in the order that they must be performed to properly reassemble the base portion of this product. If you have only performed a partial disassembly of the base, just perform the appropriate reassembly sections.

2.2.1 Circuit Board Installation

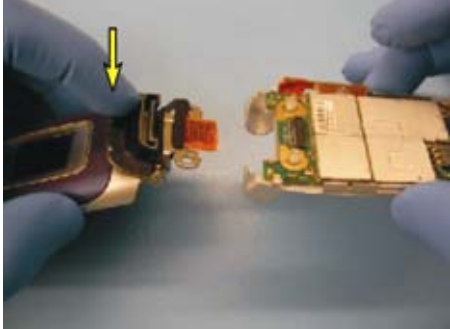
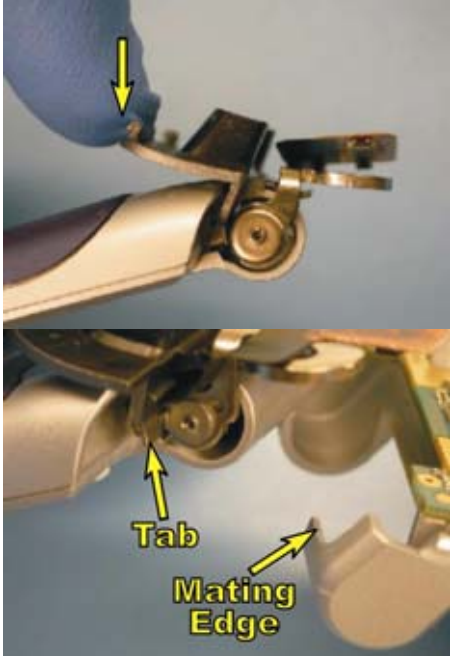
Tools needed to perform the following steps: None

Step-by-Step Instructions	
<ol style="list-style-type: none"> 1. Orient the inner base cover so its inner surface is facing upward. 2. Verify that the flip bumper strip and the keypad are present and correctly seated in the inner base cover before proceeding. If either of the parts is not present, install a new part for the component(s) that is missing. Refer to the Part Replacement section of this document for the specific part(s) that is missing for instructions on how to correctly install either of these parts. 	
<ol style="list-style-type: none"> 3. Place the circuit board, dome foil side down, onto the keypad so that the circuit board is seated down against the inner surface of the inner base cover. 	

2.2.2 Flip Assembly Installation

Tools needed to perform the following steps:

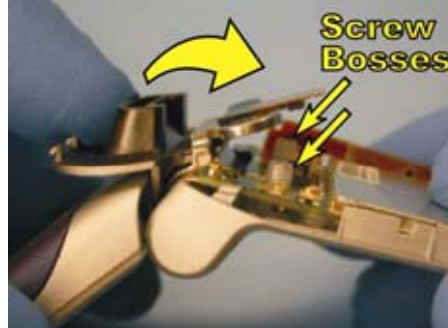
None

Step-by-Step Instructions	
<ol style="list-style-type: none"> 1. Orient the flip assembly so that the large display is facing downward. 2. Orient the circuit board/inner base cover assembly to the flip assembly so that their hinge ends are towards one another as shown. 	
<ol style="list-style-type: none"> 3. Press the edge of the antenna cover that is furthest from the hinge down towards the flip. This action moves the two tab features on the antenna cover against the two joints of the hinge, making it easier to correctly assemble the two halves of the phone. 4. Locate the tab that is against each of the two joints of the hinge assembly. 5. While continuing to lightly press the antenna cover towards the flip, insert the antenna cover's two tabs behind their mating edges of the hinge covering portion of the inner base cover. 	



Step-by-Step Instructions

6. Once the tabs of the antenna cover are inside the hinge concealing portion of the inner base cover, rotate the flip assembly so that the hinge inserts into the hinge covering portion of the inner base cover and the arm of the hinge slides down over the two screw bosses that protrude through the circuit board.



7. While holding the two halves of the phone together, connect the main flex film to its connector on the circuit board.



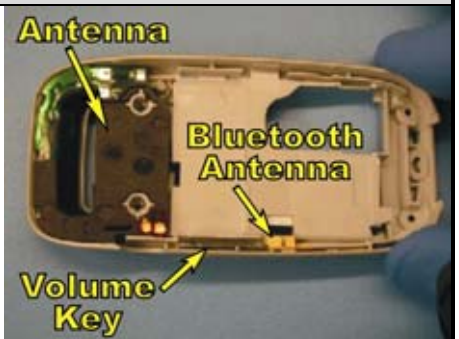


2.2.3 Outer Base Cover Installation

If this part is being replaced, a new part should be used in the place of the old part and the following bulleted actions should be performed before performing the following procedure.

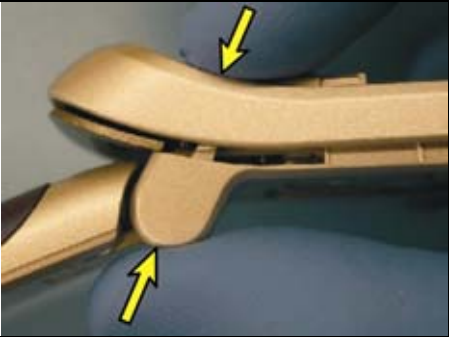
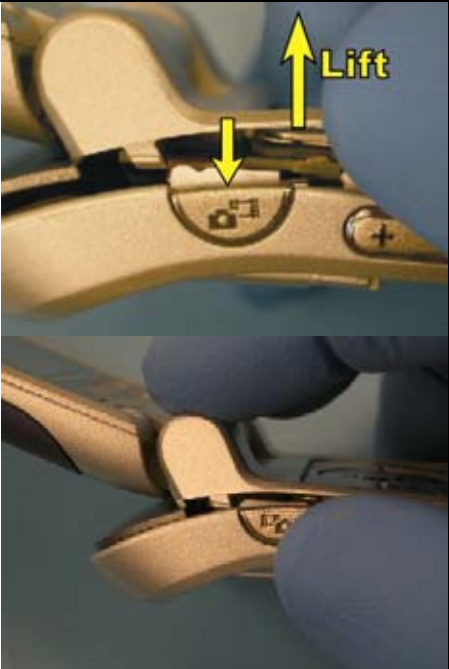
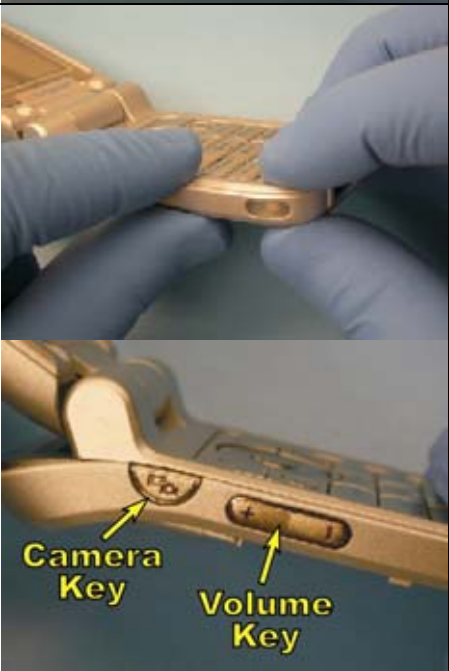
- Install a new IR window in the new outer base cover. Refer to IR window installation section for detailed instructions.
- Transfer the antenna assembly, the side volume key, the Bluetooth antenna, and the RF plug from the old outer base cover to the new one. Refer to the removal and installation sections of any specific component whose removal and installation procedures are in question.
- Create and install a new set of labels. Refer to label installation section for detailed instructions.

Tools needed to perform the following steps:

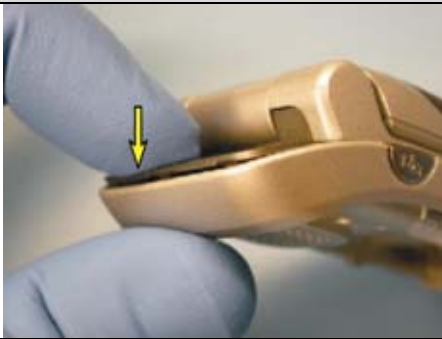

- Torque screwdriver
- T6 Torx® bit

Step-by-Step Instructions	
<ol style="list-style-type: none"> 1. Obtain the outer base cover and verify that the antenna assembly, the Bluetooth antenna, and the side volume key are in their correct positions. <p>NOTE! The camera key should not be present.</p> <ol style="list-style-type: none"> 2. Orient the outer base cover so that its inner cavity is upward, the side volume key is towards you, and the cover is rotated at a slight downward angle to help keep the side volume key in place. 	
<ol style="list-style-type: none"> 3. While holding the flip/circuit board portion of the phone over the outer base cover insert the side key flex film into its slot behind the side volume key. 	
<ol style="list-style-type: none"> 4. Rotate the flip/circuit board assembly on top of the outer base cover and work the antenna cover's "U" shaped extension into the corresponding hole in the antenna assembly. 	



Step-by-Step Instructions	
<p>NOTE! The latch that is being referred to in the following step is located directly below the portion of the inner base cover that conceals the hinge.</p> <p>5. Snap into place the inner base cover's latch that is located on the side of the inner base cover that does not contain side keys.</p>	
<p>6. Slightly lift out of the way the portion of the inner base cover that is above the camera key opening and slide the camera key into its slot.</p> <p>7. Snap into place the latch on the side of the inner base cover that is adjacent to the camera key.</p>	
<p>8. Finish snapping the inner and outer base covers together by squeezing around the seam where the two covers connect.</p> <p>NOTE! Test the side volume key and camera key by pressing each of them several times to make sure that the response of each key feels correct.</p>	





Step-by-Step Instructions	
<p>9. Close the phone so that the keypad is not accessible.</p> <p>10. Snap the external edge of the antenna cover into position in the outer base cover.</p>	
<p>11. Using a torque screwdriver set to 17 N·cm with a T6 Torx® bit, install the four 1.6 X 6.1mm screws (black colored) into the outer base cover in the following order.</p> <ol style="list-style-type: none">First, insert a screw in the screw location adjacent to the RF port.Next, install a screw in the unoccupied screw location that is adjacent to the rear speaker.Finally, install a screw in each of the two remaining screw locations that are near the system connector.	

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

2.2.4 Battery Installation

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

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 connection pads into the end of the battery cavity nearest the system connector.	
2. While pushing the battery towards the system connector, simultaneously press the other end of the battery down into the battery cavity.	

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

2.2.5 Battery Cover Installation

Tools needed to perform the following steps: None

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

Step-by-Step Instructions	
1. Place the battery cover over the battery so that the tips at the top of the battery cover are above the screw holes in the outer base cover that are on each side of the speaker port.	
2. Slide the battery cover towards the hinge until the battery cover snaps into place.	




3 Flip

3.1 Flip Disassembly




The disassembly of the flip portion of this product is broken down into sections by the components that need to be removed to perform the disassembly. The sections that make up the “Flip Disassembly” procedure are arranged in the order that they must be performed to properly disassemble the flip portion. If your task is to replace one of the components that are removed during the flip disassembly, just perform the sections of the flip disassembly through to the point that the part you are trying to replace is removed.

3.1.1 Style-Up Cover Removal

Tools needed to perform the following steps: • Nylon Pointer

Step-by-Step Instructions	
1. Locate the two notches found along the seam where the style-up cover and the outer flip cover come together. Select one of the notches as your start point.	
2. On the side of the phone that your selected notch is located, apply pressure to the outer surface of the style-up cover about 0.75 inches from the non-hinge end of the phone, so that the style-up cover is being pressed against the outer flip cover.	
3. Using your selected notch as an entry point, insert the flat end of a nylon pointer into the seam of the style-up cover so that approximately 1MM of the nylon pointer's tip is under the edge of the style-up cover.	



Step-by-Step Instructions	
4. Slide the pry tool along the seam just before reaching the location where the style-up cover is being pressed and rotate the nylon pointer towards the base so that the latch holding the style up cover disengages. Stop pressing once the latch disengages.	
5. Locate the other notch found along the seam where the style-up cover and the outer flip cover come together and repeat the previous three steps to release that side of the style-up cover from the phone.	
6. Once the two side latches are free, pry the hinge end of the style-up cover loose from the press-fit sockets that are holding it.	
7. Remove the style-up cover by rotating it away from the hinge joint while simultaneously lifting the cover from the phone.	





3.1.2 Outer Flip Cover Removal

The sections of the Flip 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:

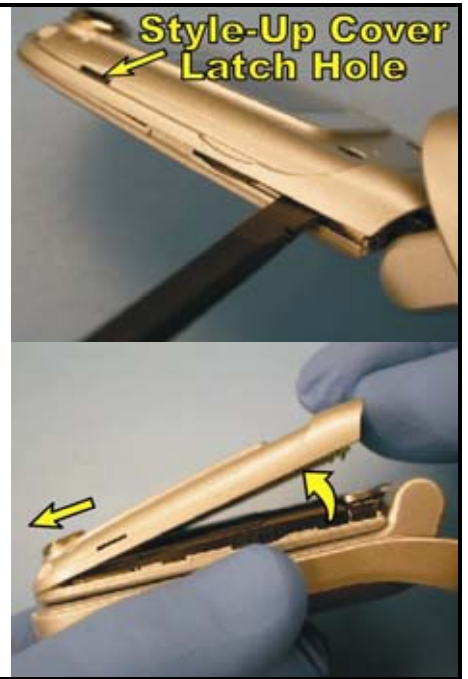
- Torque screwdriver
- T6 Torx® bit
- Style 3 ESD tweezers
- Pry tool

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

Step-by-Step Instructions	
1. Open the phone so that the keypad area is accessible.	
2. Remove the two screw covers from each side of the co-brand label using style 3 tweezers (pointed tip). NOTE! Be careful not to scratch or damage the inner flip cover when removing the screw covers. NOTE! Do not reuse the screw covers.	
3. Using the style 3 tweezers, remove any adhesive film that remains on top of the two screws adjacent to the hinge.	
4. Using a torque driver with a T6 Torx® bit, remove the two screws from the inner flip cover that were revealed when the two screw covers were removed.	
5. Close the phone so that the keypad area is not accessible.	
6. Using a torque driver with a T6 Torx® bit, remove the two screws from the outer flip cover.	



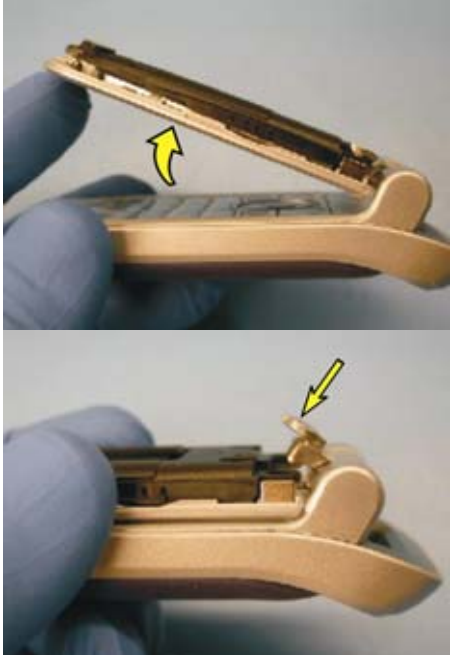
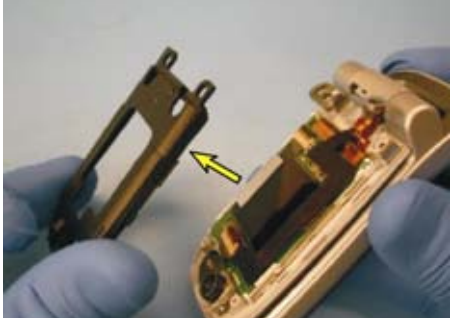
7. Locate the seam where the inner flip cover and the outer flip cover adjoin.
8. To free the clips holding the inner and outer flip covers together, start near the hinge joint and slide the flat end of a pry tool down each side seam to just before the point where the style-up cover's latch holes are located.
9. Rotate the hinge end of the outer flip cover away from the phone approximately 20 degrees so that the camera ring clears the camera module.
10. With the outer flip cover rotated up off of the flip 20 degrees, push the outer flip cover towards the system connector to remove it from the phone.



3.1.3 LCD Sub-Frame Removal

The sections of the Flip 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: None

Step-by-Step Instructions	
<p>1. Partially open the hinge by rotating the flip up from the base about 30 degrees and then closing the flip back down onto the base. This moves the hinge arm up off of the LCD sub-frame.</p>	
<p>2. Lift the LCD sub-frame off of the phone.</p> <p>NOTE! Be careful not to damage the flex circuit when removing the LCD sub-frame.</p>	

3.2 Flip Reassembly


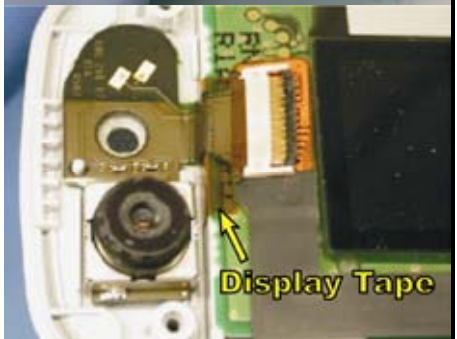

The reassembly of the flip portion of this product is broken into sections by the components that need to be installed to perform the reassembly of the flip portion. The sections that make up the “Flip Reassembly” procedure are arranged in the order that they must be performed to properly reassemble the flip portion. If you have only performed a partial disassembly of the flip, just perform the appropriate reassembly sections.

3.2.1 LCD Sub-Frame Installation

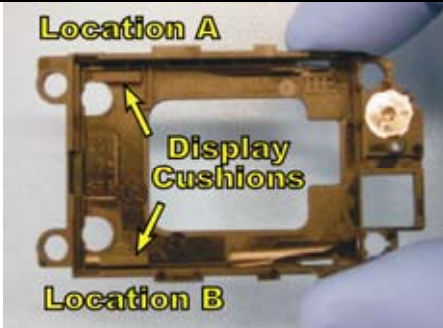

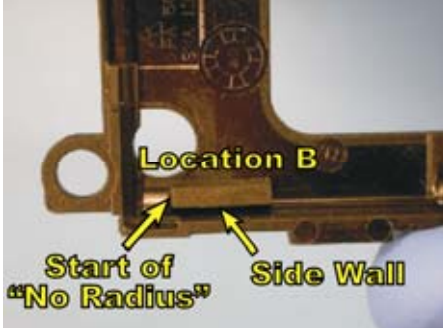

If this part is being replaced, a new part should be used in the place of the old part when reassembling. If a new part is being used, a new receiver must be installed in the new LCD sub-frame before proceeding. Refer to the receiver’s installation section for instructions on how to install a new receiver.

Tools needed to perform the following steps: * Pry tool

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

Step-by-Step Instructions	
<p>1. Verify that the hinge arm is lifted away from the inner flip cover, that the portion of the flex film under the hinge is held in place by its alignment pin, and that the camera module and LCD assembly are correctly seated against the inner flip cover.</p> <p>NOTE! There are features on the inside surface of the inner flip cover that correctly position the LCD assembly.</p>	
<p>2. Verify that a piece of display tape is mounted over the portion of the display’s edge that the camera module’s flex film goes over.</p> <p>NOTE! If a piece of display tape is not present, refer to the LCD installation instructions for instructions on how to correctly install the display tape.</p>	
<p>3. Verify that the receiver is correctly installed in the LCD sub-frame.</p>	

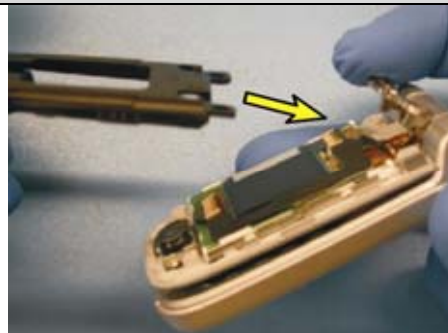


Step-by-Step Instructions	
<p>4. Orient the LCD sub-frame so that the LCD assembly's cavity is toward you. and the reciever is to the right.</p> <p>5. Determine wether the two display cushions are installed in the LCD sub-frame. If the display cushions are not installed:</p> <ol style="list-style-type: none">Obtain a display cushion and position it in location A so that a long side of the cushion is against the side wall and a short side of the cushion is against the rib that extends towards the small display opening.Apply pressure to the cushion so that a good bond forms.Obtain another display cushion and position it in location B so that a long side of the cushion is against the side wall and a short side of the cushion starts at the location where there is no radius between the side wall and the bottom of the display cavity.Apply pressure to the cushion so that a good bond forms.	   
<p>6. If the LCD sub-frame is being reused, remove any adhesive residue left on the portion of the LCD sub-frame that mates to the camera ring gasket on the outer flip cover.</p>	



Step-by-Step Instructions

7. Place the LCD sub-frame onto the inner flip cover so that the features in the LCD sub-frame align to the screw bosses on the inner flip cover.



8. Rotate the hinge arms down on top of the inner flip cover/LCD sub-frame assembly.



9. Verify that the magnet is correctly mounted in its slot in the inner flip cover.







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

3.2.2 Outer Flip Cover Installation



If this part is being replaced, a new part should be used in the place of the old part when reassembling. If a new part is being used, perform steps of the outer flip cover replacement procedure before performing the following instructions.

Tools needed to perform the following steps:

- Torque screwdriver
- T6 Torx® bit
- Style 2A ESD tweezers
- Lint-free wipes

Step-by-Step Instructions	
<p>NOTE! If a new outer flip cover is being installed, start at step 7. If an outer flip cover is being reused, start at step 1.</p> <p>1. Orient the outer flip cover so that its external side is towards you.</p> <p>2. From the external side of the outer flip cover, press the camera ring out of its opening in the outer flip cover and remove it from the outer flip cover.</p>	
<p>3. If the old camera ring is being reused, remove any camera ring adhesive that remains on the outer lip of the camera ring.</p> <p>NOTE! Make sure that all adhesive residue is removed. Carefully clean off any residue with style 2A tweezers, alcohol, and a lint-free wipe.</p>	
<p>4. Orient the outer flip cover so that its inner surface is towards you.</p> <p>5. Remove the old camera ring adhesive.</p> <p>NOTE! Make sure that all adhesive residue is removed. Carefully clean off any residue with style 2A tweezers, alcohol, and a lint-free wipe.</p>	
<p>6. Install a new camera ring adhesive as shown.</p>	



Step-by-Step Instructions	
<ol style="list-style-type: none">7. Remove the protective covering from the camera ring adhesive.8. Orient the camera ring that is being installed so that its side with the camera gasket is oriented away from the inner surface of the outer flip cover.	
<p>NOTE! Avoid contaminating the portion of the camera ring adhesive that remains exposed once the camera ring is installed.</p> <ol style="list-style-type: none">9. Align the notch features in the edge of the camera ring's outer lip with their corresponding features in the outer flip cover.10. Insert the camera ring into its hole and press it against the outer flip cover so that a good adhesive bond forms between the two parts.	



Step-by-Step Instructions

11. Hold the outer flip cover at approximately a 15 degree angle to the inner flip cover/LCD sub-frame assembly and slide the camera ring end of the outer flip cover onto the mating end of the inner flip cover so that the latches along the end seam engage correctly.



12. Rotate the outer flip cover down onto the inner flip cover/LCD sub-frame assembly and snap the two covers together by squeezing together the edges where the two covers mate.



NOTE! When the two covers are correctly snapped together, the seam should be a consistent size all the way around.



13. Hold the flip assembly together and open the phone so that the keypad is accessible.

14. Install the 1.6 X 6.1mm screws (black colored) into the two screw locations near the hinge joint in the inner flip cover using a torque screwdriver set to 17 N-cm and a T6 Torx® bit.



15. Close the phone so that the keypad is inaccessible.

16. Install a 1.6 X 4.5mm screw (silver colored) into each of the two screw locations near the camera in the outer flip cover using a torque screwdriver set to 17 N-cm and a T6 Torx® bit.

17. If a bezel was not installed on the outer flip cover, place a protective film over LCD assembly's small display.





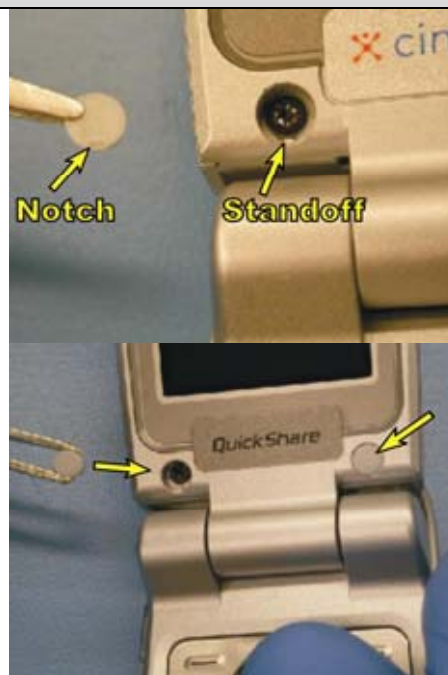
Step-by-Step Instructions

18. Open the phone so that the keypad is accessible.

NOTE! The screw covers have a specific orientation. The notch in the screw cover should be aligned to the standoff in the screw's recess hole.

19. Install new screw covers over the inner flip cover's two screw locations near the hinge.

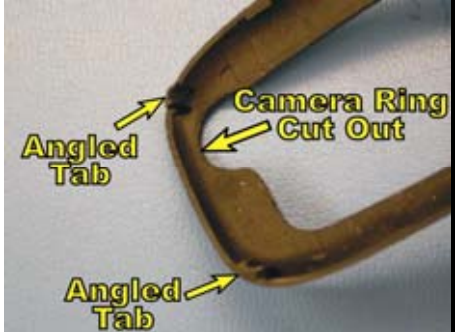
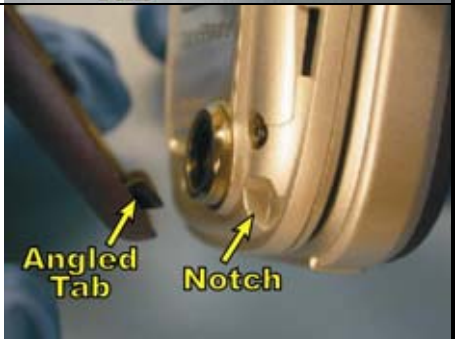


20. Using your thumb, apply pressure to each of the screw covers so that a good bond forms between the screw cover and the top of the screw.



3.2.3 Style-Up Flip Cover Installation

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

Tools needed to perform the following steps: None

Step-by-Step Instructions	
<p>Note! 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 is damaged to the point that they will not function, use a new style-up cover.</p> <p>1. Locate the two angled tabs along the end of the style-up cover near the camera ring cut out.</p>	 <p>Angled Tab</p> <p>Camera Ring Cut Out</p> <p>Angled Tab</p>
<p>2. Insert the two angled tabs in the corresponding notches in the end of the flip assembly and rotate the style-up cover onto the flip portion of the phone.</p>	 <p>Angled Tab</p> <p>Notch</p> 
<p>3. Press the style-up cover onto the outer flip cover until the style-up cover is completely snapped into place.</p>	

4 Part Replacement

4.1 Battery Cover

The removal and installation of this part is covered in the base disassembly and reassembly procedures. To remove this part, perform section 2.1.1 of the base disassembly. To install this part, perform section 2.2.5 of the base reassembly. If this part is being replaced, a new part should be used in the place of the old part when performing the reassembly instructions.

4.2 Battery

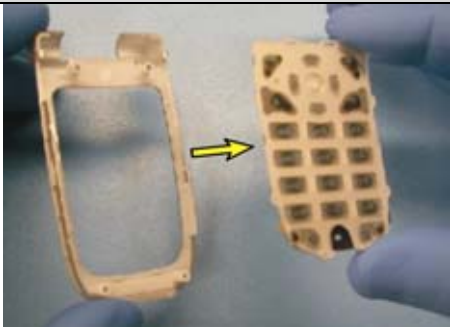
The removal and installation of this part is covered in the base disassembly and reassembly procedures. To remove this part, perform sections 2.1.1 - 2.1.2 of the base disassembly. To install this part, perform sections 2.2.4 - 2.2.5 of the base reassembly. If this part is being replaced, a new part should be used in the place of the old part when performing the reassembly instructions.

4.3 Keypad

4.3.1 Keypad Removal

- Perform sections 2.1.1-2.1.5 of the Base Disassembly


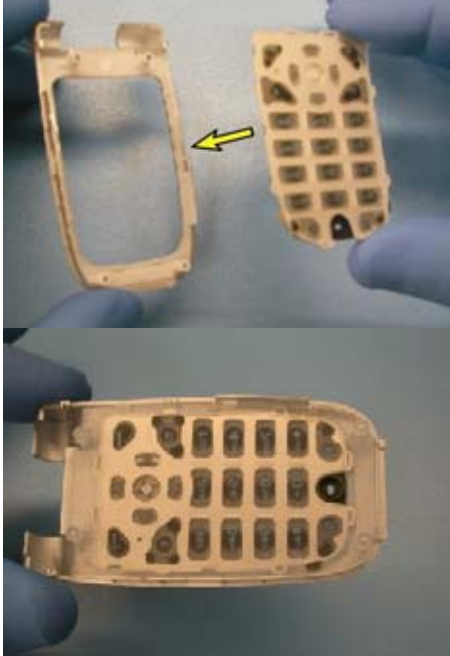
Tools needed to perform the following steps: None

Step-by-Step Instructions	
<p>1. Remove the keypad from the inner base cover.</p>	

4.3.2 Keypad 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: None

Step-by-Step Instructions	
1. Orient the inner base cover so its inner surface is facing upward and verify that a flip bumper strip is present between the two screw bosses at the system connector end of the base cover. If the flip bumper strip is not present, install one.	
2. Place the keypad, keys down, into the opening in the inner base cover.	
<p>NOTE! The keypad should be oriented so that the shape of the keypad corresponds to the shape of the opening in the inner base cover.</p>	

- Perform sections 2.2.1-2.2.5 of the Base Reassembly


4.4 Flip Bumper Strip

4.4.1 Flip Bumper Strip Removal

- Perform sections 2.1.1-2.1.5 of the Base Disassembly

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

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.


Step-by-Step Instructions	
1. Remove the flip bumper strip from the inner base cover.	

4.4.2 Flip Bumper Strip Installation

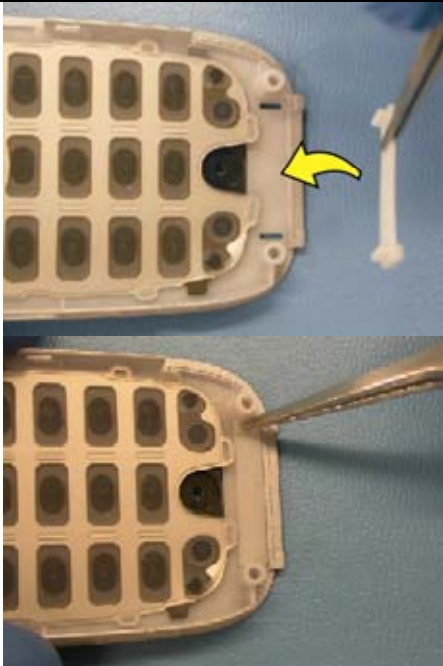
If this part is being replaced, a new part should be used in the place of the old part when performing the following steps.

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

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

Step-by-Step Instructions	
1. Orient the inner base cover so its inner surface is facing upward.	



Step-by-Step Instructions	
2. Place a flip bumper strip between the two screw bosses at the system connector end of the base cover so that the two rubber bumpers on the bumper strip insert into their corresponding holes in the inner base cover.	
3. Press the bumper strip down against the inner base cover until the bumper strip is flush against the surface of the inner base cover.	


- Perform sections 2.2.1-2.2.5 of the Base Reassembly

4.5 Inner Base Cover Replacement Procedure

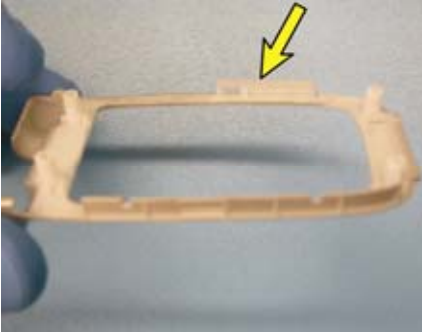
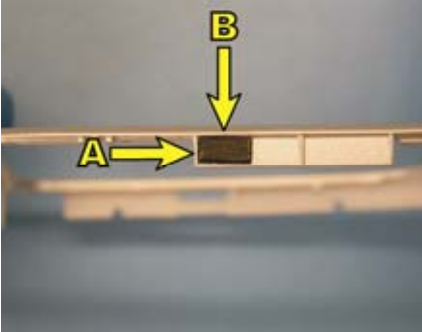
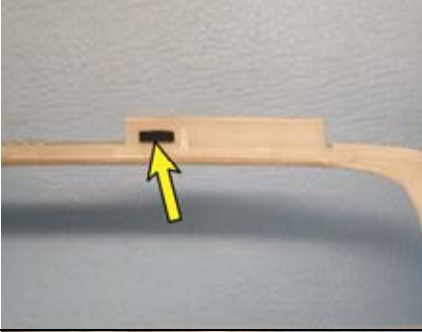

- Perform sections 2.1.1-2.1.5 of the Base Disassembly

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




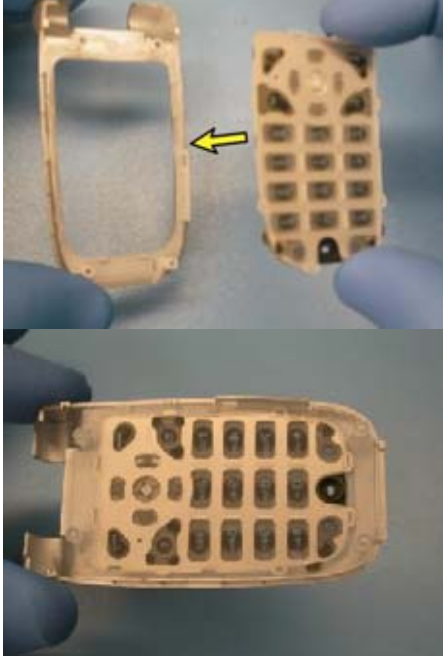
NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

Step-by-Step Instructions	
1. Obtain a new inner base cover and orient it so that its inner surface is facing upward.	



Step-by-Step Instructions	
2. Locate the smaller of the two walls that extend up from the inner surface of the inner base cover.	
3. Mount a 6mm X 3mm shim on the outer surface of the small wall in the location shown. The 3mm side of the shim should be flush against the edge of the wall labelled "A" and the 6mm side of the shim should be flush against the edge of the wall labelled "B".	
4. Apply pressure to the shim for 5 seconds once it is positioned so that a good bond forms.	
NOTE! If the shim is correctly installed, the rectangular hole in the wall should be covered by the shim.	
5. If the flip bumper strip is being reused, remove it from the old inner base cover.	



Step-by-Step Instructions	
<p>6. Insert the flip bumper strip's two rubber bumpers into their corresponding holes that are located between the screw bosses at the system connector end of the new inner base cover.</p>	
<p>7. Press the bumper strip down against the inner base cover until the bumper strip is flush against the surface of the inner base cover.</p>	
<p>8. If the keypad is being reused, remove it from the old inner base cover.</p>	
<p>9. Place the keypad, keys down, into its corresponding opening in the inner base cover.</p>	
<p>NOTE! The keypad should be oriented so that the shape of the keypad corresponds to the shape of the opening in the inner base cover.</p>	

- Perform sections 2.2.1-2.2.5 of the Base Reassembly

4.6 Outer Base Cover

Replacement Procedure

To remove this part, perform sections 2.1.1 – 2.1.3 of the base disassembly. Use new part in the place of the old part and perform the following bulleted actions before starting the reassembly procedure.


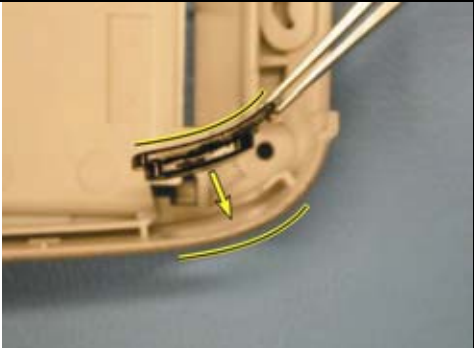
- Install a new IR window in the new outer base cover. Refer to IR window installation section for detailed instructions.
- Transfer the antenna assembly, the side volume key, the Bluetooth antenna, and the RF plug from the old outer base cover to the new one. Refer to the removal and installation sections of any specific component whose removal and installation procedures are in question.
- Create and install a new set of labels. Refer to label installation section for detailed instructions.

To install the new part, perform sections 2.2.3 - 2.2.5 of the base reassembly.

4.7 IR Window

The IR window cannot be removed from the outer base cover without damage occurring. Therefore, the outer base cover must be replaced if the IR window requires replacement. To remove the outer base cover, perform sections 2.1.1 – 2.1.3 of the base disassembly. To install a new IR window, perform the following procedure.

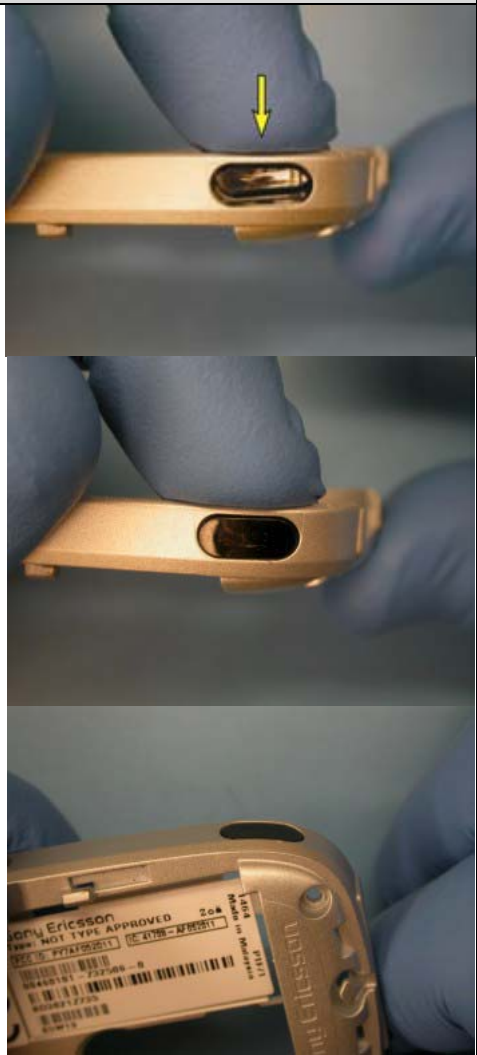
Tools needed to perform the following steps: None

Step-by-Step Instructions	
<ol style="list-style-type: none"> 1. Obtain a new IR window and the outer base cover in which it is being installed. 2. Locate the IR window opening in the outer base cover. 	
<ol style="list-style-type: none"> 3. Orient the IR window so that the portion of the window shaped like the opening in the outer base cover is towards the opening in the outer base cover and the curve of the IR window corresponds to the curve of the base cover's side wall at the IR opening. 	



Step-by-Step Instructions

4. Insert the IR window into its slot behind the IR opening in the outer base cover and press the IR window down into its slot until the window snaps to 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 outer base cover's side wall that is around it.

- Perform sections 2.2.3 -2.2.5 of the base reassembly

4.8 RF Port Plug




4.8.1 RF Port Plug Removal

If the outer base cover is removed from the phone, the easiest way to remove the RF port plug is by pressing the plug out of its hole from the inner surface of the outer base cover. To remove the RF port plug in this way, remove the antenna assembly from the outer base cover first, if it is present.

If the outer base cover is not removed from the phone, perform the following procedure to remove the RF port plug.

- Perform section 2.1.1 of the Base Disassembly

Tools needed to perform the following steps: • Dental hook


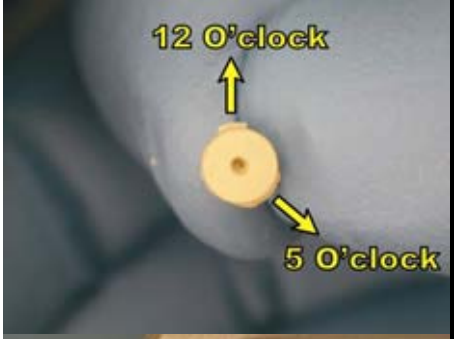

Step-by-Step Instructions	
1. Orient the phone so that the battery area is toward you.	
<p>NOTE! Be careful not to scratch or damage the outer base cover when removing the RF port plug.</p> <p>2. Insert the tip of a dental hook into the small hole in the RF port plug and pry the plug from its opening in the outer base cover.</p>	 

4.8.2 RF Port Plug Installation


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

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

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

Step-by-Step Instructions	
1. Make sure the phone is oriented so that the battery area is toward you and the system connector is at the bottom.	
2. Locate the two catches on the RF port plug and orient the plug so that the large catch is at 5 o'clock and the small catch is at 12 o'clock.	
3. Then insert the RF port plug into its hole.	



Step-by-Step Instructions	
<p>4. Using your thumb, apply pressure to the RF port plug so that outer surface of the RF port plug is flush with the surrounding surface of the outer base cover.</p>	
<p>NOTE! If the RF port plug was oriented correctly when installed, the contour of its outer surface will correspond to the contour of the outer base cover around it.</p>	

- Perform section 2.2.5 of the Base Reassembly

4.9 Style-Up Cover


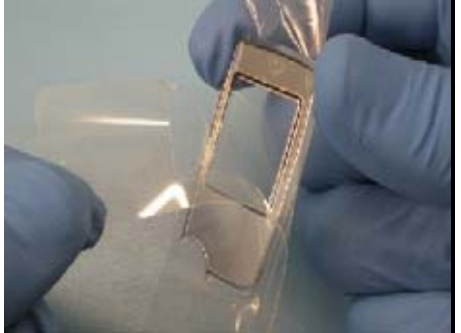


The removal and installation of this part is covered in the flip disassembly and reassembly procedures. To remove this part, perform section 3.1.1 of the flip disassembly. To install this part, perform section 3.2.3 of the flip reassembly. If this part is being replaced, a new part should be used in the place of the old part when performing the reassembly instructions.

4.10 Outer Flip Cover






Replacement Procedure

- To remove the old part, perform sections 3.1.1 – 3.1.2 of the flip disassembly.

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

Step-by-Step Instructions	
1. Obtain a new outer flip cover.	
2. Remove the protective film from the non-logo side of the co-brand bezel.	
3. With the adhesive side of the bezel towards the outer flip cover, insert the bezel into its cavity in the outer flip cover.	
<p>NOTE! Avoid getting dirt, oil, or finger prints on the inside surface of the bezel's window.</p>	
4. Apply pressure simultaneously to the upper and lower ends of the bezel for 5 seconds.	



Step-by-Step Instructions	
<p>5. Then apply pressure simultaneously to the two sides of the bezel for 5 seconds.</p>	
<p>6. Obtain a new SEMC icon, remove its adhesive protection, and place the icon in its cavity in the new outer flip cover.</p> <p>NOTE! Make sure to align the peg on the icon with the corresponding hole in the icon cavity.</p>	
<p>7. Apply gentle pressure to the icon to ensure a good adhesive bond to the outer flip cover.</p>	
<p>8. With the exterior surface of the new outer flip cover oriented towards you, locate the two round holes below the Sony Ericsson logo.</p>	
<p>9. Obtain a new rubber plug and orient it relative to the external surface of the outer flip cover so that the end of the plug with the hole in it is pointed away from the outer flip cover.</p>	



Step-by-Step Instructions

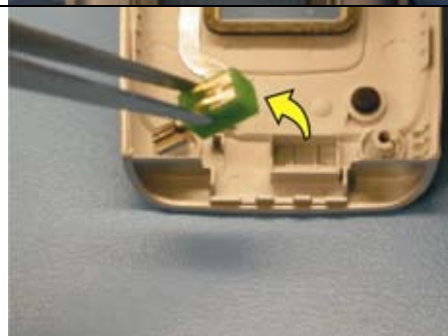
10. Insert the rubber plug in one of the two round holes in the outer flip cover and press the plug down into the hole until the outer edge of the rubber plug is planar with the surrounding outer surface of the outer flip cover.

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

11. Repeat the previous two steps to install the other rubber plug that is required.

NOTE! Be careful not to damage the vibrator contacts when handling the vibrator.

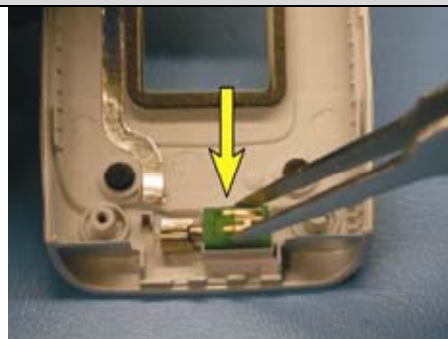
12. Using style 2A tweezers, grip on the rubber bushing on each side of the vibrator and lift the vibrator from the old outer flip cover.





Step-by-Step Instructions

13. Place the vibrator in its cavity in the new outer flip cover so that the contacts are oriented away from the outer flip cover and the neck on the vibrator is aligned with the notch in the wall of the vibrator cavity.
14. Press on the vibrator to make sure it is seated all the way down in its cavity.



- To install this part, perform sections 3.2.2 - 3.2.3 of the flip reassembly.

4.11 Camera Ring




The removal and installation of this part is covered in the flip disassembly and reassembly procedures. To replace the camera ring, perform sections 3.1.1 – 3.1.2 of the flip disassembly and sections 3.2.2 - 3.2.3 of the flip reassembly. Use a new camera ring when instructed to install the camera ring.

4.12 Rubber Plugs that hold the Style-Up Cover

Replacement Procedure

- Perform section 3.1.1 of the flip disassembly.

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

Step-by-Step Instructions	
<ol style="list-style-type: none"> 1. Orient the phone so that the outer flip cover is towards you. 2. Locate the two round plugs below the Sony Ericsson logo. 	
<ol style="list-style-type: none"> 3. Using style 2A tweezers, remove the rubber plug(s) that needs replacement. 	
<ol style="list-style-type: none"> 4. Obtain a new rubber plug and orient it so that the end of the plug with the hole in it is pointed away from the outer flip cover. 	



Step-by-Step Instructions

5. Insert the rubber plug in outer flip cover's unoccupied plug hole and press the plug down into the hole until the outer edge of the rubber plug is planar with the surrounding outer surface of the outer flip cover.

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

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



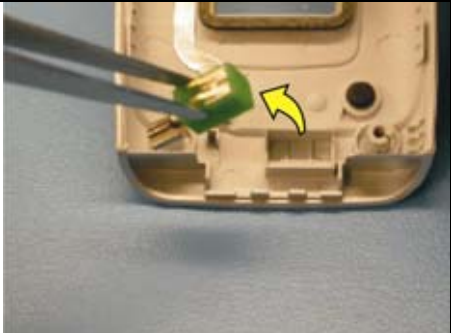
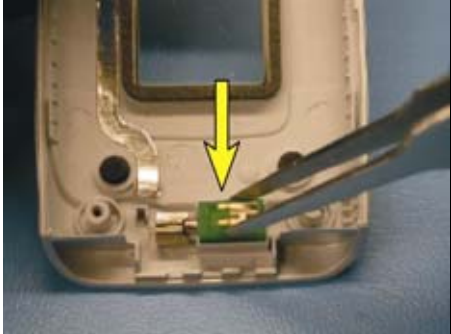
- Perform section 3.2.3 of the flip reassembly.

4.13 Vibrator

Replacement Procedure

- Perform sections 3.1.1 – 3.1.2 of the flip disassembly.

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

Step-by-Step Instructions	
<p>1. Using style 2A tweezers, lift the old vibrator from the outer flip cover.</p>	
<p>NOTE! Be careful not to damage the vibrator contacts when handling the new vibrator.</p> <p>2. Place a new vibrator in the outer flip cover's vibrator cavity so that the contacts are oriented away from the outer flip cover and the neck on the vibrator is aligned with the notch in the wall of the vibrator cavity.</p> <p>3. Press on the vibrator to make sure it is seated all the way down in its cavity.</p>	

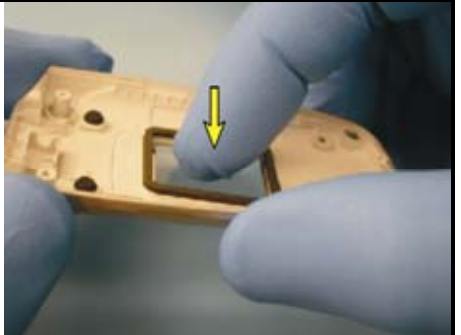


- Perform sections 3.2.2 - 3.2.3 of the flip reassembly.

4.14 Co-Branded Bezel

4.14.1 Co-Branded Bezel Removal

- Perform sections 3.1.1 – 3.1.2 of the flip disassembly.


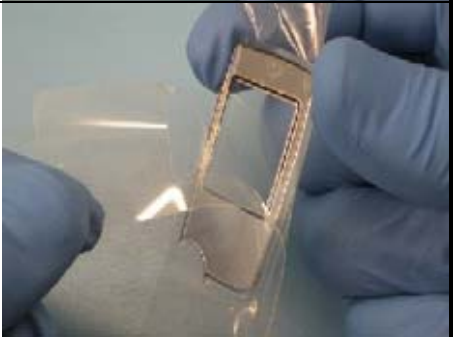


Tools needed to perform the following steps: • Lint-free wipes

Step-by-Step Instructions	
<ol style="list-style-type: none"> 1. From the inside surface of the outer flip cover, press on the display window until the bezel separates from the outer flip cover. 	
<ol style="list-style-type: none"> 2. Grip the portion of the bezel that is lifted away for the outer flip cover and finish separating the two parts. 3. Remove any and all adhesive residue from the bezel cavity on the outer flip cover using alcohol and a lint-free wipe. 	 

4.14.2 Co-Branded Bezel Installation

A new co-branded bezel should be used when performing the following steps.

Tools needed to perform the following steps: • Lint-free wipes

Step-by-Step Instructions	
<p>1. Orient the outer flip cover so that its outer surface is towards you.</p> <p>NOTE! Make sure outer flip cover's bezel cavity is clean. Use alcohol and lint-free wipes to clean the cavity if necessary.</p>	
<p>2. Obtain the appropriate co-branded bezel and remove the protective film from its non-logo side.</p> <p>NOTE! Avoid getting dirt, oil, or finger prints on the inside surface of the bezel's window.</p>	
<p>3. With the adhesive side of the bezel towards the outer flip cover, insert the bezel into its cavity in the outer flip cover.</p>	
<p>4. Apply pressure simultaneously to the upper and lower ends of the bezel for 5 seconds.</p>	

Step-by-Step Instructions

5. Then apply pressure simultaneously to the two sides for of the bezel for 5 seconds.



- Perform sections 3.2.2 - 3.2.3 of the flip reassembly.

4.15 LCD Sub-frame



The removal and installation of this part is covered in the flip disassembly and reassembly procedures. To remove this part, perform sections 3.1.1 – 3.1.3 of the flip disassembly. To install this part, perform sections 3.2.1 - 3.2.3 of the flip reassembly. If the LCD sub-frame is being replaced, a new receiver must be installed in the new LCD sub-frame before installing the new LCD sub-frame on the flip assembly. Refer to the “Receiver Installation” section of this document for instructions on how to install the receiver in the LCD sub-frame.

4.16 Flip Screw Covers

4.16.1 Flip Screw Cover Removal

- No disassembly required

Tools needed to perform the following steps: • Style 3 ESD tweezers

Step-by-Step Instructions	
1. Open the phone so that the keypad area is accessible.	
2. Remove the screw cover that needs to be replaced using style 3 tweezers (pointed tip). NOTE! Be careful not to scratch or damage the inner flip cover when removing the screw cover.	
3. Using style 3 tweezers, remove any adhesive film that remained attached to the top of the screw.	

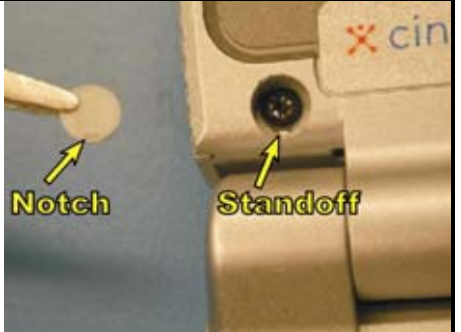



4.16.2 Flip Screw Cover Installation

When a screw cover is removed, a new screw cover should always be used in the place of it.

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

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

Step-by-Step Instructions	
<p>1. Make sure the phone is open so that the keypad is accessible.</p> <p>NOTE! Do not use a previously used screw cover.</p> <p>NOTE! The screw covers have a specific orientation. The notch in the screw cover should be aligned to the standoff in the screw's recess hole.</p>	
<p>2. Install a new screw cover over the exposed screw that is beside the co-brand label area.</p> <p>3. Using your thumb, apply pressure to the newly installed screw cover so that a good bond forms between the screw cover and the top of the screw.</p>	

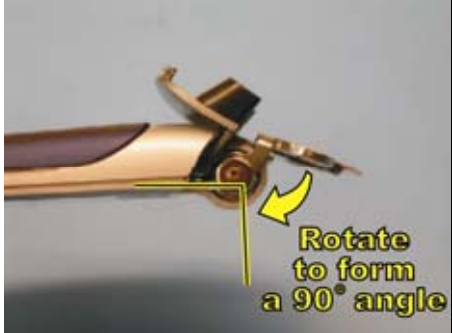
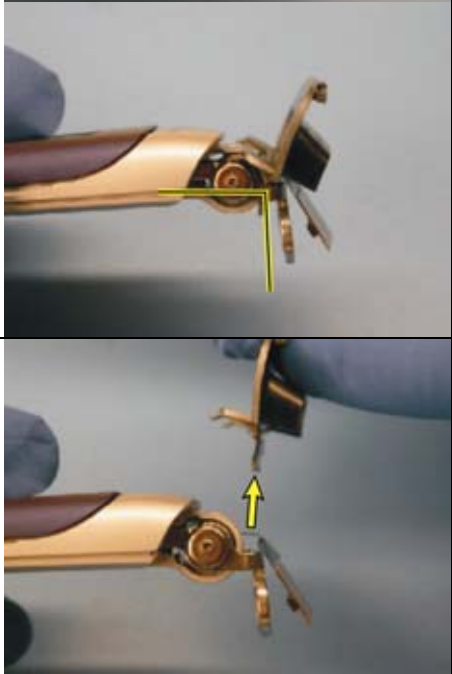
- No reassembly required.

4.17 Antenna Cover

4.17.1 Antenna Cover Removal

- Perform sections 2.1.1 - 2.1.4 of the Base Disassembly

Tools needed to perform the following steps: None





Step-by-Step Instructions	
1. Hold the flip portion of the phone so that the large display is oriented downward and rotate the hinge arm so that it forms a 90 degree angle to the flip.	 <p>Rotate to form a 90° angle</p>
2. Then lift the antenna cover from the flip assembly and set it aside.	

4.17.2 Antenna Cover Installation



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

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

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

Step-by-Step Instructions	
1. Hold the flip portion of the phone so that the large display is facing downward and rotate the hinge arm so that it forms a 90 degree angle to the flip.	 <p>Rotate to form a 90° angle</p>
2. If a new antenna cover is being installed, mount a flex film cushion on the antenna cover so that the corner of the cushion is aligned with the corner feature on the antenna cover in the location shown.	 <p>Align to the Corner Indicated</p> 
3. Orient the antenna cover so that the contour of its curved extension correlates to the curve of the hinge wrapping portion of the inner flip cover.	 <p>Hinge Wrapping Portion</p> <p>Curved Extension</p>



Step-by-Step Instructions	
4. Work the curved extension of the antenna cover into the gap between the hinge arm and the hinge wrapping portion of the inner flip cover.	
5. Rotate the hinge arm so that the hinge is in the open position.	

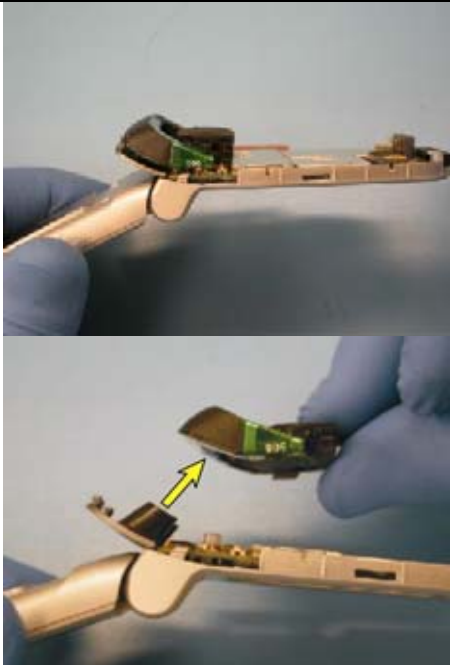


- Perform sections 2.2.2 - 2.2.5 the Base Reassembly procedure.

4.18 Antenna Assembly

4.18.1 Antenna Assembly Removal

- Perform sections 2.1.1 - 2.1.3 of the Base Disassembly Procedure


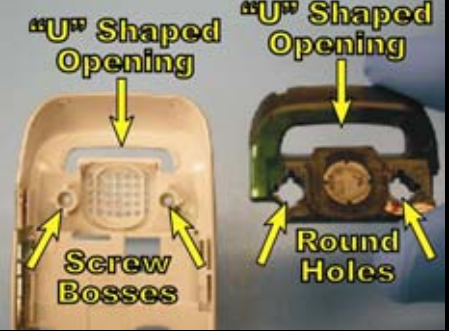
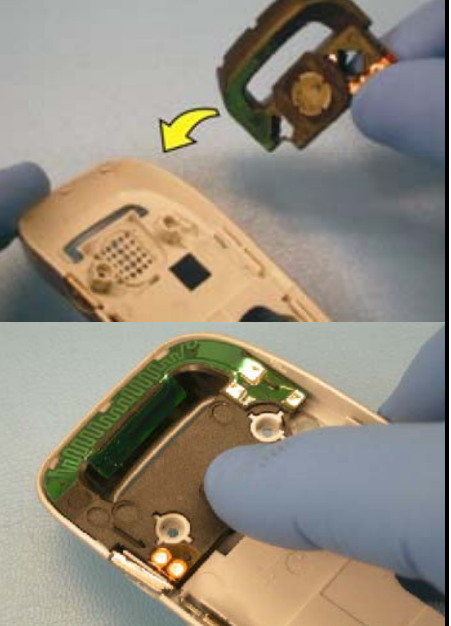
Tools needed to perform the following steps: None

Step-by-Step Instructions	
<p>NOTE! Sometimes the antenna assembly remains attached to the antenna cover when the flip portion of the phone is detached. If this is the case, remove the antenna assembly from the antenna cover by pulling it perpendicularly away from the surface of the antenna cover.</p>	
<p>1. Locate the antenna assembly in the outer base cover.</p>	
<p>2. Lift the antenna assembly out of the outer base cover and set it aside.</p>	

4.18.2 Antenna Assembly Installation

If this part is being replaced, a new part should be used in the place of the old part when the following steps are being performed. Whenever the antenna assembly is being replaced, a new rear speaker assembly and a new rear speaker cloth must be installed before installing the new antenna assembly. Refer to the “Rear Speaker Installation” section and the “Rear Speaker Cloth Installation” section for instructions on how to install these components on the antenna assembly.

Tools needed to perform the following steps: None

Step-by-Step Instructions	
1. Orient the antenna assembly so that the side of the antenna assembly where the antenna contact pads are located is toward you.	 <p>Antenna Contact Pads</p>
2. Align the “U” shaped opening in the antenna assembly with the “U” shaped opening in the outer base cover. Also align the two round holes in the antenna assembly with the two screw bosses extending up from the inner surface of the outer base cover.	 <p>“U” Shaped Opening</p> <p>Screw Bosses</p> <p>“U” Shaped Opening</p> <p>Round Holes</p>
<p>NOTE! When installing the antenna assembly, be careful not to contaminate the antenna contacts pads or the speaker contact pads.</p> <p>3. Insert the antenna assembly into the outer base cover and gently press the antenna assembly into place.</p>	

- Perform sections 2.2.3 - 2.2.5 the Base Reassembly procedure.

4.19 Magnet

4.19.1 Magnet Removal

- Perform sections 3.1.1 - 3.1.2 of the Flip Disassembly

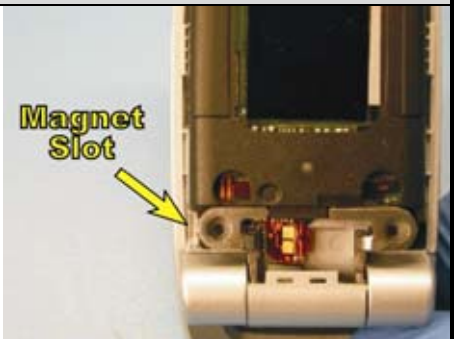
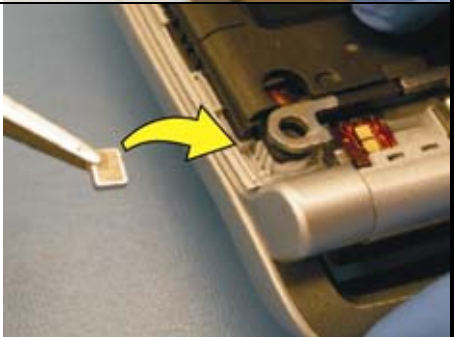
Tools needed to perform the following steps: • ESD tweezers

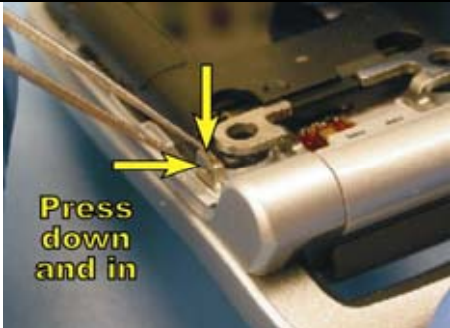
Step-by-Step Instructions	
<ol style="list-style-type: none"> 1. Locate the magnet and remove it from its slot in the inner flip cover using tweezers. <p>NOTE! When handling the magnet, avoid contaminating the adhesive film that is on one side of the magnet.</p>	

4.19.2 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"> 1. Orient the flip assembly so that the small display is towards you and the hinge is oriented to the bottom. 2. Locate the slot for the magnet that is adjacent to the left side screw boss at the hinge end of the inner flip cover. 	
<p>NOTE! Use tweezers when handling the magnet to avoid contaminating the adhesive film that is on one side of the magnet.</p> <p>NOTE! If a new magnet is being used, remove the protective covering from the adhesive on the magnet.</p>	
<ol style="list-style-type: none"> 3. Orient the magnet so that its side with adhesive is oriented towards the screw boss. 	

Step-by-Step Instructions	
<p>4. Insert the magnet into its slot and press it downward and inward so that the magnet forms a good bond to the inner flip cover.</p>	

- Perform sections 3.2.2 - 3.2.3 the Flip Reassembly procedure.

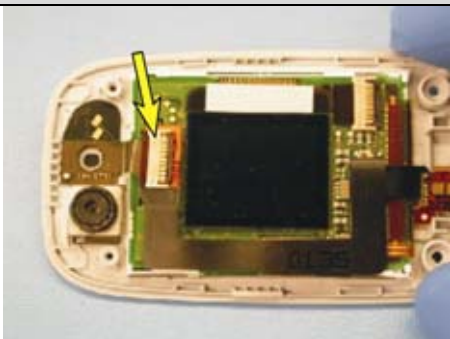
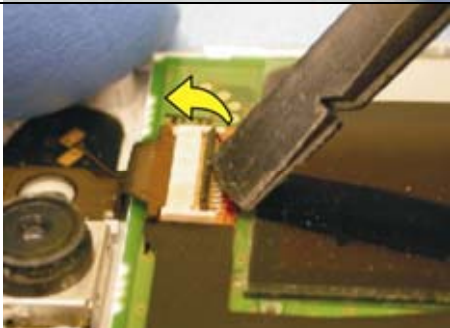
4.20 LCD Assembly

4.20.1 LCD Assembly Removal


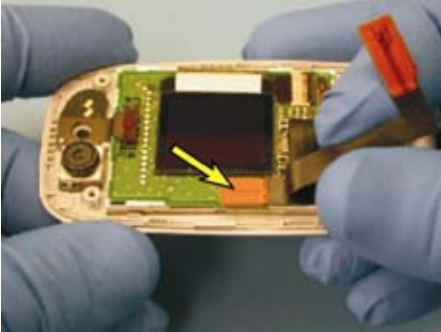

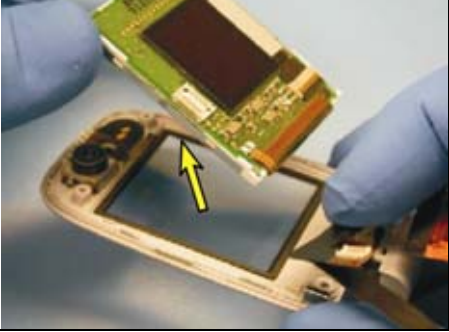
- Perform all sections of the Flip Disassembly

Tools needed to perform the following steps: • Pry Tool

NOTE! 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.

Step-by-Step Instructions	
<p>1. Locate the camera module’s connection to the main flex film.</p>	
<p>2. Disconnect the camera module’s flex film from its mating connector on the main flex film by rotating the black retaining bar of the connector towards the camera module’s flex film into a vertical position using a pry tool.</p>	



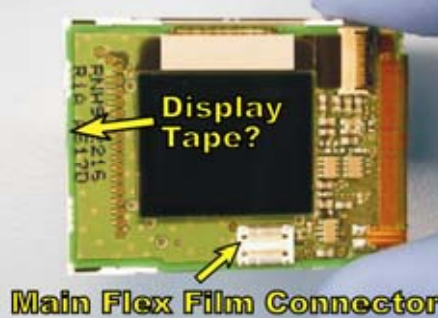



Step-by-Step Instructions	
3. Once the black retaining bar of the connector has been rotated up into a vertical position, pull the camera connection portion of the main flex film assembly directly away from the camera flex film to disconnect the camera module.	
4. Lift the portion of the main flex film that connects to the camera module out of the way so that the main flex film connection to the LCD assembly can be accessed.	
5. Using a pry tool, unplug the main flex film from the LCD assembly.	
6. Lift the LCD assembly from the inner flip cover and set it aside.	

4.20.2 LCD Assembly Installation


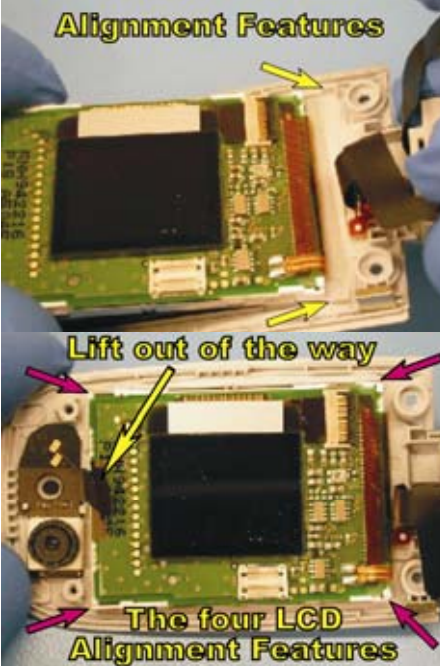

If this part is being replaced, a new part should be used in the place of the old part when performing the following steps.

Tools needed to perform the following steps: • Pry Tool


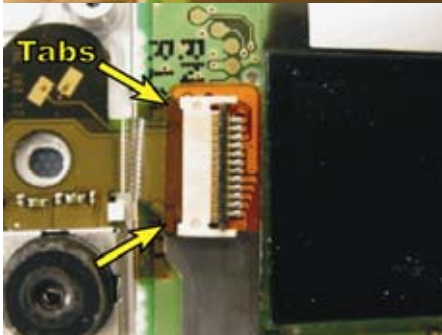


NOTE! Whenever the phrase “pry tool” is used, a nylon pointer, an orangewood stick, or a front opening tool may be used, depending on the user’s preference.

Step-by-Step Instructions	
<ol style="list-style-type: none"> 1. Orient the LCD assembly so that the small display is toward you and main flex film connector is below the small display window. 	
<ol style="list-style-type: none"> 2. Determine whether a piece of display tape is installed over a portion of the LCD assembly’s left edge. If a piece of display tape is not installed: <ol style="list-style-type: none"> a. Obtain a display tape and position it on the surface shown so that the upper narrow edge of the display tape is adjacent to the bottom of the upper series of notches in the LCD assembly’s circuit board. b. Apply pressure to the portion of the tape that was just placed. c. Rotate the unattached portion of the display tape down on to the LCD assembly’s circuit board and apply pressure to the tape. 	  



Step-by-Step Instructions	
<p>NOTE! If there is a protective film over the large display of the LCD assembly, remove it at this time.</p> <p>3. Orient the LCD assembly so that the large display is towards the inner flip cover and the end of the LCD assembly with the strip of flex film wrapped over it is towards the hinge.</p>	
<p>4. Lift the main flex film out of the way and insert the end of the LCD assembly with flex film wrapped over it into the LCD alignment features on the inner surface of the inner flip cover.</p> <p>5. Lift the camera module's flex film out of the way and rotate the LCD assembly down onto the inner flip cover so that the LCD assembly is seated within its four alignment features on the inner flip cover.</p>	
<p>6. Plug the LCD connector on the main flex film into the corresponding connector on the LCD assembly.</p>	



Step-by-Step Instructions	
<p>NOTE! Make sure that the main flex film connector's black retaining bar is rotated to vertical orientation before trying to insert the camera module's flex film.</p> <p>7. Carefully slide the flex connection of the camera module into the slot in the adjacent edge of its mating connector on the main flex film until the two tabs on each side of the flex connection are butted against the edge of the connector.</p>	 
<p>8. Rotate the black retaining bar into a horizontal orientation. Then press down on the retaining bar until it is completely closed.</p> <p>NOTE! If there is a protective film over the small display on the LCD assembly, remove it at this time.</p>	 

- Perform all sections of the Flip Reassembly

4.21 Camera Module

4.21.1 Camera Module Removal

- Perform all sections of the Flip Disassembly


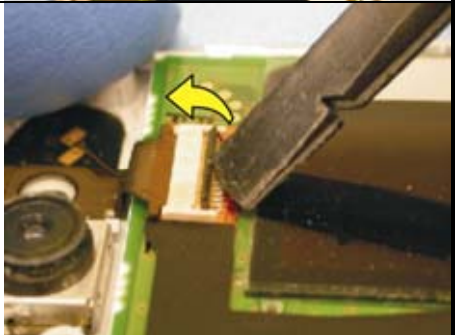
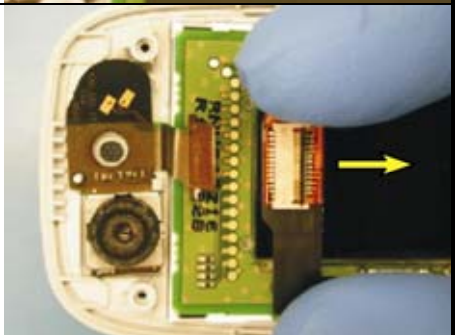
Tools needed to perform the following steps:

* ESD tweezers

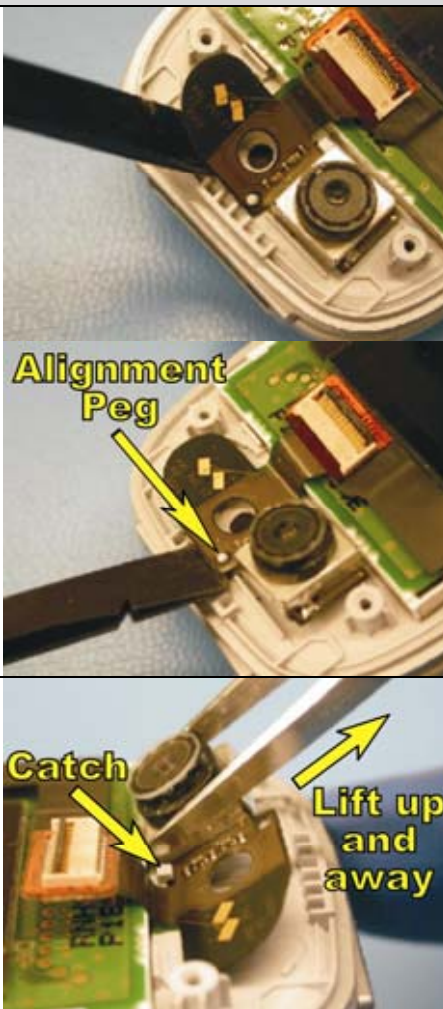
- Pry Tool

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

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

Step-by-Step Instructions	
<ol style="list-style-type: none"> 1. Orient the flip assembly so that the inner surface of the inner flip cover is towards you and the hinge is oriented to the bottom. 2. Locate the camera module’s connection to the main flex film. 	
<ol style="list-style-type: none"> 3. Disconnect the camera module’s flex film from the mating connector on the main flex film by rotating the black retaining bar of the connector towards the camera module’s flex film into a vertical position using a pry tool. 	
<ol style="list-style-type: none"> 4. Once the black retaining bar of the connector has been rotated up into a vertical position, pull the camera connection portion of the main flex film assembly directly away from the camera flex film to disconnect the camera module. 	



Step-by-Step Instructions	
5. Using the flat end of a pry tool, dislodge the camera flex film from the adhesive that is around the receiver port.	
6. Work the camera module's flex film free from the alignment peg that protrudes through it.	
7. Once the camera module's flex film is free from its alignment peg, lift the camera module up and away from the inner flip cover so that the camera module's flex film comes free of the catch just above the display window.	

4.21.2 Camera Module Installation


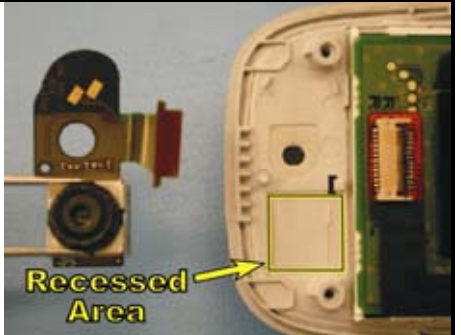
If this part is being replaced, a new part should be used in the place of the old part when performing the following steps.

Tools needed to perform the following steps:

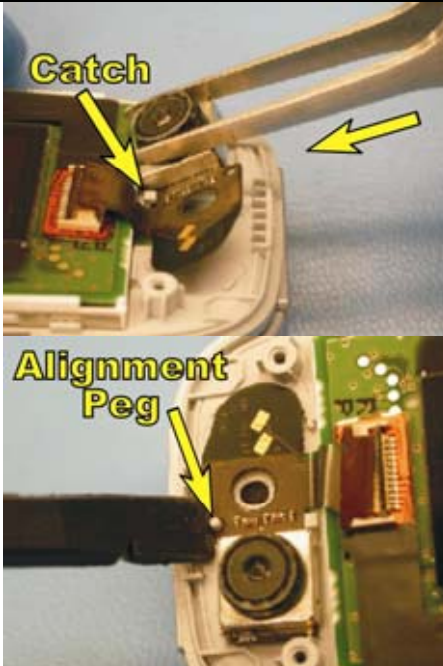


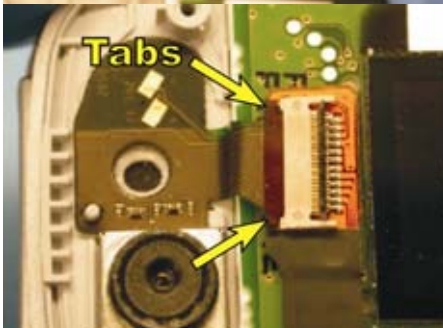
- * ESD tweezers
- Pry tool
- Lint-free wipes

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

NOTE! 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.

Step-by-Step Instructions	
<p>1. Remove the old adhesive film that is mounted around the receiver port.</p> <p>NOTE! Make sure that all adhesive residue is removed. Carefully clean off any residue from around the receiver port with alcohol and a lint-free wipe.</p>	
<p>2. Obtain a new adhesive film and orient it so that it corresponds to the shape of the recess around the receiver port.</p> <p>3. Insert the adhesive film into its recess and press it into place using your finger to ensure a good adhesive bond is formed to the inner flip cover.</p> <p>4. Remove the protective covering from the adhesive film</p>	
<p>NOTE! Make sure not to get finger prints, dust, or dirt on the camera lens.</p> <p>5. Position the camera module so that the camera portion of the module is over the top of its square recess area on the interior surface of the inner flip cover.</p>	

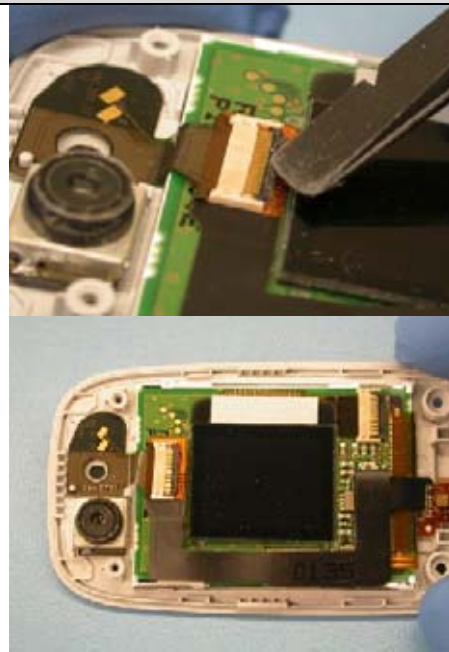


Step-by-Step Instructions	
<p>6. Slide the edge of the camera flex film under the catch adjacent to the display window and press the camera flex film down onto its alignment peg.</p>	
<p>7. Apply pressure to the flex film around the receiver opening using the flat end of a pry tool so that the camera module's flex film will bond to the inner flip cover.</p>	
<p>NOTE! Make sure that the main flex film connector's black retaining bar is rotated into a vertical orientation before trying to insert the camera module's mating flex film.</p>	
<p>8. Carefully slide the flex film connection of the camera module into the slot in the adjacent edge of it mating connector on the main flex film until the two tabs on each side of the flex connection are butted against the edge of the connector.</p>	



Step-by-Step Instructions

9. Rotate the black retaining bar into a horizontal orientation. Then press down on the retaining bar until it is completely closed.



- Perform all sections of the Flip Reassembly

4.22 Camera Key


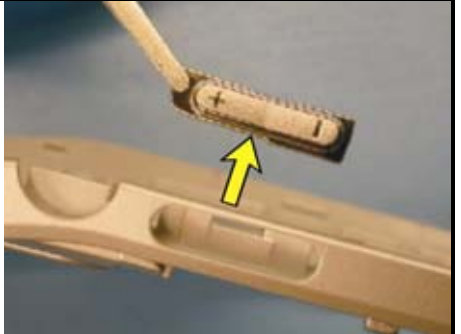
The removal and installation of this part is covered in the base disassembly and reassembly procedures. To remove this part, perform sections 2.1.1 - 2.1.3 of the base disassembly. To install this part, perform sections 2.2.3 - 2.2.5 of the base reassembly. If this part is being replaced, a new part should be used in the place of the old part when performing the reassembly instructions.

4.23 Volume Key

4.23.1 Volume Key Removal

- Perform sections 2.1.1 - 2.1.3 of the Base Disassembly

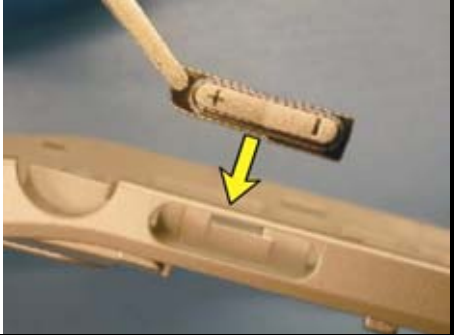

Tools needed to perform the following steps: • ESD tweezers

Step-by-Step Instructions	
1. Locate the volume key mounted in the side of the outer base cover.	
2. Using tweezers, lift the volume key out of its opening in the outer base cover.	

4.23.2 Volume Key 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	
1. Orient the volume key relative to the outer base cover so that the end of the key with the “+” icon is adjacent to the camera key location and the icon side of the key is facing outward.	
2. Using tweezers, insert the volume key into its cavity in the outer base cover.	

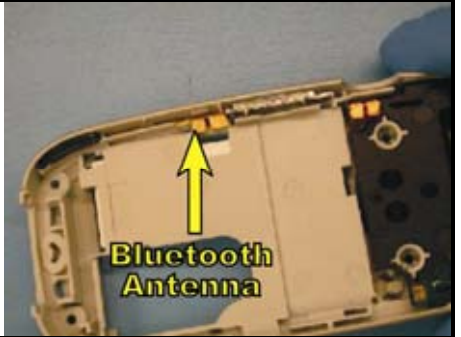
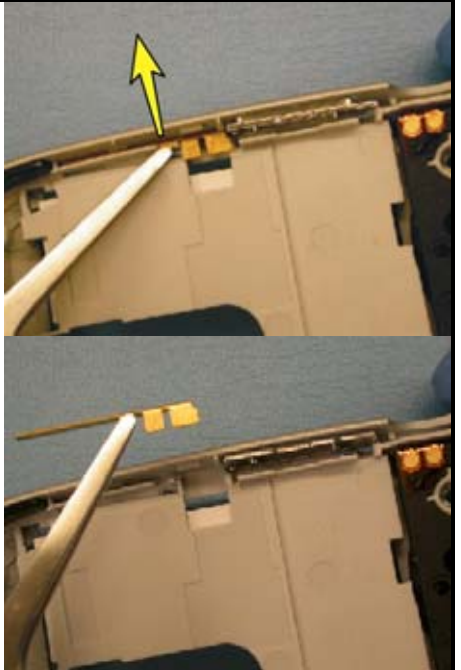
- Perform sections 2.2.3 - 2.2.5 the Base Reassembly procedure.

4.24 Bluetooth Antenna

4.24.1 Bluetooth Antenna Removal

- Perform sections 2.1.1 - 2.1.3 of the Base Disassembly

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

Step-by-Step Instructions	
1. With the inner surface of the outer base cover oriented towards you, locate the Bluetooth antenna.	
2. Using style 2A tweezers, grip the smallest of the Bluetooth antenna's three tabs and lift the antenna out of its cavity.	



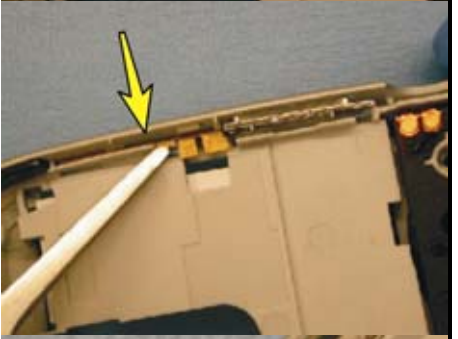




4.24.2 Bluetooth Antenna Installation

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: * Style 2A ESD tweezers

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

Step-by-Step Instructions	
1. With the inner surface of the outer base cover oriented towards you, locate the area just below the side volume key opening in which the Bluetooth antenna mounts.	
2. Obtain a Bluetooth antenna and place it into the outer base cover so that the three tabs are up towards the volume key opening and the long leg portion of the antenna is inserted in its slot in the outer base cover.	  
NOTE! The Bluetooth antenna is correctly positioned if a standoff is protruding up between the smallest two tabs of the Bluetooth antenna.	

- Perform sections 2.2.3 - 2.2.5 the Flip Reassembly procedure.

4.25 SEMC Icon



4.25.1 SEMC Icon Replacement – If Damaged

The SEMC icon located on the outer flip cover cannot be removed without damaging the cover to which it is mounted. Therefore, unless the icon is missing, the outer flip cover must be replaced if the SEMC icon requires replacing. To remove the outer flip cover, perform sections 3.1.1 – 3.1.2 of the flip disassembly. To install a new outer flip cover, perform sections 3.2.2 – 3.2.3 of the flip reassembly.

4.25.2 SEMC Icon Replacement – If Missing

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

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

Step-by-Step Instructions	
<p>1. Remove the backing from a new SEMC icon and place the icon in its cavity in the outer flip cover.</p> <p>NOTE! Make sure to align the peg on the icon with the corresponding hole in the icon cavity.</p>	
<p>2. Apply gentle pressure to the icon to ensure a good adhesive bond to the outer flip cover.</p>	

- No further reassembly required

4.26 Label

4.26.1 Label Removal

- Perform sections 2.1.1 – 2.1.2 of the Base Disassembly Procedure

Tools needed to perform the following steps:

- * Style 2A ESD-safe tweezers

- * Pry tool

- Lint-free wipes

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

NOTE! The phrase “pry tool” indicates that a nylon pointer, an orangewood stick, or a front opening tool may be used during this procedure depending on the user’s preference.

Step-by-Step Instructions

NOTE! This product contains two labels, an information label and a logo label. Both labels are printed at the same time on one label and then that label is separated into two parts.

- Before removing a label from a phone, print a new label.

NOTE! The text on the new label must be fully readable and all barcodes must be scannable.



NOTE! The label being replaced only has to be removed if there are already two or more of that label on the phone.

NOTE! Both the information label and the logo label do not have to be replaced just because one of the labels requires replacement.

- Carefully peel the old labels that are being replaced from the bottom of the battery cavity.


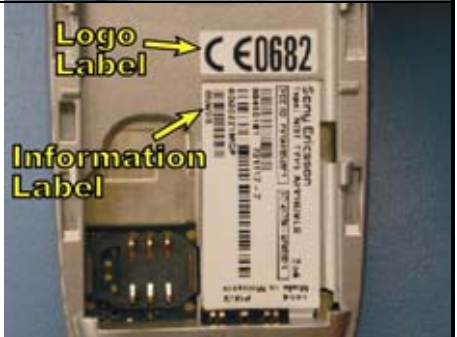
NOTE! Avoid damaging the battery cavity.

NOTE! Make sure that all adhesive residue is removed. Carefully clean off any residue in the label area with alcohol and a lint-free wipe.



4.26.2 Label Installation

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

Step-by-Step Instructions	
NOTE! This product contains two labels, an information label and a logo label. Both labels are printed at the same time on one label and then that label is separated into two parts.	
NOTE! Both the information label and the logo label do not have to be replaced just because one of the labels requires replacement.	
NOTE! No more than two labels are allowed stacked on top of each other in the battery cavity. If there are already two labels of the label being replaced present, perform the label removal procedure before proceeding.	
1. If a new label has not been created yet, then do so at this time.	
2. Separate the logo label and the information label.	
3. Using tweezers, position the new label(s) that are being installed in the appropriate location(s) shown.	
NOTE! When correctly placed, the information label should be within the rectangular recessed area directly adjacent to the battery connector and the logo label should be directly above the information label.	
4. Once the label(s) is correctly positioned, carefully smooth the label(s) into place.	

- Perform sections 2.2.4 – 2.2.5 of the Base Reassembly Procedure

4.27 Dome Foil

4.27.1 Dome Foil Removal


- Perform all sections of the Base Disassembly Procedure

Tools needed to perform the following steps:

- * Style 2A ESD tweezers (Blunt Tip)
- * Pry tool
- Lint-free wipes

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

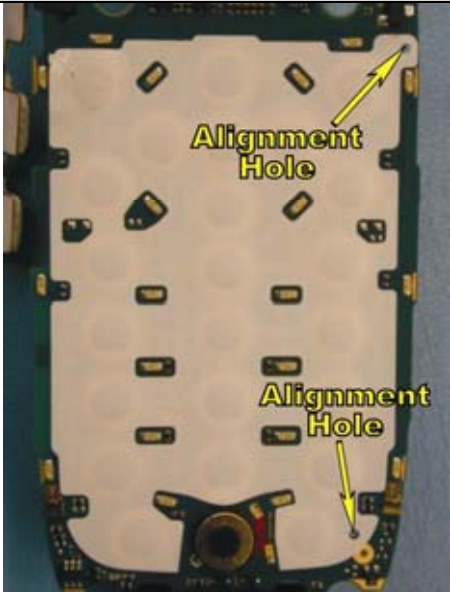

NOTE! The phrase “pry tool” indicates that a nylon pointer, an orangewood stick, or a front opening tool may be used during this procedure depending on the user’s preference.

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

4.27.2 Dome Foil Installation

A new dome foil must be used if the old dome foil has been removed.

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

Step-by-Step Instructions	
<p>1. Remove the protective backing from the dome foil.</p> <p>NOTE! Use a pair of style 2A tweezers to assist with handling and the positioning of the dome foil to its alignment features on the circuit board.</p>	
<p>2. Align the dome foil to the circuit board using the two alignment holes in the circuit board.</p> <p>NOTE! When the dome foil is correctly installed, you should be able to see completely through both alignment holes. Also, components should be visible in all of the rectangular holes in the foil.</p>	
<p>3. Carefully smooth the dome foil into place.</p> <p>NOTE! Make sure that no air bubbles are trapped under the foil.</p>	

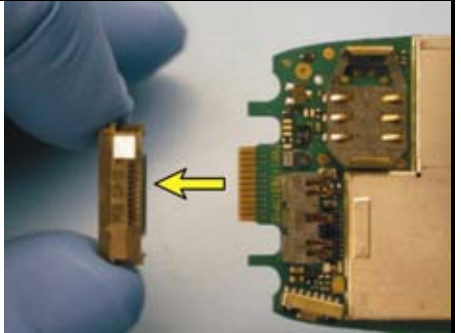
- Perform all sections of the Base Reassembly Procedure

4.28 System Connector

4.28.1 System Connector Removal

- Perform all sections of the Base Disassembly Procedure

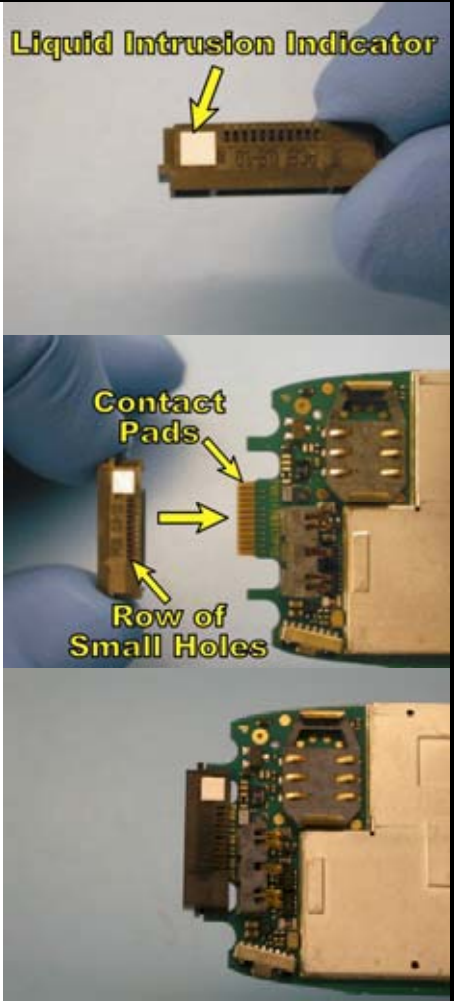
Tools needed to perform the following steps: None

Step-by-Step Instructions	
1. Pull the system connector off of the bottom of the circuit board.	

4.28.2 System Connector 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. Whenever the system connector is being replaced, a new liquid intrusion indicator must be installed on the new system connector. Refer to the installation portion of the “Liquid Intrusion Indicator” section for instructions on how to install a new liquid intrusion indicator.

Tools needed to perform the following steps: None

Step-by-Step Instructions	
<p>NOTE! Verify that a liquid intrusion indicator is present on the system connector before proceeding. If a liquid intrusion indicator is not present, refer to the “Liquid Intrusion Indicator” section for instructions on how to install a new liquid intrusion indicator.</p> <ol style="list-style-type: none"> 1. Orient the circuit board so the contact pads for the system connector are towards you. 2. 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 side of the system connector with the row of contact pads that is end user accessible is pointed away from the circuit board. 3. 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. 	

- Perform all sections of the Base Reassembly Procedure.

4.29 Liquid Intrusion Indicator


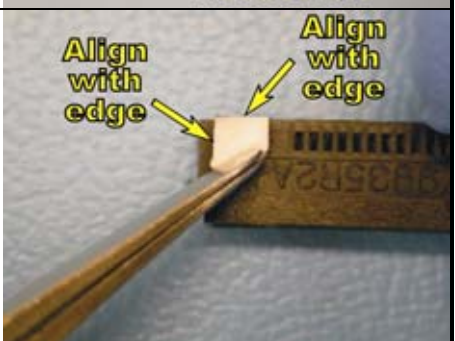
4.29.1 Liquid Intrusion Indicator Removal

If a liquid intrusion indicator is activated, handle the unit according to the instructions of your Sony Ericsson representative.

4.29.2 Liquid Intrusion Indicator Installation

- Tools needed to perform the following steps:**
- Pry tool
 - Style 2A ESD tweezers

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

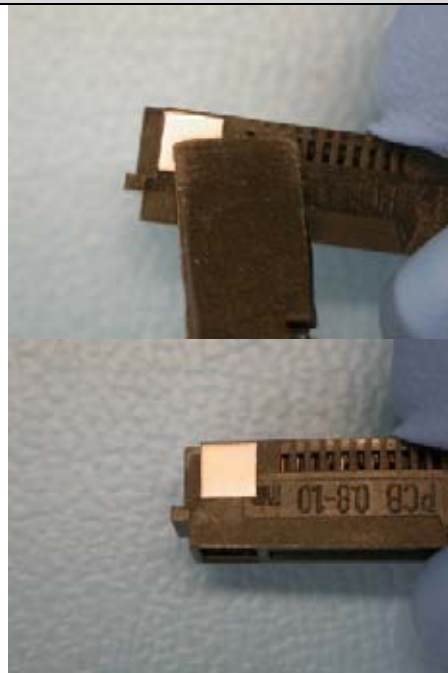
Step-by-Step Instructions	
1. Orient the system connector so that the side of the connector with the row of small holes is oriented towards you and the portion of the connector that is end user accessible is oriented downward.	
2. Using tweezers, obtain a liquid intrusion indicator and place it so that its top and left edges are aligned with the top and left edges of the connector’s upper surface.	



Step-by-Step Instructions

NOTE! 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.

3. 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.



- Perform the installation portion of the “System Connector” section
- Perform all sections of the Base Reassembly Procedure

4.30 Rear Speaker Cloth

4.30.1 Rear Speaker Cloth Removal

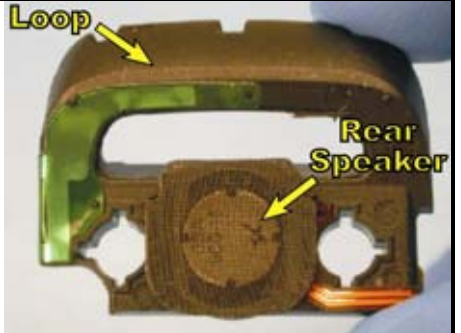

- Perform sections 2.1.1 - 2.1.3 of the Base Disassembly Procedure
- Perform the Antenna Assembly Removal Procedure

Tools needed to perform the following steps:

- * Pry tool
- * Style 2A ESD tweezers

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

NOTE! The phrase “pry tool” indicates that a nylon pointer, an orangewood stick, or a front opening tool may be used during this procedure depending on the user’s preference.

Step-by-Step Instructions	
1. Orient the antenna assembly so that the rear speaker is toward you and the antenna loop is to the top.	
2. To reduce the risk of damaging the rear speaker’s flex film when removing the rear speaker cloth, start by peeling up the top right corner of the rear speaker cloth.	



Step-by-Step Instructions

3. Pull the rear speaker cloth towards its bottom left corner in a shearing fashion until the rear speaker cloth is free of the antenna assembly.



4. Remove any remaining residue from the rear speaker assembly (if it is not being replaced).

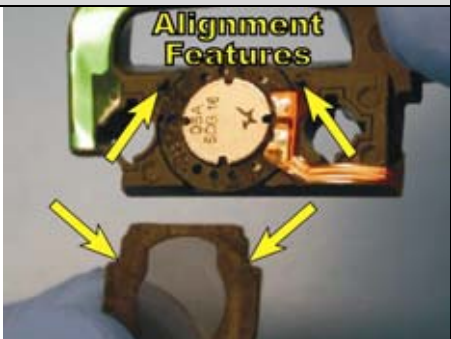





4.30.2 Rear Speaker Cloth Installation

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

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

Step-by-Step Instructions	
<ol style="list-style-type: none">1. Obtain a new rear speaker cloth and remove the protective backing.2. Orient the rear speaker cloth so that the features in the rear speaker cloth correspond to the corresponding alignment features on the antenna assembly.	
<ol style="list-style-type: none">3. Place the rear speaker cloth over the rear speaker and carefully smooth it into place so that a good bond is formed between the rear speaker cloth and antenna assembly.	

- Perform the Antenna Assembly Installation Procedure
- Perform sections 2.2.3 - 2.2.5 of the Base Reassembly Procedure

4.31 Rear Speaker

4.31.1 Rear Speaker Removal

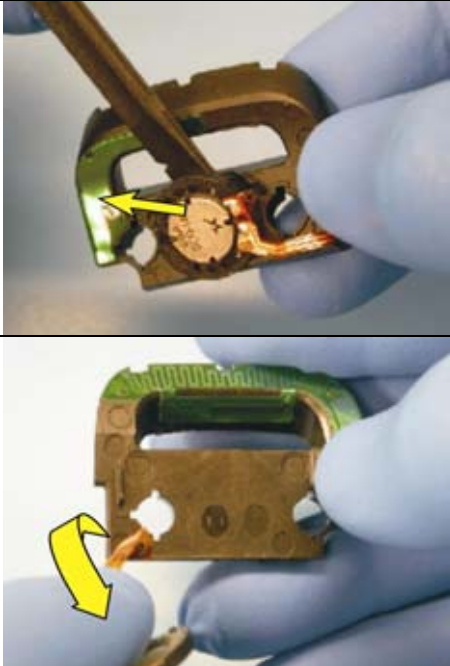
- Perform sections 2.1.1 - 2.1.3 of the Base Disassembly Procedure
- Perform the Antenna Assembly Removal Procedure
- Perform the Rear Speaker Cloth Removal Procedure


Tools needed to perform the following steps:

- * Style 2A ESD-safe tweezers (Blunt Tip)
- * Pry tool

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

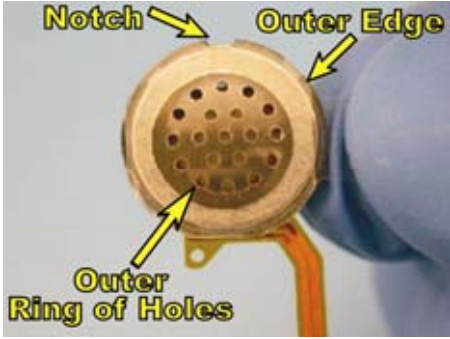
NOTE! The phrase “pry tool” indicates that a nylon pointer, an orangewood stick, or a front opening tool may be used during this procedure depending on the user’s preference.


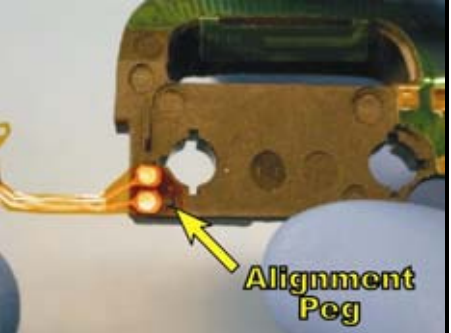


Step-by-Step Instructions	
<p>NOTE! The adhesive that holds the rear speaker in its antenna assembly cavity is very strong. Therefore when removing the rear speaker, the likelihood of damaging it to the point that it is non-usable is very high.</p>	
<ol style="list-style-type: none"> 1. Using a pry tool or style 2A tweezers, pry the rear speaker from its cavity in the antenna assembly. 	
<ol style="list-style-type: none"> 2. Once the speaker portion of the rear speaker assembly is free, peel the contact pad portion of the assembly off of the antenna assembly. 	

Step-by-Step Instructions	
<p>3. Remove any remaining residue from the bottom of the speaker cavity and the area where the contact portion of the flex film attaches to the antenna assembly.</p>	

4.31.2 Rear Speaker Installation

Tools needed to perform the following steps: None

Step-by-Step Instructions	
<ol style="list-style-type: none"> 1. Obtain a new rear speaker assembly and a new adhesive ring for the speaker. 2. Orient the adhesive ring relative to the speaker so that the adhesive ring will be applied to the metal side of the speaker assembly. 3. Align the notch in the adhesive ring with the notch in the edge of the speaker assembly. 4. Place the adhesive ring onto the speaker assembly so that it is located between the outer ring of holes and the outer edge of the speaker. 5. Once the speaker has been placed, rub over the entire adhesive ring so that a good bond forms between the adhesive and the speaker assembly. 	

Step-by-Step Instructions	
<p>6. Orient the antenna assembly so that the rear speaker cavity is away from you and the antenna loop is to the top.</p>	
<p>7. Remove the protective backing from back of the contact portion of the speaker assembly's flex film.</p> <p>8. Orient the contact portion of the speaker assembly's flex film over the lower left corner of the antenna assembly so that the features of the contact portion of the rear speaker assembly correspond to the alignment features on the antenna assembly.</p> <p>9. Place the contact portion of the speaker assembly onto the antenna assembly and apply pressure so that a good bond is formed between the two parts.</p> <p>NOTE! The rear speaker should extend off to the left side of the antenna assembly if the contact portion of the speaker assembly has been correctly positioned.</p>	
<p>10. Remove the protective film from the adhesive ring attached to the speaker.</p> <p>11. Wrap the rear speaker assembly's flex film around the side of the antenna assembly and insert the speaker into its cavity.</p>	
<p>12. Apply pressure to the back of the speaker so that a good bond is formed between the speaker and the antenna assembly.</p>	

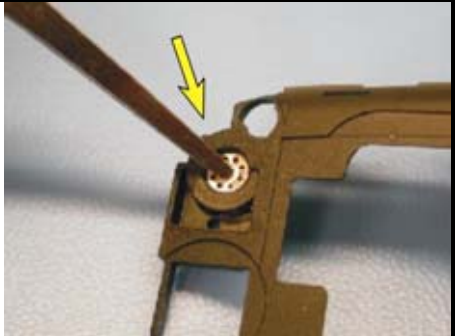

- Perform the Rear Speaker Cloth Installation Procedure
- Perform the Antenna Assembly Installation Procedure
- Perform sections 2.2.3 - 2.2.5 of the Base Reassembly Procedure

4.32 Receiver

4.32.1 Receiver Removal

- Perform all sections of the Flip Disassembly Procedure

Tools needed to perform the following steps: • ESD-safe tweezers

Step-by-Step Instructions	
1. Using tweezers, remove the receiver from its cavity in the LCD sub-frame by pressing on the side of the receiver with the pattern of holes.	
2. Remove any adhesive residue left on the bottom of the LCD sub-frame's receiver cavity	

4.32.2 Receiver Installation

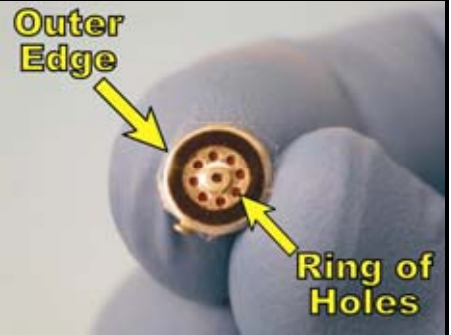
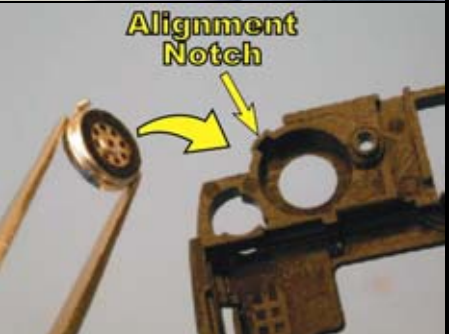
The receiver can never be reused. Therefore, if the receiver has been removed a new receiver must be installed.

Tools needed to perform the following steps:

- * Style 2A ESD-safe tweezers (Blunt Tip)
- * Pry tool

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

NOTE! The phrase “pry tool” indicates that a nylon pointer, an orangewood stick, or a front opening tool may be used during this procedure depending on the user’s preference.

Step-by-Step Instructions	
1. Apply an adhesive ring to the side of the receiver that has the circular pattern of holes. The adhesive ring should be applied so it is positioned between the ring of holes and the outer edge of the receiver.	
2. Remove the protective covering from the receiver’s adhesive ring.	
3. Orient the receiver so that its side with the adhesive ring attached is towards the receiver cavity in the LCD sub-frame and the alignment tab on the receiver is aligned with the corresponding notch in the side wall of the receiver cavity.	



Step-by-Step Instructions

NOTE! Avoid damaging the receiver's contact springs when mounting the receiver.

4. Insert the receiver into the LCD sub-frame and apply pressure to the surface area around the contact springs of the receiver so that a good bond is formed between the receiver and the LCD sub-frame.

Alignment Feature



Contact Springs



- Perform all sections of the Flip Reassembly Procedure.



4.33 Side Key Flex Film

4.33.1 Side Key Flex Film Removal

- Perform all sections of the Base Disassembly Procedure

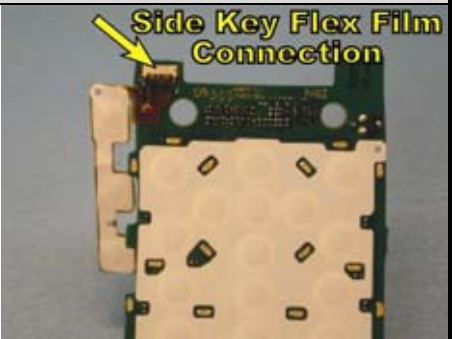
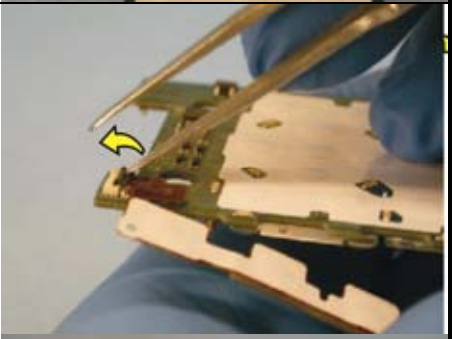
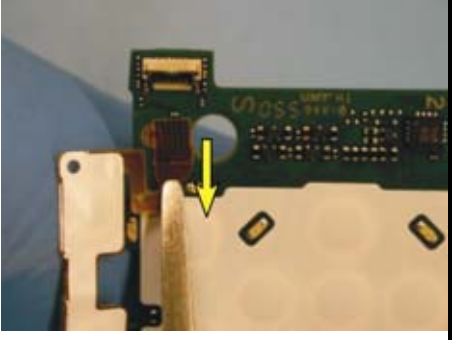
Tools needed to perform the following steps:

* Pry tool

- Style 2A ESD-safe tweezers

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

NOTE! The phrase “pry tool” indicates that a nylon pointer, an orangewood stick, or a front opening tool may be used during this procedure depending on the user’s preference.

Step-by-Step Instructions	
<ol style="list-style-type: none">1. Orient the circuit board so that the dome foil is towards you and the system connector is oriented to the bottom.2. Locate the side key flex film connection on the top left corner of the circuit board.	
<ol style="list-style-type: none">3. Disconnect the side key flex film from its mating connector on the circuit board by using the flat end of a pry tool or the tip of a pair of style 2A tweezers to rotate the black bar portion of the connector towards the connector’s center so that the black bar is in a vertical position.	
<ol style="list-style-type: none">4. Using the style 2A tweezers, grip the portion of the side key flex film that extends directly below the board connector and pull the flex film straight down out of the board connector. <p>NOTE! Do not attempt to pull the side key flex film out of its board connector by pulling down on the dome foil covered portion of the flex film. Disconnecting the side key flex film in this manner is likely to cause damage to the side key flex film.</p>	

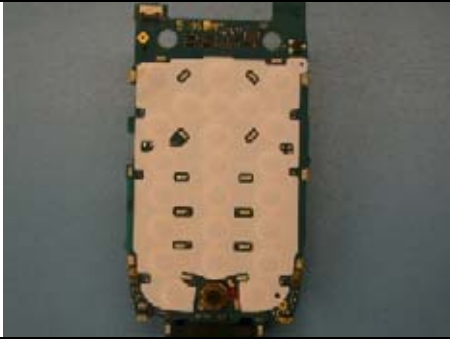
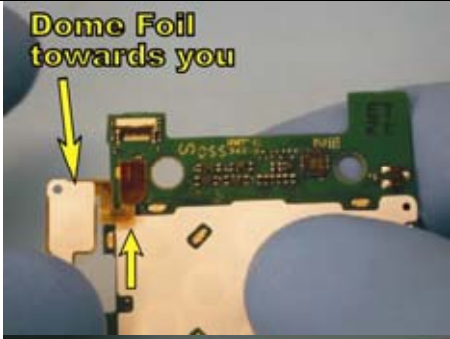

4.33.2 Side Key Flex Film Installation

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: * Pry tool

NOTE! A “ * ” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

NOTE! The phrase “pry tool” indicates that a nylon pointer, an orangewood stick, or a front opening tool may be used during this procedure depending on the user’s preference.

Step-by-Step Instructions	
<ol style="list-style-type: none"> 1. Orient the circuit board so that the dome foil is towards you and the system connector is oriented to the bottom. 	
<p>NOTE! Make sure that the black retaining bar on the circuit board connector for the side key flex film is rotated to a vertical orientation before trying to insert the connection portion of the side key flex film.</p> <ol style="list-style-type: none"> 2. Orient the side key flex film so that the side of the flex film with the dome foil is towards you and the contact portion of the flex film is aligned with the bottom of its connector on the circuit board. 3. Carefully slide the connection portion of the side key flex film into the slot in the edge of its mating connector on the circuit board until the flex film will not insert any further. 	 



Step-by-Step Instructions	
4. Hold the connection together and rotate the black retaining bar towards the main keypad dome foil so that the retaining bar is flush with the rest of the connector. Then press down on the retaining bar to make sure it is completely closed.	



- Perform all sections of the Base Reassembly Procedure.

4.34 Hinge

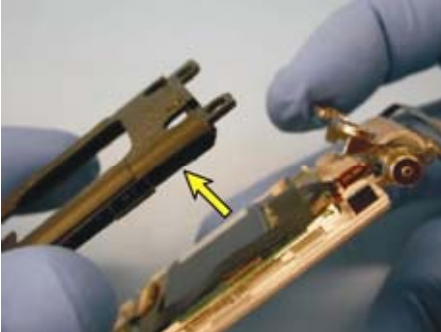
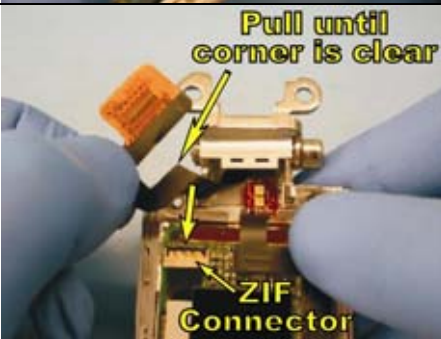

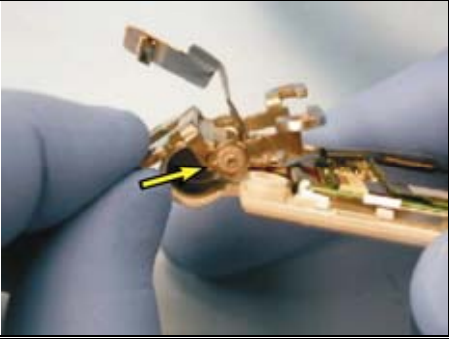
4.34.1 Hinge Removal

- Perform sections 2.1.1 - 2.1.4 of the Base Disassembly Procedure.
- Perform the Antenna Cover Removal Procedure.
- Perform sections 3.1.1 - 3.1.2 of the Flip Disassembly Procedure.

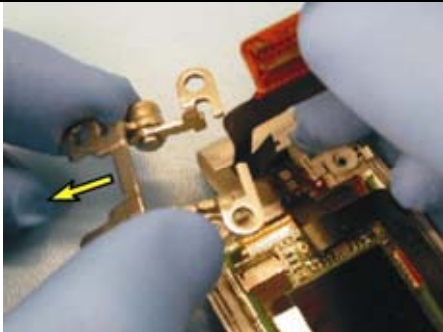
Tools needed to perform the following steps: None

Step-by-Step Instructions	
1. Rotate the hinge into the open position.	
2. Rotate the hinge arms that are lying on top of the LCD sub-frame up off of the sub-frame.	



Step-by-Step Instructions	
<p>3. Hold the hinge arms up out of the way and lift the LCD sub-frame off of the phone.</p> <p>NOTE! Be careful not to damage the flex circuit when removing the LCD sub-frame.</p>	
<p>4. Grip the portion of the main flex film that extends to the side of the hinge and gently pull it towards the ZIF connector on the LCD until the corner of the flex film comes from under the portion of the inner flip cover the wraps through the middle of the hinge.</p>	
<p>NOTE! Hold the non-locking hinge arm in the open position when performing the remaining steps.</p> <p>NOTE! Make sure that the two hinge arms that mount in the flip assembly do not get hung in their alignment cavities on the inner surface of the inner flip cover when performing the following steps.</p>	
<p>5. Center the two hinge joints in the portion of the inner flip cover that wraps through the middle of the hinge.</p>	
<p>6. Slide the two hinge joints simultaneously through the opening in the hinge wrapping portion of the inner flip cover. The hinge should now be separated from the inner flip cover.</p>	

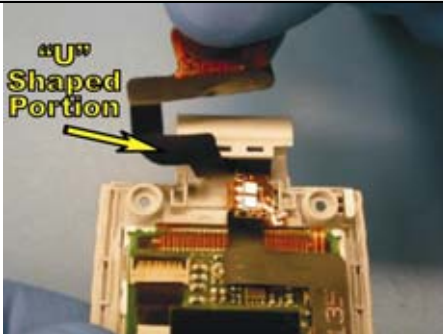



Step-by-Step Instructions	
<ol style="list-style-type: none">7. Work the hinge from around the main flex film.8. Once separated from the main flex film, set the hinge aside.	

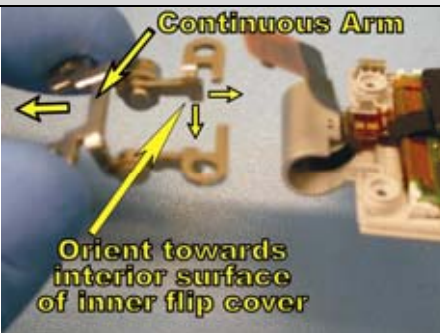
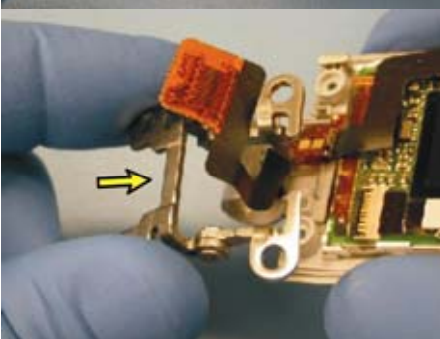
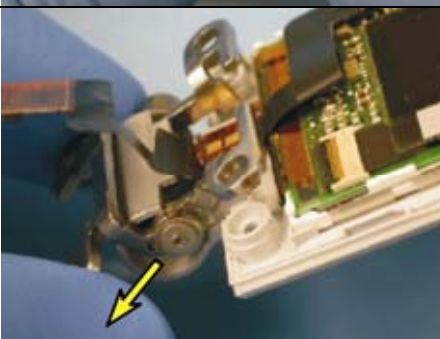

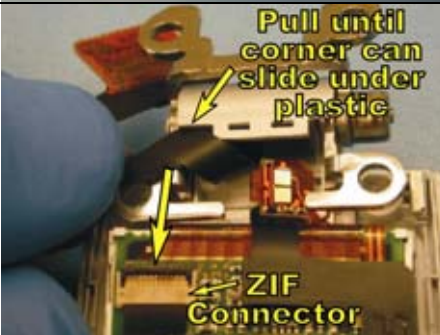
4.34.2 Hinge Installation




If the hinge 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: None

Step-by-Step Instructions	
<p>NOTE! Make sure the corner of the “U” shaped portion of the main flex film is not under the hinge wrapping portion of the inner flip cover.</p>	
<ol style="list-style-type: none">1. Rotate the hinge into the open position.	



Step-by-Step Instructions	
<p>2. Orient the hinge so that the alignment features on each of the small hinge arms is toward the interior surface of the inner flip cover and the large continuous arm is pointing away from the flip.</p> <p>NOTE! Hold the small non-locking hinge arm in the open position when performing the following steps.</p> <p>3. Pass the main flex film through the opening between the two small hinge arms as shown.</p>	 
<p>4. Slide the two hinge joints simultaneously through the opening in the hinge wrapping portion of the inner flip cover. The hinge joints should now be inside the hinge wrapping portion of the inner flip cover.</p>	 
<p>5. Grip the "U" shaped portion of the main flex film and gently pull it towards the ZIF connector on the LCD until the corner of the "U" shaped portion can be worked under the hinge wrap portion of the inner flip cover.</p>	

Step-by-Step Instructions	
6. Position the end of the main flex film that contains the circuit board connection over the top of the large continuous hinge arm as shown.	
7. Rotate the two small hinge arms up out of the way and place the LCD sub-frame down onto the inner flip cover so that features in the LCD sub-frame align to the screw bosses on the inner flip cover.	
8. Rotate the two small hinge arms down onto the LCD sub-frame.	

- Perform sections 3.2.2 - 3.2.3 of the Flip Reassembly Procedure.
- Perform the Antenna Cover Installation Procedure.
- Perform sections 2.2.2 - 2.2.5 of the Base Reassembly Procedure.

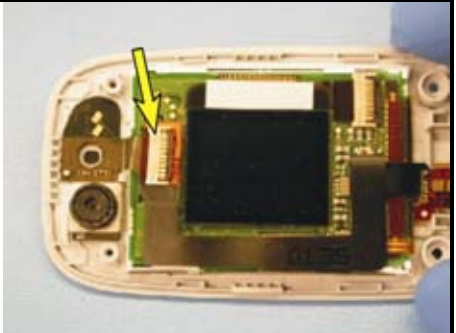
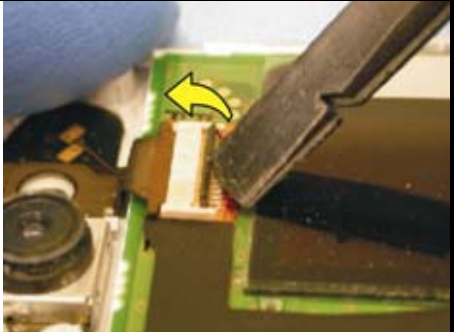

4.35 Main Flex Film

4.35.1 Main Flex Film Removal

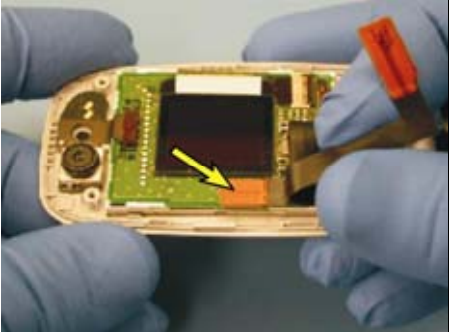

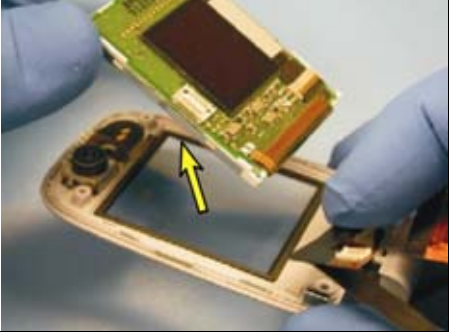
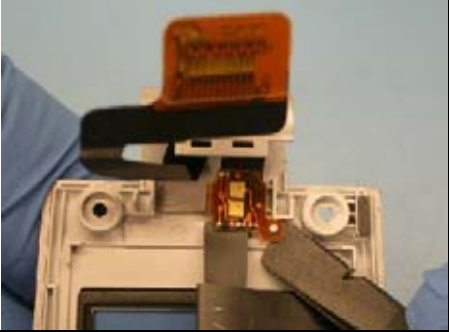
- Perform sections 2.1.1 - 2.1.4 of the Base Disassembly Procedure.
- Perform the Antenna Cover Removal Procedure.
- Perform sections 3.1.1 - 3.1.2 of the Flip Disassembly Procedure.
- Perform the Hinge Disassembly Procedure

Tools needed to perform the following steps: • Pry Tool

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

Step-by-Step Instructions	
1. Locate the camera module’s connection to the main flex film.	
2. Disconnect the camera module’s flex film from its mating connector on the main flex film by rotating the black retaining bar of the connector towards the camera module’s flex film into a vertical position using a pry tool.	
3. Once the black retaining bar of the connector has been rotated up into a vertical position, pull the camera connection portion of the main flex film assembly directly away from the camera flex film to disconnect the camera module.	

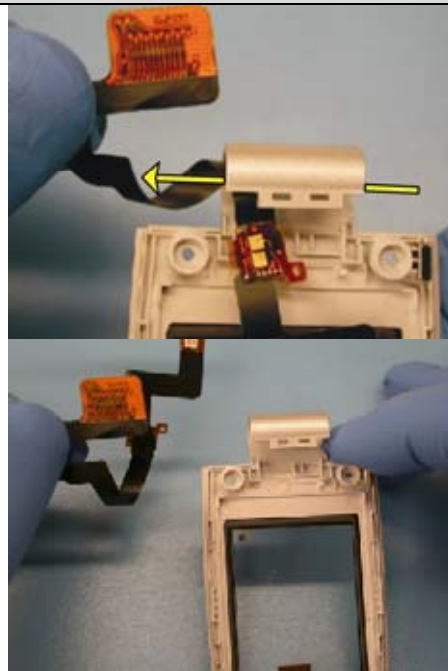


Step-by-Step Instructions	
4. Lift the portion of the main flex film that connects to the camera module out of the way so that the main flex film connection to the LCD assembly can be accessed.	
5. Using a pry tool, unplug the main flex film from the LCD assembly.	
6. Lift the LCD assembly from the inner surface of the inner flip cover and set it aside.	
7. Pry free the portion of the main flex film that contains the vibrator contacts from the alignment peg that is holding it in place.	



Step-by-Step Instructions

8. Once the portion of the main flex film containing the vibrator contacts is free from its alignment peg, grip the “U” shaped portion of the main flex film and gently pull it away from the inner flip cover along the imaginary axis that runs through the center of the hinge concealing portion of the inner flip cover until the main flex film separates from the inner flip cover.





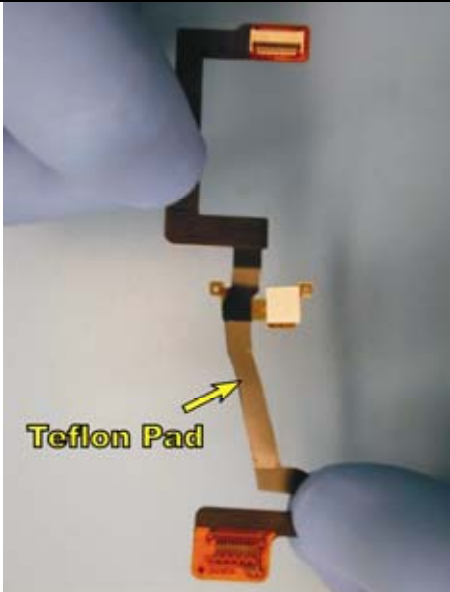
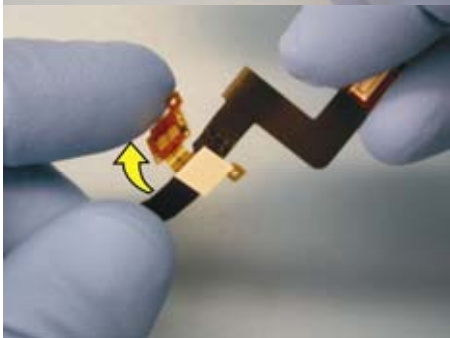
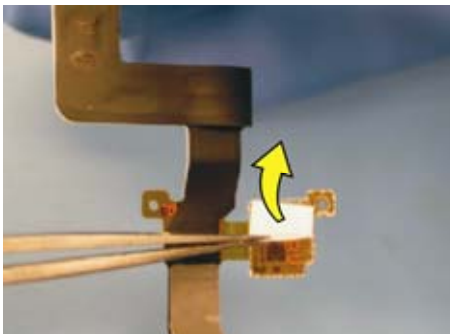
4.35.2 Main Flex Film Installation

If the main flex film is being replaced, a new part should be used in the place of the old part when performed the following steps.

Tools needed to perform the following steps: • Pry tool

* Style 2A ESD tweezers

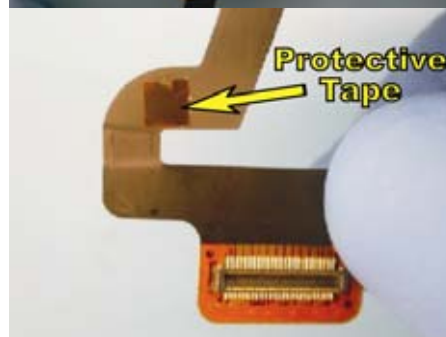
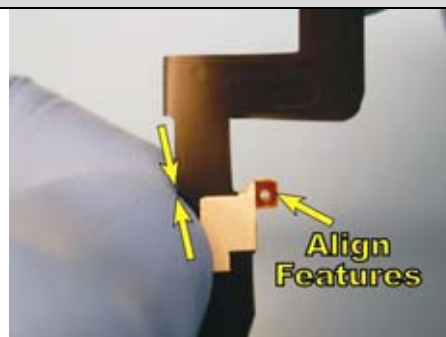
NOTE! A “ * ” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.

Step-by-Step Instructions	
<p>1. If a new main flex film is being installed:</p> <p>a. Install a Teflon pad on the main flex in the location shown.</p> <p>b. Fold the main flex film's extension that contains the vibrator contact pads back onto the main flex film so that the vibrator contact pads are accessible and the features of the extension are aligned with the corresponding features of the main flex film.</p> <p>c. Once the main flex film's extension that contains the vibrator contact pads is correctly positioned, lightly crease the fold where the flex film extension bends back onto the main flex film.</p> <p>NOTE! To prevent damage to the flex film, do NOT over crease the fold in the flex film.</p> <p>d. Remove the protective covering from the adhesive film located on the back of the flex film extension containing the vibrator contact pads.</p>	 <p>Teflon Pad</p>  



Step-by-Step Instructions

- e. Realign the flex film extension containing the vibrator contact pads with the corresponding features of the main flex film and apply pressure to the area where the adhesive is located so that a good bond forms between the extension and the main flex film.
- f. Install a spacer pad in the location shown.
- g. Install a square of protective tape in the location shown.

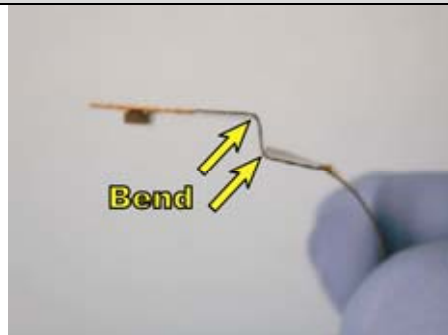




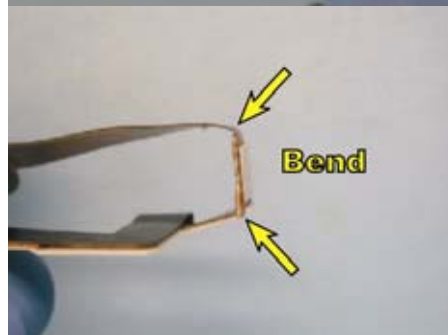
Step-by-Step Instructions

NOTE! To prevent damage to the flex film when performing the next two steps, do **NOT** overcrease the bends being added to the flex film.

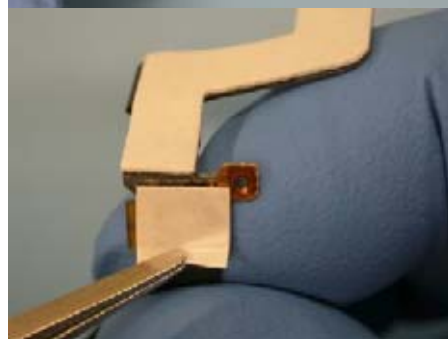
- h. Lightly bend the flex film near the board connection end as shown.



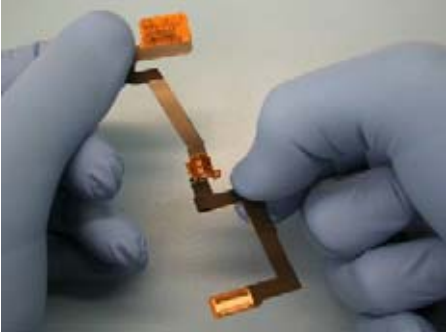
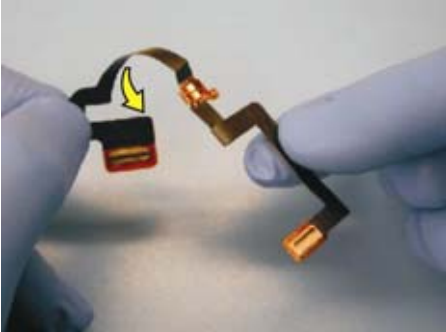
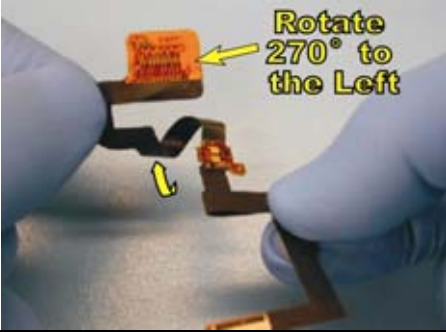
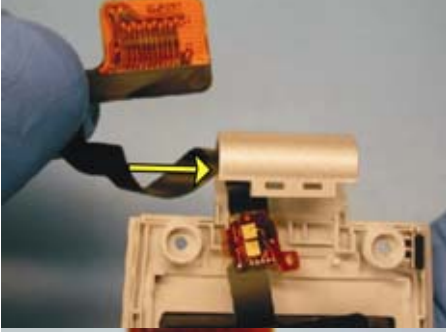

- i. Lightly bend the flex film near the vibrator connection area as shown.




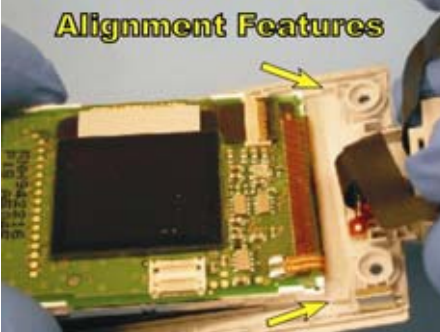



- j. Remove the protective covering from the adhesive film located on the main flex film that is directly behind vibrator contacts.




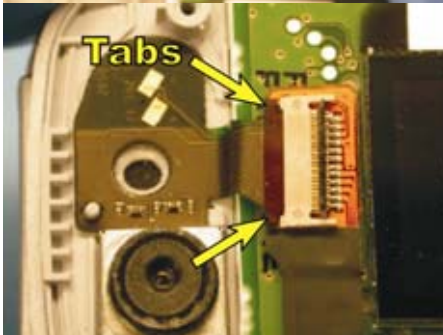



Step-by-Step Instructions	
<p>NOTE! Avoid contaminating the adhesive on the flex film directly opposite of the extension that contains the vibrator contact pads.</p> <p>2. Orient the main flex film so that the extension that connects to the circuit board is to the top and the circuit board connection on the flex film is facing away from you.</p>	
<p>3. Rotate the circuit board extension of the main flex film away from you and back around to the left side of the flex film 270 degrees so that a large spiral is formed in the circuit board extension.</p> <p>NOTE! The circuit board extension should spiral to the left of the main flex film.</p> <p>NOTE! The looped portion of main flex film's circuit board extension will be further away from you than the rest of the main flex film if the circuit board extension was spiraled correctly.</p>	 
<p>4. Slide the spiraled portion of the flex film inside the hinge covering portion of the inner flip cover and press vibrator contact portion of the flex film down onto it alignment peg to hold the flex film in place.</p> <p>5. Press the vibrator contact portion of the flex film against the inner flip cover so the adhesive on the back side of the flex film directly behind the vibrator contacts will bond to the inner flip cover.</p>	 



Step-by-Step Instructions	
<p>NOTE! Make sure there is no dust, debris, or finger prints on the two displays of the LCD assembly before proceeding.</p> <p>6. Orient the LCD assembly so that the large display is towards the inner flip cover and so that the end of the LCD assembly with flex film wrapped over it is towards the hinge wrapping portion of the inner flip cover.</p>	
<p>7. Lift the main flex film out of the way and insert the end of the LCD assembly with flex film wrapped over it into the LCD alignment features on the inner surface of inner flip cover.</p> <p>8. Lift the camera module's flex film out of the way and rotate the LCD assembly down onto the inner flip cover so that the LCD assembly is seated within its four alignment features on the inner flip cover.</p>	  
<p>9. Plug the LCD connector on the main flex film into the corresponding connector on the LCD assembly.</p>	



Step-by-Step Instructions		
<p>NOTE! Make sure that the black retaining bar on the main flex film's camera module connection is rotated towards the center of the connector into a vertical orientation before trying to insert the mating flex film.</p> <p>10. Carefully slide the flex connection of camera module into the slot in the edge of its mating connector on the main flex film. Slide the two halves of the connection together until the two tabs on each side of the camera module's flex film are butted against to the edge main flex film's connector.</p>		
		
	<p>11. Rotate the black retaining bar away from the camera module's flex film into a horizontal orientation. Then press down on the retaining bar to make sure it is completely closed.</p>	

- Perform the Hinge Reassembly Procedure
- Perform sections 3.2.2 - 3.2.3 of the Flip Reassembly Procedure.
- Perform the Antenna Cover Installation Procedure.
- Perform sections 2.2.2 - 2.2.5 of the Base Reassembly Procedure.

4.36 Inner Flip Cover

Replacement Procedure




- Perform sections 2.1.1 - 2.1.4 of the Base Disassembly Procedure.
- Perform the Antenna Cover Removal Procedure.
- Perform sections 3.1.1 - 3.1.2 of the Flip Disassembly Procedure.
- Perform the Hinge Disassembly Procedure
- Perform the Main Flex Film Disassembly Procedure

Tools needed to perform the following steps:

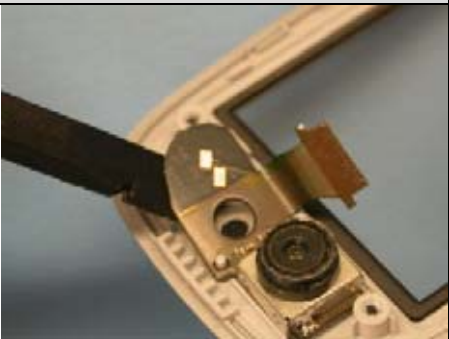

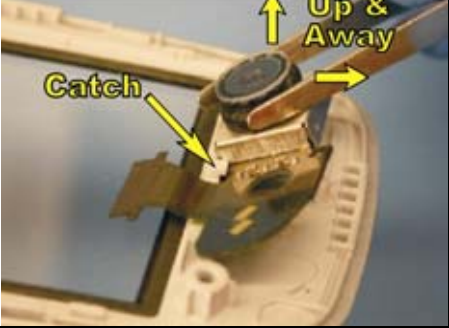
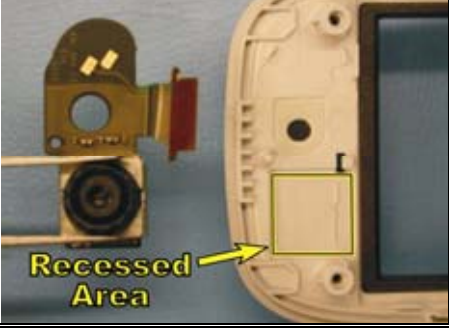
- Style 2A ESD tweezers

- Pry tool

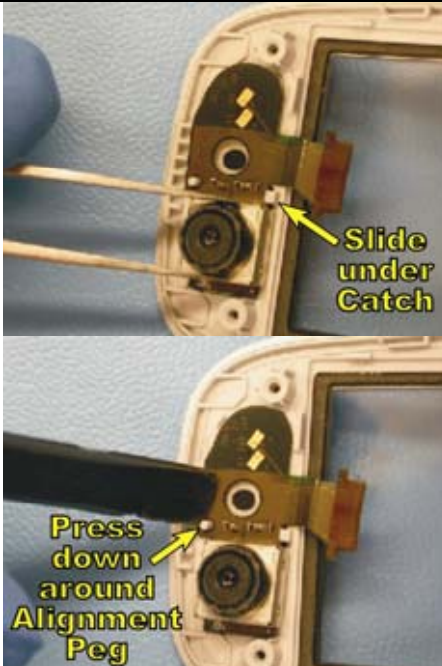

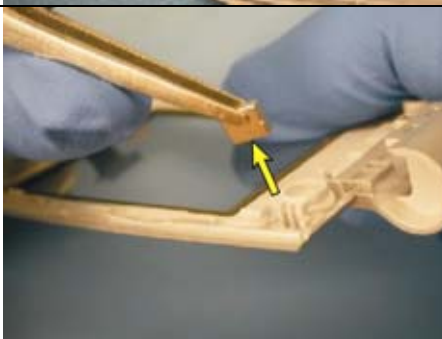

NOTE! Whenever the phrase “pry tool” is used, a nylon pointer, an orange stick, or a front opening tool may be used, depending on the user’s preference.

Step-by-Step Instructions	
<ol style="list-style-type: none"> 1. Obtain a new inner flip cover. 2. Orient the new and old inner flip covers so that the interior surface of the flip covers are towards you and the hinge wrapping portions of the covers are oriented to the bottom. 	
<ol style="list-style-type: none"> 3. Obtain a new adhesive film that mounts around the receiver port. 4. Position the adhesive film so that its shape corresponds to the shape of the recess around the receiver port of the new inner flip cover. 5. Then place the adhesive film into its recess and press the adhesive film into place using your finger to ensure a good adhesive bond to the new inner flip cover. 6. Remove the protective covering from the adhesive film around the receiver port. 	
<ol style="list-style-type: none"> 7. Locate the camera module on the old flip cover. <p>NOTE! Do not get finger prints, dust, or dirt on the camera lens during its removal and reinstallation.</p>	

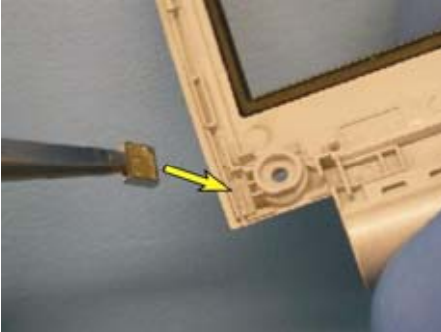
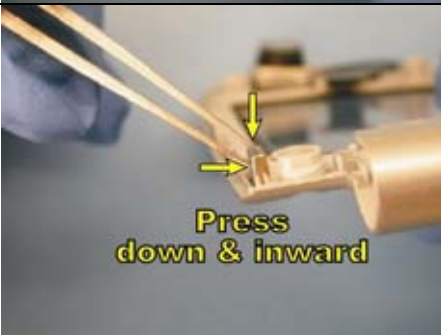


Step-by-Step Instructions	
8. Using the flat end of a pry tool dislodge the camera flex film from the adhesive that is around the receiver port.	
9. Work the camera module's flex film free from the alignment peg that protrudes through it.	
10. Once the camera module's flex film is free from its alignment peg, lift the camera module up and away from the inner flip cover so that the camera module's flex film becomes free of the catch just about the display window.	
NOTE! Make sure not to get finger prints, dust, or dirt on the camera lens.	
11. Position the camera module so that the camera portion of the module is over the top of its square recess area on the inner surface of the new inner flip cover.	



Step-by-Step Instructions	
12. Slide the edge of the camera flex film under the catch adjacent to the display window and press the camera flex film down onto its alignment peg.	
13. Apply pressure to the flex film around the receiver port using the flat end of a pry tool so that the camera module's flex film will bond to the inner flip cover.	
14. Locate the magnet and remove it from its slot in the old inner flip cover using tweezers. NOTE! When handling the magnet, avoid contaminating the adhesive film that is on one side of the magnet.	
15. Locate the magnet's slot on the new inner flip cover that is adjacent to the left side screw boss at the hinge end.	



Step-by-Step Instructions	
16. Orient the magnet so that the side of the magnet with the adhesive film is oriented towards the screw boss and insert the magnet into its slot.	
17. Using tweezers, press the magnet down into its slot and inward towards screw boss so that the magnet forms a good bond to the inner flip cover.	

- Perform the Main Flex Film Reassembly Procedure.
- Perform the Hinge Reassembly Procedure
- Perform sections 3.2.2 - 3.2.3 of the Flip Reassembly Procedure.
- Perform the Antenna Cover Installation Procedure.
- Perform sections 2.2.2 - 2.2.5 of the Base Reassembly Procedure.
- For non-DPY/Z units, perform the Co-Brand Label Installation Procedure.



4.37 Co-Brand Label

4.37.1 Co-Brand Label Removal

- No Disassembly required

Tools needed to perform the following steps:

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

NOTE! A “*” beside a tool listed above indicates that the tool is not specifically called out in the following instructions, but an operator may find it helpful to use that tool when performing some steps of the following procedure.



NOTE! The phrase “pry tool” indicates that a nylon pointer, an orangewood stick, or a front opening tool may be used during this procedure depending on the user’s preference.

Step-by-Step Instructions	
1. Locate the co-brand label area on the inner flip cover adjacent to hinge.	
2. If an old co-brand label is present, remove it.	
NOTE! Be careful not to scratch the inner flip cover when removing the old co-brand label.	
3. Using alcohol and a lint-free wipe, clean any remaining adhesive residue from the co-brand label area on the inner flip cover.	

4.37.2 Co-Brand Label Installation

Tools needed to perform the following steps:

- Style 2A ESD tweezers

Step-by-Step Instructions	
NOTE! Use tweezers to handle the new co-brand label once it had been removed from its protective backing so that contamination of the adhesive is avoided.	
1. Using tweezers, mount a new co-brand label in the designated area.	
NOTE! Make sure that all edges of the co-brand label are within the recessed area designated for it.	
2. Once the co-brand label is correctly positioned, carefully smooth the label into place.	

- No Reassembly required



5 Revision History

Rev.	Date	Changes / Comments
A	2005-August 12	Initial Release
B	2005-Oct 26	<ul style="list-style-type: none">• Added a note to the “General” section regarding the lack of the display tape in the pictures of sections that do not directly deal with the display tape.• Added a display tape check to the LCD sub-frame installation procedure• Added a display tape check and installation steps to the LCD installation procedure• Updated the LCD sub-frame installation section to include the installation of the two display cushions.• Updated the inner base cover replacement section to include the installation of a shim on the inner base cover’s smaller side wall.