The Disassembly of a Single Use Camera

A. Identification of Functional Components

1. Outer Housing Shell
2. View Finder
3. Internal Frame
4. Lens
5. Film Transport and Counter Mechanism
6. Electronic Flash
7. Shutter Mechanism
8. AA Energy Cell
9. Film
B. How are the parts and components arranged?

1. Spin wheel, which in turn spins film to new spot on reel
2. When button is ready for activation press it down
3. The button activates multiple things simultaneously
   a. shutter
   b. flash
   c. lens
4. When all these things activate, the picture is taken

C. Materials Used:

1. Acrylonitrile butadiene styrene (plastic) lens
2. Polyethylene plastic casing
3. Polyethylene Terephthalate (plastic) film
4. Copper/Lead circuitry
5. Aluminum springs

Assembly and Disassembly:

1. Peel back the label
2. Use flathead screwdriver to separate casing
3. Remove the back of the camera
4. Remove the AA battery
5. Remove the film
6. Remove capacitors to rid of electric charge
7. Remove lens, shutter, and all other parts

*In order to reassemble the camera, the process would be doing the reverse of the disassembly.

D. Parts grouped by camera’s subsystems/functions:

1. Image Forming Function
   a. Lens
   b. Film transport and counter mechanism
2. Closing & Opening of Light Path Function
   a. Shutter mechanism
   b. Electronic flash
   i. Energy cell (source of power in flash)
3. Image Sensing & Recording Function
   a. Film
4. View Selection Function
   a. Viewfinder

E. Which parts are reused and how many times?

1. Inside parts that are in good condition
   a. Circuit boards
   b. Lens
   c. Shutter mechanism
Which parts are recycled into raw materials?
1. Cameras are shipped to Mexico
2. Outer casing is melted down
3. Easy to recycle and saves money
   *Worldwide, about 70% of the cameras sold are recycled

Disassembly Procedure of Kodak PowerFlash (FunSaver) Camera

- Kodak Fun Saver, has flash and space for multiple pictures, costs approximately $13
- Yes, the packaging protects the camera from the elements before you open it up and are ready to take pictures.
- The front and back components are connected with plastic tabs. They are used to keep the front and back of the camera together but they are used so that you can still access the inside. Also keeps the film and other components contained within the casing.
- They are made to be used for a short time, recycled, and redistributed. They don’t have as many electrical components as conventional cameras.
- The design is good across the board. Easy to assemble and manufacture, its easy for the user to take pictures with, and it’s simple to recycle and redistribute.

Lifecycle of the Outer Shell of the Kodak FunSaver

- In the lifecycle, it’s included in the manufacturing and material recycling stages.
- They take melted down plastic and pour it into a mold of the outer casing. When the consumer is done with it, they melt it back down to be used again.
- In terms of recycling the outer casing is melted down.
- It was made this way so that it’s both easy to manufacture and reuse but it's also durable and not easily broken.
Works Cited

http://www.kodak.com/ek nec/PageQuerier.jhtml?pq-path=4213&pq-locale=it_US


http://gicl.cs.drexel.edu/index.php/Group_7 - Kodak Disposable Camera