Rubik's Shells

Left Toy Brokers Ltd. / www.rubiks.com circa 2000, right Chinese purchased 2007.
(plastic, 4.5 inches)

Four loops of eight balls each are arranged in two perpendicular intersecting pairs. Since four of the balls are located at the intersections of the loops, there are a total of 28 balls, seven of each of the four colors (so when solved, each loop has one intersecting ball of its color and one intersecting ball of the other color). Each of the two axles has a button which when pushed in locks the two loops on that axle so that they must rotate together, which gives the puzzle three levels of difficulty (neither pushed, one pushed, or two pushed). Unfortunately, once a button is pushed, that cannot be undone so that someone else can enjoy the easier level (so if you like this puzzle, you may want to get three of them, and leave them set to each of the three levels).

The goal is to mix up the puzzle and then put the colors back to the 4 loops. *Jaap's Page* presents a solution (for all three button states, and which works independent of what state the puzzle was in when a button was pushed), and the puzzle was sold with a solution booklet. Here are photos of the other sides:

Further Reading
Jaap's Page, from: http://www.geocities.com/jaapsch/puzzles/rubshll.htm
Solution booklet from Rubiks.com: http://www.rubiks.com/World/Rubiks%20downloads.aspx

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