Changing a Top Case Lock

By: Brian Curry Updated September 2005

This definitely applies to the BMW 22 Liter Top case. The info also applies in general to a lot of the locks BMW currently uses.

First how the lock operates and is retained:

When the key is inserted the "tumblers" (actually flat metal tabs) are pulled in so that the lock barrel can be rotated. Using the key slot end closest to the edge as a reference, the 3 o'clock position is unlocked and the 6 o'clock position locked. (This places a tab on the end of the lock in a position where an internal post prevents the Top Case latch button from being pushed in.)

In addition to the "tumblers" that lock the lock, there is an "extra" tumbler that keeps the lock barrel in the lock housing. To remove the lock, this tumbler has to be pushed into the lock barrel so the lock can be extracted from the housing. The tumbler is pushed into the barrel from outside the lock. Check the description of how to remove the locks from the K Integral cases or the R11 cases for evidence of this. This seems to apply to all locks that have the flat sheet metal face and a spring loaded flap over the key insertion slot.

While all the locks look the same, apparently they were produced by several manufacturers to a specification. This means that while they are similar, they are not exactly the same. (e.g. Multivario bags were made in at least 5 production runs with different zippers in each one.) Tumblers/tabs from one lock may not fit in another. I know this from experience.

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Now removing the lock:

Rotate the large nut inside the case counterclockwise looking at it, fiddle it off and fiddle the lock out.

Looking at the hook end of the lock, on the right side just at the beginning of the threaded area, there is a small circular flat area with a hole in the center.

Make sure the lock is in the "unlocked" position.

Use a 1/16" diameter rod (allen wrenches will work fine.) and shove it in ~3/8-7/16 of an inch into the hole. This depresses the lock retaining tab (extra "tumbler").

Using the key, rotate the lock 180 degrees, 1/2 turn, counter clockwise. This positions the retaining tab in a slot where it can be removed.

Pull the lock cylinder out. This does not require major amounts of force.

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Now you can swap the tumbler/tabs around to match your key.

Butch Hays has an excellent page describing how to do this with pictures. Here is some additional info.

To lock the lock the tumblers/tabs are pushed out of the barrel by small springs. These springs will be very hard to find if you loose them in the carpet. :(:(Put some grease on the barrel to retain them, if there is not some there already. The tumblers/tabs are retained in the barrel by deforming the barrel over small protrusions on the side of the tabs. You will destroy the barrel deformation to swap the tumblers/tabs. To keep the tumblers/tabs and springs in the barrel as you put it together put some grease in the slots. It will keep everything in place until you have the barrel in the lock body.

If you are having a locksmith do the work for you, this information will make his job much simpler. Locks are puzzles. This provides some information on the puzzle and gives him a starting point.