

Authors: A.T. Barr and Joe Talmadge
Last Updated: December 1998

A well-made liner lock is a beautiful thing. The action is smooth, the lock is very strong, and it can be opened and closed one-handed. However, it is easy for the knifemaker to make a mistake on a liner lock. Many common mistakes can result in the lock accidentally unlocking, and this is a serious threat to fingers. Below are some of the tests we recommend a potential buyer try on a liner lock. Keep in mind that many of the factory knives easily pass all the tests below, while many knives from custom makers -- including those lauded in the knife rags -- often don't pass. Test your knives, don't assume the more expensive knife has the more secure lock-up!

One caveat is that the second of A.T.'s suggestions, the "palm-on-spine" and "whack-the-spine" tests, are a bit controversial. We both feel that a blade should never close due to palm pressure, and a moderate whack on the spine shouldn't make a blade fold up either. Some makes say that a knife in normal use does not ever get whacked on the spine, so this test is not real-world. You can decide for yourself how secure you think the lock should be.

A.T. Barr's tests:

- You don't want your blade to open except when you want it to. Always check for a good detent ball to blade tang contact. Open your liner lock normally and then close it very slowly. The blade *should* snap closed the last 1/16" or so.
 - Open your knife blade very slowly, until the lock engages. Do not snap it open. You want the tension of the liner lock to just snap to the tang of the knife. Then do two things. First turn the knife over, and using the palm of your hand try to close the blade. It should not close. Then strike the blade spine on the table. Not real hard, but it needs some pressure. It should not close.
- [Note from Joe: A lot of people have been cutting themselves very badly trying this test. Please, be sure to keep your fingers out of the path of the blade! If you can't keep your fingers out of the way, a reader suggested trying this test another way. Put the knife down on a table with the blade hanging off the edge. Hold the handle down with one side, and put pressure on the blade back. If the lock fails, it will drop and hit the table instead of your fingers.]
- Snap the blade open REAL FAST, then close it. If it takes a lot of pressure to unlock the blade, walk away from that knife.
 - Open the knife blade real slow, and check for any movement. Sideways or up & down.

Great tip:

Also, if your liner lock has a sloppy lock-up, sometimes you can help it by snapping the blade open and then half-way hard striking the blade (try to close it) on it's tang. That will help seat the Titanium liner to the tang of the blade. If that does not work, send it back to the maker. Be careful when you do this. If the blade does

disengage, the blade will hit your knuckle. A number of rec.knife readers have reported good results using this tip.

Joe Talmadge's tests:

Open knife, then thumb the lock aside (blade is still open). Wiggle the knife back and forth. If the blade has **any** play at all, that's a bad sign. It might just be that the pivot is too loose, so tighten the pivot until there is no more side-to-side play, and then make sure the action is still acceptable. Sometimes a knifemaker will have a bad action, and then make it appear smoother by loosening the pivot too much.

On top of that, I do the "white knuckle" test, which many makers also fail. Making believe I'm under stress, I grab the knife in a very firm grip, letting the flesh of my fingers sink in and around the liner to whatever extent this happens. Now the question is: will small movements unlock the lock (if a small movement moves the lock AT ALL, assume it can unlock it)? If the lock is too loose or too high relative to the handle scales, a knife that passes the other tests might fail this. I made an expensive folder from a well-known maker fail this way. I sent it back to him and he fixed it to my satisfaction. That is why I like the AFCK-style handles that do not give easy access to the lock via a cut-out -- I'd rather it be a little harder to unlock than to unlock accidentally under weird conditions.

Bob Kaspar recommended a torque test as well, which is a test many liner locks fail. You want to open the blade and then torque it while applying pressure against the spine. The lock should not fail simply because the blade is being torqued a bit. I do this test by sticking the blade through something hard, a few layers of strong cardboard or wood, and then torquing the blade while trying to shut it.