



This is the keeper (black). There is a groove in the valve stem (which you don't see in these illustrations). The keeper is like a round, thick washer with a slot in the middle that only goes about halfway across it. The keeper slot slides into the groove on the valve stem. Once it is in place it locks the spring and damper in place. It is how the spring is actually connected to the valve stem.

The keeper fits into an indentation in the bottom of the damper, so when the damper is forced down (by the spring) against the keeper, it surrounds the keeper and prevents it from moving (and falling out). You see only a small portion of the keeper hanging down under the damper, in the valve chamber.

And so, if you want to remove the valve, you must first get a valve spring compressor under the bottom of the damper and then raise the damper -- NOT the keeper. The damper (with its spring) will then be compressed upwards, gradually revealing the keeper which was hiding at the bottom of the damper. Once the damper is high enough, the keeper is easily slid out (with your fingers, needle nosed pliers, old chewing gun....whatever). At that point the compressor can be relaxed and down comes the damper and spring. Both those can now be removed, and the valve can be raised up out of the block, since the keeper is no longer holding it to the spring and damper.

Have I confused you thoroughly?