Not sure how well these pictures are going to work for you but based on this information and possibly a conversation, I think I can provide you with enough information to get you guys going…

Injector Connector Disassembly

Once you have pressed the red secondary lock down on these connectors, it is rather tricky to get it back up without breaking it. What we have found is, if you use a Craftsman type screwdriver that has “ridges” on it’s blade face, you can sweep the red secondary lock up with the screwdriver. So, you are not prying the lock up as much as sweeping it up with the motion of the screwdriver, with a bit of pressure against the red lock.

Each connector terminal cavity has a little finger preventing the terminal from backing out. (Take a look at an un-assembled connector for more details). After you have pulled the red lock up, you can use a straightened paperclip to go in and release the finger so that the terminal can back out. FYI, the red lock bears down on the finger, so that is the secondary lock action.

Injector Mate Connector Disassembly

This one is a bit trickier. The issue is the amount of force it takes to pull the red secondary lock up once it has been pushed down and seated. I would first try the heaviest gauge paperclip you can find and bend a small hook on the end of it as seen in the photo.

You will then go in and try to lift the red lock. Sorry, not a real good photo but you will see an open area around the red lock where you can get something down underneath it to grab it. These red locks are in there real good. If your paperclip simply straightens out, you might need to find something else to use. After you lift the red lock, there are fingers in each connector terminal cavity, just like the other connector. Take a look at an unassembled connector for more info.

We have tools that are straight, which can help release the fingers but for that hook deal, we simply make things around the shop that suffice.