Modifying DeLorean Door Locks

Adjust your DeLorean door locks to make them way less trouble-prone. If you're not sure what we're referring to, see the article: "DeLorean Door Locks – Overview and Terminology"

Turn off battery power by disconnecting one battery cable in the compartment behind the passenger seat. (Be careful you aren't "grounded," for example by touching the metal doorframe, while touching the battery terminal.) Remove the interior door panels on the door you're modifying. (See the section on "Removing DeLorean Interior Door Panels" for directions how to do this.) Sit in the seat sideways, your feet out on the ground, with a short bungee cord or substitute holding the door halfway open:

Start with the door Latch toward the front of the car. It's easier to remove.

First notice the setup: there are two Control Link Rods going to the Door Latch mechanism. BEFORE you get it out of the door cavity, make a note of which rod goes in which hole. If you wait until you have the Latch assembly out, whoops! A rod will fall out and you won't know where to put it back. Also note whether the bent end pokes down thru the hole or up from the bottom: the rod from the Lower (lock/unlock) Bellcrank to the Door Latch goes to the end of a long white plastic lever toward the outer skin of the door. That's the Lock/Unlock Rod. The other rod goes from the Upper (unlatching) Bellcrank to a stubby white lever nearer to the inside of the car, to the hole closest to the axle it turns on. That's the Unlatch Rod. Typically, the Lock/Unlock Rod threads up through the bottom of its pivot hole, and hooks around to stay in place. The Unlatch Rod hooks down from the top of its pivot hole. Don't confuse things by removing rods you aren't working with yet! Just work on these two on the front door Latch.

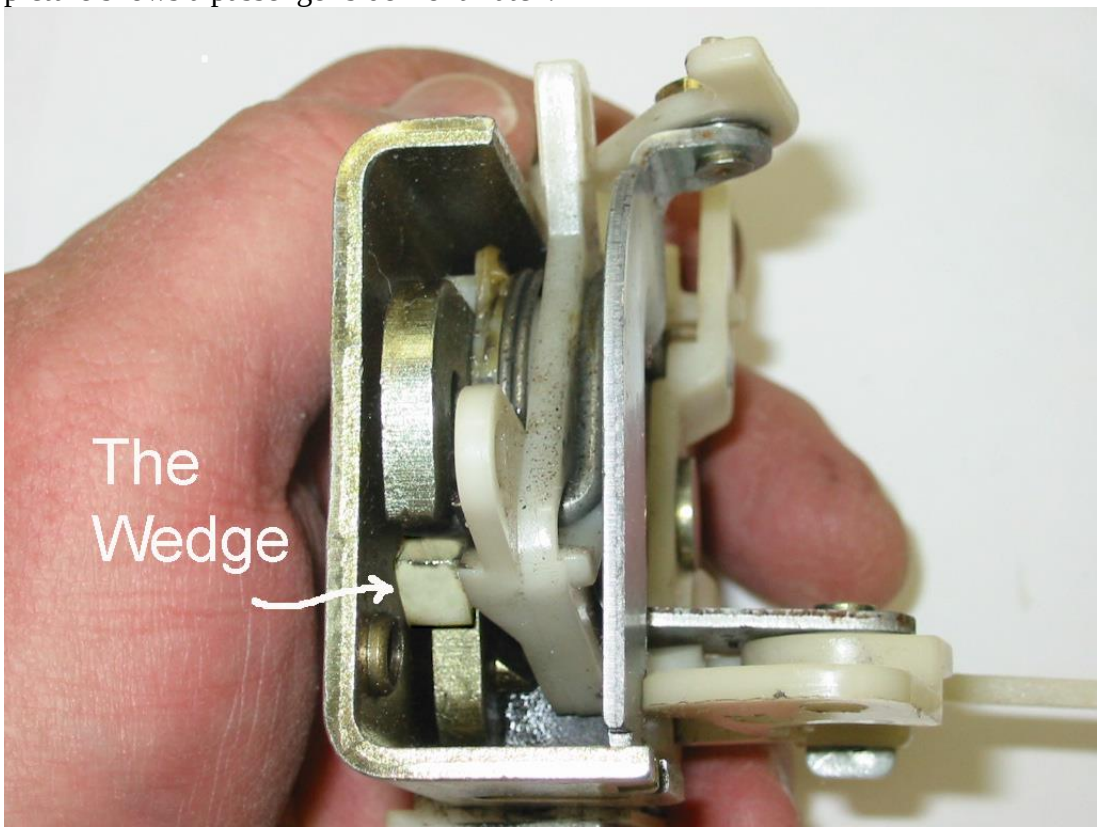
CAUTION: A DeLorean Door Latch is spring-loaded and will essentially lock shut by itself when the door is closed even if all the control link rods are removed. So if the Latch is installed as usual with all the link rods disconnected, closing the door will make it nearly impossible to open without a lot of grief.

Using small wrenches, make sure the adjustment Turnbuckle and both its locknuts are snug and immovable on the unlatch rod. The z-shaped front Lock/Unlock Rod usually doesn't have a turnbuckle.

Step outside of the car now. Facing the door edge, carefully remove the three large Phillips screws around the outer face of the door latch.

Get back in the car, facing sideways with feet outside on the ground. Use the tip of a smallish Phillips screwdriver, twisting it carefully, with a rolling motion, under the lip of the black metal rod clip, to release the clip on the Bellcrank end of each of the 2 control rods. Carefully push the "L" shaped end of each of the two control rods loose from its pivot hole in its Bellcrank. Rotate the Bellcranks as needed to be able to get each end loose.

Use the 2 control rods, carefully pushing or pulling on each one as needed to turn the latch sideways so you can remove it. Take the Latch mechanism to the workbench. Remove and set aside the two link rods, and look in the side of the Latch. Your Latch mechanism will look like a mirror image of this if it's the driver side front Latch… this picture shows a passenger side front Latch.



You can see the Anti-Lock Wedge, a triangular piece of plastic about the size of a large kernel of corn. To see how it works, look at the golden side of the Latch, and at the notch you can always see when it's installed on the car. Unless it was disturbed, the hole at the top of the notch should look teardrop shaped, just it does when you look at the side of your open door. This is called the "open" position. DeLorean doors can't be locked when open, right? So while looking at the Anti-Lock Wedge, move the long white Lock/Unlock lever. It needs to move freely and "click/clack" to lock and unlock, but you'll notice the Lift Tab, something like a heavy coat hanger wire that bumps against the Wedge, stopping any motion. It just WON'T let you lock a Latch in the "open" position. That's absolutely ALL that wedge does. But the motor that controls link rod movement doesn't know that, so if you try to lock it with the door open, it tries with all its might to force the link rods to move the latch innards. Unfortunately, there's absolutely nothing to prevent a seated passenger in the car from messing things up by pressing the Lock Switch on the door while the other door is open. People do that all the time in other cars with no problem. Or, if you have installed a remote door dock controller, you could easily do it yourself unintentionally. In either case, to do so can throw your Latches or Link Rods out of alignment.

Now put your finger in the bottom of the notch, and press the moveable Striker Catch upwards into the notch carefully while pulling back on the top white lever to free it up. The finger moves up to the top of the notch, and now there's a "U" shaped hole at the top of the notch. The Striker Catch is now in the "closed" position, just like when the door is closed. Try flipping the long white lever back and forth now while watching the Lift Tab and Wedge, and you have no problem whatsoever. The Wedge is not in the way. To use the lock and unlock feature with the doors open while servicing the car, you must normally move all 4 latches into the "closed" position, then before closing the doors, move all 4 back into the "open" position or you'll damage them by closing them. But that's absolutely no help in preventing accidental locking at inopportune times. To eliminate this problem, just perform a "wedgectomy." Cut out the wedge. Remove it, and you won't prevent normal locking, unlocking, latching or unlatching. It only touches one part of the Latch if you try to lock the door with the lock open. But that's often enough to jam the Latch.

To better expose the Anti-Lock Wedge, do this: first be sure to set the Striker Catch into the "open" position. It's a lot easier that way. Now push back the spring loaded white lever on the top so that the curved metal Detent Pawl rotates up and mostly out of the way, exposing the Wedge plus bringing it closer to the edge. If the metal Pawl won't rotate when you turn the lever, with the spring loaded white lever on top pushed back, you need to unlock it first: Turn the long white lever to click the Latch into unlocked mode. Now turn the top lever once again to see the Detent Pawl rotate out of the way.

Brace the Latch against the work surface while holding the top lever once again to rotate the Detent Pawl. While holding the Detent Pawl out of the way, use a new, razor sharp, thin blade to slice out the Anti-Lock Lever. Be careful and avoid a trip to the emergency room for sutures. (It would be handy if you could take apart the two halves of the Latch body, but they're not designed to survive that.) Shake out each sliver or piece as you slice it off. Don't pry it out when its not entirely cut, you may damage something.

Then manipulate it through all unlatch and lock/unlock positions. Clean out any debris from the cutting process, and lube it. Spray the Latch with white lithium grease, wiping off any excess, as well as any old grime. Especially be sure you lubricate from the sides of the Latch mechanism, since it's hard to do that when it's installed. After you finish putting everything back together properly, you may never need to adjust your doors again. Some people DO actually have doors that always work, and don't go out of alignment! Wouldn't that be great?

Reinstall the rods. Holding the rods carefully so that they don't drop out of the pivot holes, insert the Latch slowly back inside the door. It's rather like picking up a whole orange with chopsticks. Shoot! One of the rods came loose!!! Pull it out, reattach the rod and try again. A ruler or similar long thin tool can help you to reach in and rotate the Latch into proper position. When you have it close to the end where it goes, get out of the car carefully while holding the rods to keep it in place, or better yet, have an assistant help. I did it myself but it's extremely awkward. Look at it from the door edge. See if you can hook it with a finger, or screwdriver tip, and draw it close to the installed location.

Fiddle until you can line up one of the screw holes, then insert and partially tighten one of the three screws. Line up and install the other two screws. Tighten all three.

Back in the car, before you reinstall an "L" shaped end in a ballcrank, be sure that it lines up where it should be. If the control rods were correctly adjusted in the first place, and the turnbuckle was properly adjusted, everything should go back together just fine. However, since Murphy's Law still operates, check to be sure everything lines up as it should. See directions elsewhere for the procedure. Then install each rod end in its correct Bellcrank. Close the black rod clips with the screwdriver tip. Be sure the long z shaped lock link rod is secured in the little white plastic clip or a suitable substitute, on the inner door frame pull handle bracket, or flexation will cause vexation!

Now give the Bellcrank and control link rod pivot points lubrication as well.

Be sure the latch is in the "open" position. If it isn't, lift up the door handle to release the Striker Catch and then pull it down into the normal "open" position. Before closing up the door panels, or doing the rear Latch assembly, operate the door lock and latch several times, directly as well as by working the lock from the opposite side door after reconnecting the battery. Be sure that everything is working as it did before then you can move ahead and do another Latch. Note that the "wedgectomy" won't cure old problems, just go a long way toward preventing new ones. If your doors needed adjustment before you began this, they will still need to be adjusted.

Now let's do the rear Latch. Disconnect the battery again. At first glance, you'll see that the rear Latch appears to have three instead of two control rods going up inside the door to it. Actually, the third rod is the Keylock control rod attached to the outside Keylock instead of the Latch.

If you have an aftermarket remote door opener actuator inside the door near the Latch mechanism, you will need to temporarily remove it to give yourself room to pull out the rear Latch mechanism. You will probably want to detach the control rod coming from the outside keylock to the bottom Bellcrank as well.

Aside from that, directions are the same as for the front Latch, just a little more frustrating since the space is more cramped, and you'll need to experiment with turning the Latch at different angles to figure how best to be able to carefully draw it out of the rear door cavity. At least you had the practice run on the easier front Latch!

When you're done the "wedgectomy" and have done any other needed adjustments and things are working well, THEN reinstall your interior door panels. Be sure all 4 latches are in the "open" position before you close your doors.