

# Locked Out and Can't Get In?

## How to bypass a seized C3 lock mechanism.

by Tom Russo  
Photos by Julie Bostian

I was terrified when I concluded that the passenger door of my low-mileage, original 1978 silver anniversary Corvette was locked shut with no way in! The doorknob was not giving and I feared that if I pulled too much I would strip it from the threads...making matters worse. The key would not turn and, again, I feared forcing a twist would leave the key in two pieces, one in the tumblers and the key head in my hand.

Understand, the '78-model year was eligible for NCRS Bowtie in 1998 and my intent was, at minimum to enter the car at the NCRS National Convention as a Bowtie candidate. Those thoughts were going through my mind while I bought time, attempting to come up with a solution.

The only way in was through the driver's side, but it was obvious I had a problem of a serious nature. Plowing through shop manuals, service manuals and assembly instructions manuals yielded few nuggets of wisdom from which I could finesse a relatively innocuous entry. Pictures were few. I concluded that I must remove the door panel to reach the lock mechanism and somehow find a way to un-seize a frozen mechanism.

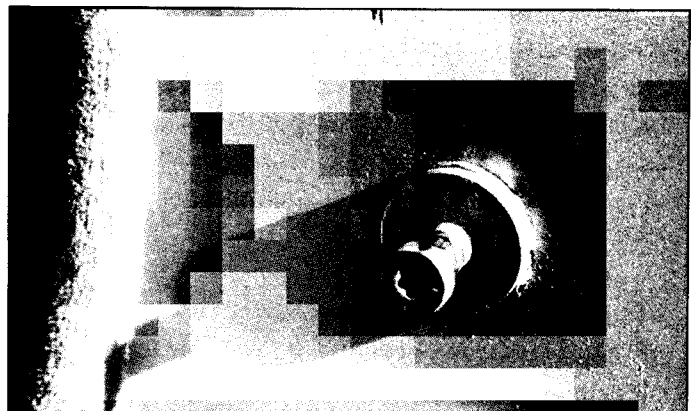
The enthusiasts on the various Corvette Internet lists were helpful and instructive but options suggested were limited and most appeared to be rather invasive. Suggestions were plentiful, but there was no way I could sacrifice an original, mahogany door panel. Finally on a Sunday afternoon, patience got the best of me because it was the only option remaining prior to forcible removal of the door panel.

I began my study by exploiting the door that still worked. Removing the driver's side door panel was a breeze. Once inside, I identified the various locking mechanisms and how the door was secured with the striker bolt assembly. I studied for an hour, tinkering with the mechanism and working several different scenarios. I had mapped out a procedure to bypass the door handle mechanism, and the key entry mechanism and simply trip the receiver latch that catches the striker bolt securing the door in the doorframe. Of course, the test was successful on a door with the panel

removed and lots of light to guide the screwdriver blade to the correct metal latch that secured the receiver. The trick was to perform the identical task peering through a 1/4-inch window slot with only a flashlight and a long screwdriver blade.

I took a deep breath and moved the operation from test to production and from driver's side to passenger's side. I used the flashlight and the screwdriver blade to locate the latch that trips the striker bolt receiver latch. It is located on the inside of the door, next to the doorjamb side. If it worked correctly, it would trip the receiver. The lock mechanism would still be in the lock position, which did not matter. Once the door was opened, I would have access to the door panel and be able to remove it. This permits entry to the doorframe and the guts of the locking mechanism.

The screwdriver found the edge of the latch and once I was assured that I had the screwdriver blade on the correct receiver latch I gently pushed downward...I heard a very quiet movement that responded to the pressure I exerted on the screwdriver. As I pressed, the receiver moved upward until finally the momentum carried it to an unlatched position. The door did not budge, remaining in the closed position. I backed away from the door almost with the fear the door would fall off its hinges! Finally, I reached for the door grabbing it by the open window and pulled. It opened without a whimper!



**Fig. 1** The cadmium plated striker bolt.



**Fig. 2** The receiver, below the decal, on rear face of the door.

After reading and listening to the stories of other C3 owners and how they addressed this problem, I knew others would appreciate this bypass procedure when they understood it would avoid complicated invasive procedures. All I lost was time wasted on anxiety and some excellent cruising weather. I share this with other Corvette owners so they can learn from my experience while maximizing their cruise time.

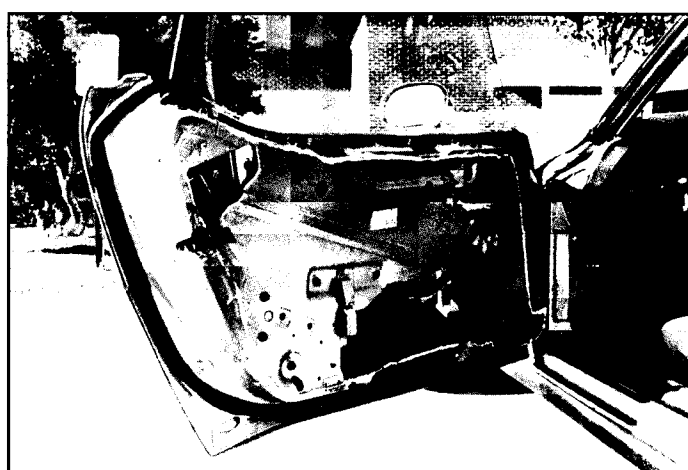
The door locking mechanism consists of three primary, interactive mechanisms. The most familiar are the door handles (internal and external) used to open the door. These are used often, and hopefully you know these devices intimately. Also visible, is the cadmium plated striker bolt found on the doorjamb (Figure 1). On the door where the decal is found, is a latch described as a receiver (Figure 2). You may have to look for this unless you have a habit of tinkering with your vehicle. It receives the striker



**Fig. 3** The latch in the lock position; the screwdriver blade simulates the striker bolt.

bolt when the door is shut. The receiver is a metal device in the shape of a “C,” located on the edge of the door, and when it strikes the striker bolt (on the doorjamb) it rotates downward, securing the door into its frame. Try it with a screwdriver and you will experience the striker bolt-receiver latch mechanism...but leave the door open! Figure 3 shows the latch in the lock position; the screwdriver blade simulates the striker bolt.

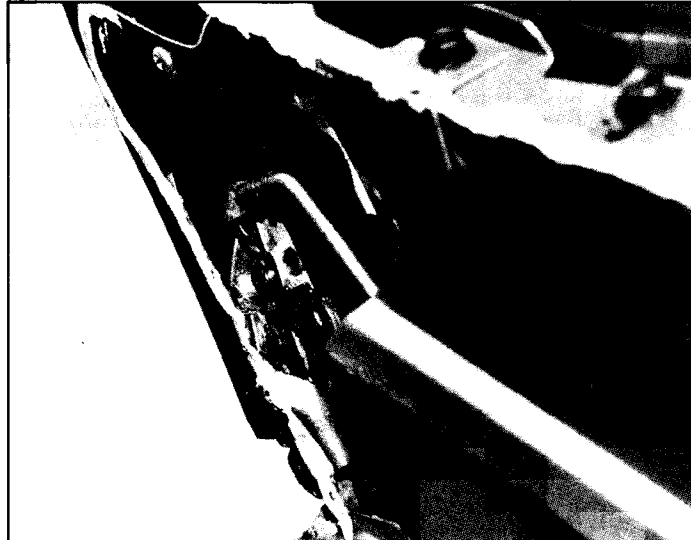
What you don't see are the internal rods, linkages and latch mechanism that connect door handles to latches and locking mechanisms to latches. Your door panel does a wonderful job of hiding this mirage of hardware and deadening the sound of their workings. All this stuff simply permits the receiver to rotate upward permitting you to use a door handle and open the door, or keep it in the down



**Fig. 4** Door with door panel removed.

position. To initiate this operation, you use a lock release or key to trip the locking mechanism, which permits the door handle to operate by tripping the receiver latch, thereby allowing egress or ingress into your corvette. Simple huh?

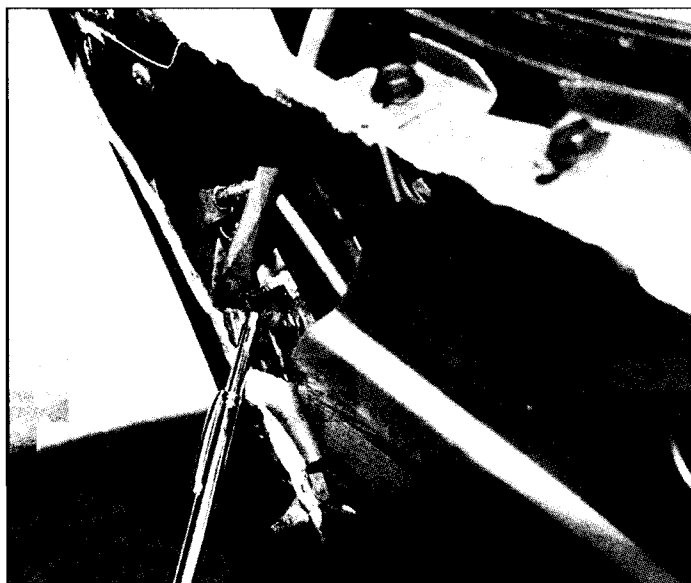
So, how do you trip a seized lock mechanism? First, remove the panel. Shop or Service Manuals make this a relatively easy task. It's best to understand how the door opens and how the lock operates under normal conditions. This study is best done with the window in the down position. Locate the mechanism toward the doorjamb that is visible with the door panel and plastic removed (Figure 4). You will see rods coming to metal levers, springs, latches, etc. The mechanism is located on the opposite of the key tumbler assembly. Figure 4 shows the door panel removed while Figure 5 shows the area where we will work, opposite the key tumbler assembly.



**Fig. 5 The latches that operate the lock mechanism.**

Operate the door handle and watch the lever push the latch downward. A parallel latch behind the primary latch moves downward as the door handle is pulled. This secondary latch is what I call the receiver latch and is the latch that trips the receiver. As the door handle operates the receiver on the outside (Figure 3) rotates upward! Figure 6 shows the primary and secondary latch. The screwdriver blade is touching the topside of the receiver latch while the chrome magnet rod is pointing to the primary latch.

Once you have a clear understanding of the normal door opening sequence, let's try the door in the lock mode. Simply pull the rod or rotate the knob that you normally use to lock the door. Now, operate the door handle. You will



**Fig. 6 The primary and secondary latch. The screwdriver blade is touching the topside of the receiver latch while the chrome magnet rod is pointing to the primary latch.**

see the lever operate the primary latch but it does not budge the secondary receiver latch. You can quickly see how a seized lock renders your ability to unlock the door with either key or knob useless. It is this secondary latch that you want to target with the screwdriver blade to successfully trip the receiver...in the lock position. So, with the door locked, try this procedure. With the door panel removed and plenty of light, you should find it relatively easy. The 1978-79 models have an anti-theft plastic guard that you may have to push out of the way or work around...but no major obstacle at this point.

The trick is to find the receiver latch in the problem door with the light of a flashlight peering through that ¼-inch



**Fig. 7 Tripping the receiver latch with the screwdriver blade.**

window opening. That's why is important to understand the operation and location of the receiver latch. Now, you can proceed by locating the receiver latch with your screwdriver blade. Once you are confident you have the target sighted, simply exert pressure on the screwdriver until you feel it give and hear the receiver complete its rotation! Back up, grab the door and pull. If you followed the procedure, it will open with ease and a sigh of relief!

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