



Unlocking “Deadlocked” BMWs

By Steve Young

I've always disliked the term “deadlock” when applied to a vehicle. It tends to give people the wrong impression of what is actually going on. To me, the term “Deadlock” implies that an additional lock of some type has been engaged. I prefer to think of these systems as a “disconnect,” because when a vehicle “deadlock” is engaged, all of the normal lock control devices are disconnected and only the master key or the remote will re-engage them. Anyone who has accidentally been locked inside a “deadlocked” vehicle will tell you that they could operate all of the inside lock controls, but the controls just didn't do anything. Unfortunately, everyone else calls these systems “deadlocks,” so I will too in this article.

In North America you'll only find BMW and Land Rover vehicles equipped with deadlock systems, but they are very common in Europe on a wide range of models. One of the reasons for that are the stringent anti-theft laws that have been enacted for new vehicles in Europe over the past decade. I suspect that another reason deadlocks are not common in North America is that we in the US have become infamous for our legal system. In the US, we not only allow but encourage people to sue anyone for just about any reason. In the US, there are people who would see getting locked inside a car in the same way most of us would look at a winning lottery ticket.

In 1997, Volvo implemented deadlocking systems on all of their European models. They also announced that for the 1998 model year all US vehicles would also be equipped with deadlocks. When the new models arrived in 1998, I went looking for the deadlocks only to discover that nothing had changed. When I finally got in touch with someone at Volvo who knew what I was talking about, they told me that they had decided not to equip the US vehicles with deadlocks after all. I was told that they thought that if someone got locked inside a Volvo, it would jeopardize their reputation in the US as the manufacturer of “Safety Cars.”

Since most of the deadlocks that you will encounter in the US will be on BMW vehicles, I'll limit this article to those systems. Deadlocks on BMWs first appeared in the late 1980s on the 6 and 7 series vehicles. Since that time, the deadlocks have evolved from mechanical devices into electronic devices. BMW has also used three distinct systems, and each system needs to be handled differently. The deadlocks of today are far different from the deadlocks of twenty years ago. I have no idea what terminology BMW uses to describe these different systems, so I have come up with my own terminology, and I'll be using that in this article. I'll refer to these systems as Type-1, Type-2 and Type-3 for convenience.

Type-1 Systems

This is the original BMW deadlock, which was mechanically controlled. On this type of system the deadlock was only active if the operator of the vehicle manually turned it on. In order to activate the system, the owner had to turn the key in the door lock ninety degrees and then remove it. On the Type-1 system it is easy to tell if the car is in the deadlocked mode just by looking at the door locks. If the keyway of either door lock is horizontal, rather than vertical, then the vehicle is deadlocked. If the vehicle is not deadlocked, then the inside lock control systems are still engaged and any normal method of unlocking will work. If the vehicle is in the deadlocked mode, the inside lock controls will be inactive and the lock buttons will be rigidly held in place. This system was originally used only on the 6 and 7 series vehicles beginning in the mid-1980s, but was later expanded to the 5 series vehicles. The Type-1 system was gradually replaced by the type-2 system beginning in 1991.

Type-2 Systems

This system was phased in beginning in 1991 and by the end of the 1991 model year was standard equipment on all BMW models sold in the US. This system was still manually activated, but would be engaged only if the car was locked with the key or with the remote. The key did not have to be removed in any special position and there was no obvious outward indication whether the system was active or not. In the deadlock mode, the inside lock buttons are rigidly locked in place and will not move even if you are inside car pulling on them with all your might.

Because this system was still manually activated, in most cases where the keys are locked inside the vehicle the deadlock system will not be active. The lock button on the driver's door cannot be pushed down while the door is open, but you can lock the other doors without the key. It was relatively easy to lock the keys inside the car, sometimes along with a child, while strapping a child into, or removing them from, a car seat in the rear compartment. All you had to do was put your keys or your purse down while taking care of the child and then lock the door as you closed it on your way to your own seat. In this scenario, the doors will all be locked due to the central locking system, but the car will not be deadlocked because it was not locked with the key or the remote. Traditional car opening procedures, including getting junior to pull the button up, will unlock the car.

Another great way to lock the key in a BMW equipped with the Type-2 system is to lock the car with the key or the remote and then unlock the trunk, set the keys inside the trunk and close the trunk lid. I've seen this scenario occasionally at golf courses where the owner sits on the trunk lip, sets the keys inside the trunk, changes their shoes, grabs their clubs and then closes the lid. Once again, the car will not be in the deadlocked mode because it was not locked with the key or the remote. Even if the driver locked the car before opening the trunk, the central locking system unlocked the car when either the key or the remote was used to unlock the trunk. When the trunk was closed, the central locking system once again locked the car, but because the key or the remote was not used, the car will not be in the deadlocked mode. BMW began gradually phasing out the type-2 system beginning in the 1996 model year.

Type-3 Systems

This is the system that is in use today and the majority of BMW vehicles that you will encounter will be equipped with this system. The Mini-Cooper, which is built by BMW, is also equipped with this system. The deadlock on these vehicles is automatically activated within a few seconds after the vehicle is locked, regardless of how the vehicle is locked. On vehicles equipped with the type-3 system the inside lock control buttons will disengaged and move up and down freely without any effect on the locks.

On these vehicles, the base of the linkage that connects the inside lock control button to the latch is mounted in a slide on the side of the door latch. When the button moves, it is operating an electronic switch that is also a part of the latch. In normal operation, pushing the button down will lock the doors and the top of the button will be flush with the top of the door panel. If the ignition is on, pulling the inside door handle or operating the power door lock button will unlock the door and move the lock button back up. If the ignition is off, it may be necessary to pull the inside door handle twice in order to exit the vehicle.

If you were able to get a tool inside the door to attack the vertical lock linkage, you would find that the button would move up easily in its slide and then drop back down as soon as you release it, without unlocking the door. In addition, operating the power door lock from inside the car after the deadlock has been activated will lift the lock button, but will not unlock the door.

Defeating a BMW deadlock system

Since there are three very different systems out there, the way you attack a deadlocked BMW will vary according to the system that you're attacking and the tools that you have on hand, but some methods will work on all three systems.

Picking the lock

Ten years ago, picking a high-security lock, such as those found on BMWs was something that required a great amount of skill and an even greater amount of luck. But today, there are several high-security lock picking systems on the market, and all of them are easy to use and work quite well, at least to some degree, depending on the age of the vehicle. The pick systems generally fall into two categories: all-in-one systems and modular systems. Picking most high security locks first requires you to pick the lock in the “wrong” direction and then you have to “flip” it back into the unlocked position with a plug-spinner.

Some of the picking tools incorporate a turning tool (tension wrench), pick and plug spinner all into one tool, while other systems use individual components to do the same job. As a general rule, I prefer the modular type of pick because I can use the components, such as the turning tool and the plug-spinner on other jobs as well as picking high-security locks. I often use the turning tool that came with my pick set to help me pick other kinds of automotive locks like those on GM, Ford and Chrysler vehicles. It does a great job of grabbing the shutter door on almost any automotive lock. In addition, I can use the plug spinner for flipping almost any lock that I pick in the wrong direction.

The problem with all of the picking tools is that the folks at BMW are not stupid. Once pick sets became available for their locks, they started changing the way that the locks are built in order to stop the picks from working on the newer cars. Most of the pick sets can easily pick the door locks on any BMW made before 2002. But after 2002, the locks have gotten much harder to pick, which explains the new generation of high-security decoding tools that have recently come on the market. With the new decoding tools, you can decode a high-security door lock and then make a key to unlock the door. Of course making the key requires a high-security key machine, which is something that relatively few locksmith trucks are equipped with.

Using traditional car-opening tools

The type-1 and type-2 systems can be unlocked with traditional vehicle-entry tools by grasping the base of the inside door lock linkage and then pulling up on the linkage. The problem is that the linkage is often very hard to find and you will have to pull up very hard on the linkage. When I say that you have to pull up hard, I'm not talking about jerking the linkage up, but instead you pull up with gradually increasing force until the linkage moves. (Because you are exerting a lot of pressure on whatever the end of the tool is in contact with, it is vitally important that you are on the correct part of the linkage.) Once the linkage moves, and the button comes up inside the car, you will have to hold it in that position while you pull the outside door handle to actually open the door. On vehicles equipped with the type-1 system, you will also have to pull up hard on the outside handle as well as on the inside linkage. All Land Rover Discovery vehicles that are equipped with a deadlock have the type-2 system and there are now tools on the market for bypassing the deadlock using this method.

Using long-reach tools

The long reach tools, such as the Jiffy-Jak, which is shown in the photos, can be used to unlock most deadlocked vehicles; if you know how to use the tool properly for the type of deadlock that you are attacking. If the keys are visible inside the vehicle, the easiest way to unlock the car with a long-reach tool is to use the tool to pull the keys out of the vehicle, or operate the remote on the key or keyring with the tool, or to turn the ignition on with the tool.



If the keys have been left in the ignition, all you have to do is turn the key to the on position, which will disengage the deadlock system, and then operate the inside power door lock or pull the inside handle to unlock the car. If the keys were left lying on the console or car seat where you can attack them with the tip of the tool, you can push the button on the remote, which on late model BMWs is built into the key itself. Or, you could try to pull the keys completely out of the vehicle, but that is often impossible because of all the other junk that people tend to attach to their keyrings.



The type-3 deadlock system, which is the most common, can be defeated in a three step operation using a flexible long reach tool.

Step one: Use the tool to open a gap into the vehicle, as shown in these two photos.





Then operate the inside power door lock control with the tool. The power door lock switch on most BMW models is located on or near the center console. On later model vehicles, it is located on the dash between the air conditioning ducts as shown in the photos. When you press the power door lock button, be sure to listen for the power door lock motor to cycle inside the door; if you don't hear the motor, you have not operated the power locks.



In order to push the power lock button, you will have to put a “reverse bend” in the long reach tool, so that the flat part of the tip is squarely against the power lock button. (See photos)





Step two: Re-bend the tool as shown so that you can attack the inside door handle.



Either on the same side of the car that you are working on, as shown, or on the opposite side of the car. When the inside lock control button pops up, you will have disengaged the deadlock system.

Step three: At this point you can either release the inside door handle and then pull it a second time, or remove your tools from the car and pull the outside door handle to open the door. I prefer the second method for several reasons. If you pull the inside handle a second time, it will be much harder to pull than the first time (because you are now working the door latch as well as the lock system) and there is a greater danger of slipping off and scratching something inside the car. In addition, if you are using an inflatable wedge, the door will “pop open” with great enthusiasm and your tools will go flying in all directions. This looks unprofessional and tends to unsettle your customer if they are watching.

Triggering the crash sensor

This is a method that I save for emergencies; in most cases the customer won't let you use this method anyway. All BMW vehicles since the mid 1980s have been equipped with a crash sensor that is designed to unlock all of the doors in a collision. The trick is to make the sensor think that the car has been in a wreck without doing damage to the car. Fortunately, the sensor is so sensitive that BMW used to have a segment in the DVD that came with the car, advising the owner that it was “perfectly normal” for the doors to unlock while crossing railroad tracks or after hitting a large pot-hole.

Unfortunately, there is also a myth in the locksmith world that the crash sensor can be triggered by smacking the inside of the left front wheel-well with a dead-blow hammer. At one time the crash sensor was located roughly below the driver's left foot, and if you clobbered the car in that area it would unlock the doors. The problem is that BMW moved the sensor in 1991. Now the sensor is usually located inside the passenger compartment, below the rear seat. Beating on the wheel-well with a dead-blow hammer is a waste of time on modern BMWs. Not to mention the fact that it makes you look pretty stupid to the owner when it doesn't work.

The current crash sensor can usually be triggered by jacking up the rear end of the car and then dropping it. How many of us know a BMW owner that would allow you to try that method? But, if it is a real emergency, such as a baby locked inside the car on a hot day, this method is a good one to keep in mind.