

# Shark Injector FAQ

prepared by Turner Motorsport



## How does the Shark Injector work exactly?

The Shark Injector's software replaces the stock BMW software but not all of BMW's programming is changed. When plugged in and the button is pressed, the Injector reads the stock software and stores it for later retrieval if necessary. It also records the VIN number and other required information. Then it programs the DME with the Shark-modified BMW file. After programming, the Shark Injector verifies that the transfer of data was completed.

## What's the USB port for?

The USB port will allow you to connect your Shark Injector to a web server for updates or upgrades. This allows the Shark Injector to be compatible with future BMW software releases. The user will have the ability to download updates directly from the Update Web Server.

Also, different files may be loaded into the Shark Injector for additional modifications you make to your car. Upgrade files may be purchased for a fee and downloaded straight to your Shark Injector, ready for installation. This will allow you to move from one performance stage to another without having to buy a new Shark Injector each time.

Currently, the USB feature is not activated. Updates and Upgrades can be done by sending the Shark to Turner Motorsport.

## What octane must be used?

The minimum octane rating for the Injector is 91. However, on certain models the Shark Injector is offered in a "high octane" setting of 93. It is recommended that you purchase the version that you will use now and possibly in the future. Many states are abandoning 93 octane in favor of 91.

## Do I really need a battery charger?

Yes! The installation of the Shark Injector requires power from the battery. It needs more power than the battery can provide without the alternator generating a charge (and it's obviously not possible to have the engine running). This is why a battery charger is necessary. Can you install the Shark Injector without the charger? No. The Injector checks for voltage several times during its programming. If at any time it detects voltage levels are too low it will give you an Error Code (123 or 124).

## Does the Shark Injector void my warranty?

No. Federal law prohibits a manufacturer from voiding a warranty simply because aftermarket parts are present. The installed aftermarket part has to be the cause of a failure on the warranty part (the Magnuson-Moss Warranty & Federal Trade Commission Improvement Act). Oftentimes, it's not BMW themselves that say a warranty is voided, but rather an uninformed or stubborn dealer that is unwilling to support the owner.

According to BMW's own literature on the subject, "the BMW warranty on a component is void due to a modification where *the modification, alteration or installation of an aftermarket part was directly responsible for the failure*" [emphasis added]. In other words, the aftermarket part has to be the direct cause of a failure; its presence alone is not grounds for voiding the warranty.

## Is the Shark Injector tuned for a CAI and exhaust?

There are different Shark Injector files for different modifications. Generally speaking, the Shark Injector is compatible with a standard Cold Air Intake. Upgrades such as sport cams, headers, or larger air flow meters will work better with a special software file. With the USB connection, you may be able to purchase these upgraded files from Shark Injector dealers and re-load your Injector.

## **Shark Injector FAQ, continued**

### **Is it possible to “share” the Shark Injector?**

No. Because the Shark Injector needs information from the car's DME that is *specific* to the car itself, the unit cannot be used on another car. The Shark Injector will give you Error Code 162 if it has been previously installed on another vehicle.

A note about eBay or buying from classifieds: the Shark Injector is designed to be used on one car and only one car. Once it is used on a car the Shark Injector cannot be used on a different car. Even if the Injector was removed from the car, specific vehicle info is stored for the next time and the Injector will not work on another car. In other words, once it has been plugged into the car and the button is pushed, it stays with that car.

### **Does the Shark Injector cause any Check Engine lights?**

No. The Shark Injector is only refining certain parts of the BMW software to maximize the greater potential of higher octane fuel. Changes are made to the timing and fuel maps to achieve this. If the Check Engine light does appear, it is the BMW software telling you there is a problem with something else – not caused by the Shark Injector.

### **Does the software “go away” over time and will the Shark need to be re-installed?**

No. BMW software is adaptive to your driving habits and environment but the Shark Injector software never disappears from the computer.

### **Will the Shark Injector work on a car with an automatic transmission?**

Yes, in most cases. There are several cars where the automatic transmission computer can interfere with the programming of the engine computer. If the Shark loses contact with the engine computer, you could be left with a blank computer. We are working on solutions for the automatic cars we don't have applications for.

The Shark Injector files do not alter the transmission's programming. In other words, the shift points and maximum allowed rev limit remain the same as before. All of the benefits of the Shark Injector are there – including the horsepower gains.

### **Can the Shark Injector damage my ECU?**

No, if installed correctly. The procedure that the Shark Injector follows is really no different than the one BMW uses to update your car. As long as you follow and understand the instructions the procedure is painless and transparent. In the end, this is software that is being loaded into the car; the hardware remains the same.

### **Will my car ping with the Shark Injector?**

No, if used with the correct octane. Pinging/detonation/knocking can occur with or without the Shark Injector installed. The greater cause of this issue is the quality of the fuel available to you. The vast majority of customers with the Shark Injector and a Cold Air Intake do not experience pinging problems. However, there have been instances with other aftermarket products which have led to pinging when used with this poor quality fuel. Your car is equipped with knock sensors, however, so the risk of permanent damage to the engine is kept very low.

### **How do I know if my car has been Sharked?**

At the end of the procedure, one or both of the LED's will illuminate. For an UPGRADE, the green LED will shine. For a RESTORE, the green and the red LED's will be on. Without the Injector, the only way to tell, other than the increase in power, is by probing the new rev limit. On most BMWs this is raised to 7000 rpm. On cars equipped with automatic transmissions it will be difficult or impossible to reach this point without performance software for the transmission. For added confirmation you can always repeat the UPGRADE process.

### **How do I un-install the Injector?**

Follow the same procedure as you did for installation. When doing a Restore function you will see both the green and red LED lights light up at the end.

## **Shark Injector FAQ, continued**

### **Do I ever need to get the Shark Injector updated?**

No. Generally speaking, BMW's engines are so finely tuned from the factory that further updates are not usually necessary. Jim Conforti has spent many years tweaking BMW's software to the point that the engine is at its peak efficiency when the Shark Injector is installed. As a general rule, updates to the Injector are not necessary.

### **What do I do when I have to take the car to the dealer?**

If your car needs to visit the dealer for a new upload of BMW software you should perform a Restore function with the Shark Injector. This will allow the BMW dealer to upgrade your software without over-writing the Shark Injector's performance software. New software is not always strictly necessary and you can always refuse when the dealer wants to install new software.

### **What should I do when my Check Engine light or Service Engine light comes on?**

A) You can bring your car to a BMW service facility and have them read the trouble codes from the car's computer. Or B) you can purchase the Peake Fault Code Reader from any number of aftermarket retailers and save yourself a trip to the BMW dealer. This will tell you exactly what is wrong with the car; however, it will not be caused by the Shark Injector.

### **Is it legal in California?**

These products are not CARB-certified or legal for sale or use in the state of California on any pollution-controlled motor vehicles.

### **Will the Shark Injector work on a Euro-spec car?**

No. European-spec cars – and the software used on them – are not available in the U.S. The software in a European DME will be different than on a US car and the Injector will not install. The Shark Injector works on cars that are sold for the U.S. and Canadian markets only.

For *US-spec* cars in a foreign country (people in the military, business overseas, etc) it is recommended NOT to have the local BMW dealer perform any software updates on your car. This can lead to the Shark Injector not re-installing after the BMW update. BMW may have different versions of their software in a foreign country than in the U.S. and Canada.