



## **Active Engine Noise Enhancement:**

### **What is it and why are automakers using it?**

With automobile manufacturers making vehicle interiors quieter through a combination of sound deadening and acoustic processing, automakers have seen a need to add “engine sounds” to the audio system, mainly to appeal to the car enthusiast. There are many automakers doing this: Ford, Dodge, Cadillac, Mini, Lexus, Acura, Porsche, BMW, Honda, VW, Audi, and Skoda to name a few. Manufacturers have also added ANC (Active Noise Cancellation) in some vehicles. The ANC is (at times) a separate circuit designed to make the ride quieter.

In both cases, it is necessary to bypass, remove, or disconnect the enhancement circuit(s) if you plan on upgrading your audio system. Without the needed bypassing in place, the sound quality may suffer significantly.

### **How to detect “enhanced audio” with aftermarket audio installed:**

Note that systems with the “enhancement” will sound perfectly fine with the vehicle not running. If you notice a low-frequency rumble or tone present only when the vehicle is running, either Active Noise Canceling or Active Engine Enhancement is being used. Some versions of the circuit only activate when the engine reaches a certain RPM or throttle position.

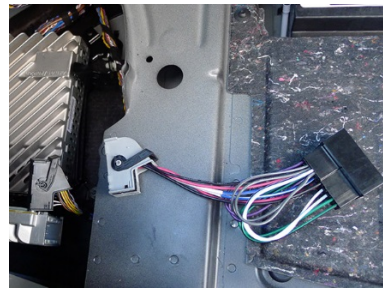
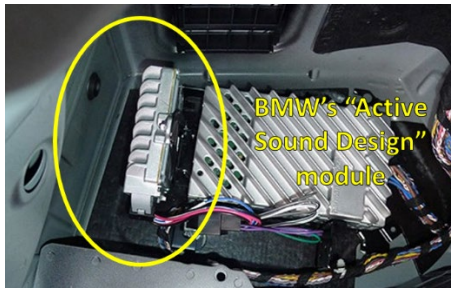
Not all “enhancements” are embedded in separate modules. Some are in the OEM head units. If this is the case, they must be deactivated (if possible) through a dealership, assuming there is no user interface available to eliminate it.

It may be necessary to search the internet to find the procedure necessary to eliminate these circuits. With some vehicles, it will be a simple additional module that you can unplug from the OEM head unit or amplifier. VW and Audi, for example, use a module and separate speaker under the hood (mounted to the firewall) to produce fake engine noises. Volkswagen has named this circuit the “Soundaktor”. The Audi “Active Sound Control” even has a variable dial on the dash to allow the driver to tailor the sound to their personal preferences. In most cases, you must test drive the vehicle after installing the aftermarket audio system to verify the interference issues have been eliminated.



**Audi ASC control**

Others, such as some models from BMW, will require a bypass harness that will eliminate the unwanted fake engine sounds. On this type of system, the audio from the head unit is sent to the engine enhancement module before it gets sent to the amplifier. Simply unplugging the module will eliminate all audio in the vehicle and trigger an error code. The bypass harness keeps the ASD module powered up and the OEM computer happy. Check with an Authorized KICKER [Dealer](#) for details.



**BMW ASD modules**

**BMW ASD bypass harness**