

# How to: AIH(Air Intake Heater) Delete Mod

Background: The AIH(Air Intake Heater) is a device located on the intake manifold of the 99.5-03 Ford 7.3L Power Stroke diesel. It is said to restrict up to 20% of intake flow\*. The purpose of this plug is to reduce white smoke during very cold weather. A few things must be met in order for this plug to turn on.

- Ambient temperature must be below 0 deg C (32 deg F).\*
- Engine oil temperature must be below 55 deg C (131 deg F).\*
- Vehicle power must be between 11.8 and 15 volts.\*
- Parking brake must be applied on manual transmission vehicles.\*
- The transmission must be on park or neutral on automatic transmission vehicles.\*
- Glow plugs must be off.\*

First, locate the plug on the intake manifold. It is on the cold side of the intake.



Next, remove the 10mm nut attached to the red wire.



After the 10mm nut has been removed take the spacer off.



Next, take off the black ground wire.



Now you are left with the bare AIH plug.





You can now unscrew the plug. I found it easiest to use a crescent wrench.



This is what the AIH plug looks like.



Now you must obtain a bolt to replace the AIH plug. It is a M22-1.5 bolt. You can get this new plug/bolt from some diesel product vendors or you can go to an auto parts store and get an oil drain plug for a 2000 Dodge diesel. I just used an oil drain plug.



This plug will just screw right in. Do not over tighten or you may strip the threads out.



Now you need to disconnect the two wires. The red wire is attached to a solenoid and the black wire is just grounded. There is a blue wire attached to the solenoid on the same post that the red wire is. This blue wire must be left on the solenoid.

Here is where the removed red wire would go. Notice the blue wire still intact.



Here is where the ground wire ran to. It's on the driver's side underneath the hot side intercooler boot off of the intake manifold.



Now you are done. Keep the AIH plug and wires in case you ever want to reinstall them.



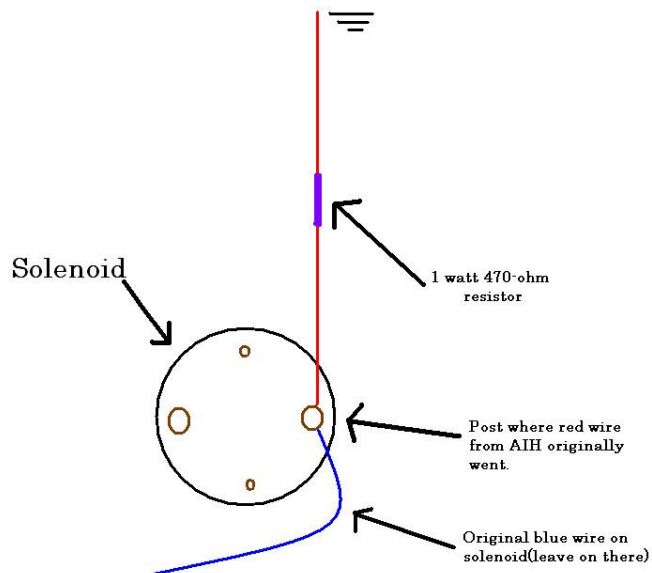
Additionally, you may want to wire in a resistor so no soft codes will be thrown if/when the AIH is supposed to be on. All you would have to do is run a 1 watt 470-ohm resistor from the post where the red wire originally went, then to a ground.



Here is what the resistor will look like. These resistors are only  $\frac{1}{2}$  watt so you should use two of these in line.



Here is a wiring diagram of how it should be set up.



Information with an asterisk\* next to it came from [www.dieselsite.com](http://www.dieselsite.com)

Instructions created by Justin Bochmann (JBone).