

## Cold Air Intake For GM TBI Fuel Injection

Throttle Body Fuel Injection was once GM's most popular fuel delivery system. Its is cheap, very reliable, simple and effective. These features meant that for a time it was used on every truck GM produced from about 1986 until 1992 when GM introduced CFI on the Chevrolet and GMC S-series platform. Through all these years an almost identical air cleaner system was used across every model. The only major difference being size. The stock air cleaners were identical in design and function to any air cleaner you might find on a carbureted vehicle. These old air cleaners work well in terms of filtering air, but they lack performance potential. For the performance minded individual there is a lot to be desired, the same is true for someone after a couple more miles to the gallon. So what are the options?



**The typical stock air cleaner on a GM TBI equipped vehicle. This is a Chevrolet S-10 2.8L**

Well the one free option is to turn over the air cleaner lid. Doing this will open up the filter housing all around and allow a shorter, and much less restrictive, path for air to enter. The benefit is more air so you should get a noticeable difference. The downside is this air will be hot and as we all know hot air is less dense and wont give the same benefits as cold air. But hey its Free! The results can be improved by installing a high flow filter element.

So how can we get cold air into the engine? Well there is one company making a heavy duty, well designed, plenum that can easily be installed in place of the stock air cleaner that will allow you to route 4" tube from a cold air source right into your engine. Spectre Performance P/N 9849 is a polished cast aluminum TBI/Carb plenum with a 4" OD inlet that will get you on your way to having a fully functional cold air intake system. The plenum simply screw on the same way as your stock air cleaner does. It does not require any hardware to mount, and even clears the injectors. It will only fit two barrel TBI units so unfortunately 2.5L owners are out of luck.

Once you have the top on your vehicle the options are endless. With some clamps and elbows, also available from Spectre, you can make almost any shape intake you could imagine. In this article we will focus on a 1993 S-10 with a 2.8L TBI engine. The system will also include a Reusable and washable filter from AEM and a stainless steel filter box to help block out even more heat. To make the system we chose the following parts  
Spectre Performance P/N 9849 - TBI Plenum

Spectre Performance P/N 9719 - 4" OD 6" Long Polished Tube

Spectre Performance P/N 9749 - 4" OD 45 Degree Elbow

Spectre Performance P/N 9771 x2 - 4" ID Rubber Couplers w/Clamps

## AEM P/N 21-2059DK - 4" ID Inlet 9" Long Cone Filter



Here is the Spectre Performance 9849 TBI Plenum. This is the polished version, it is also available in powder coated black, blue or red.

The first step is to remove the stock air cleaner system. You will need to remove and plug the vacuum line going to the air cleaner. You will also need to remove the breather tube and install a breather filter. And lastly the MAP sensor will have to be removed from the Air Cleaner housing (does not apply to all applications) and secured in a safe place. Extension of the MAP vacuum hose may be necessary. Once done you can begin installing the air cleanser system. If you do a rough assembly on the ground you can drop the entire thing on as one piece and just adjust the angles, or you can install the plenum first and plug the pieces in. The air cleaner will sit in the front driver side corner of the engine bay. If you are not going to install some type of filter box you can use Specter Performance P/N 9702 filter support bracket which will keep your system supported at the filter end. It can be secured to the rad support or fender. If you decide to make a filter box you may be forced to remove the vacuum reservoir, this is a suitable tradeoff unless you have a 4WD vehicle. Without the reservoir the front axle can disengage without warning in low vacuum situations like wide open throttle or heavy engine load.

That's it your cold air intake is done. Remember to keep your filter clean and oil it if required.



Here is the cold air intake unit installed on a 1993 S-10 with a 2.8L. Any S-10 with a 4.3L would be an almost identical install and can use the same parts.

Written by: Geoff Moore (geoffinbc)

Edited by: Snoman002