

This PDF article was bought to you by

CarBasics
www.carbasics.co.uk

What is an induction kit

LATEST DISCOUNT VOUCHER CODES

Save on car parts and tools at -

www.carbasics.co.uk/dealsanddiscounts.htm

Whether your car is a basic model or a performance version it will probably have either a round or panel type filter sat inside an airbox in the engine bay.

Photo of standard airbox



Inside the airbox will be an inexpensive paper type air filter ;



Photo of standard airfilter element

This airbox and airfilter setup are, at best, adequate for providing clean air into the engine. However, as the car ages, things get dirty and full of dust and become less efficient.

The idea behind an induction kit is to replace the restrictive airbox and airfilter with something that will allow more cool air into the engine and also do it with less effort. This will then result in more power from the engine.

So what is an Induction Kit then ?

An induction kit normally consists of a cone shaped filter (cone filter) and the necessary pipework and brackets to fit it to your specific vehicle model.



The photo above shows a typical (K&N) induction kit with the cone filter on the right attached to the existing pipework.

As mentioned above, the kit replaces the manufacturers airbox and filter, it will sit in the engine bay in place of them and provide the engine with more clean air for less effort from the engine.

Is fitting cone filters difficult ?

The short answer is no, fitting an induction kit is not a very technical or difficult thing to do. Most kits available from the most popular induction kit manufacturers are 'car specific'. K&N, piper, green filters and Jetex (there are more) are amongst the most well known induction kit manufacturers.

If you look online at some performance car parts shops, do a search on induction kits specific for your car, example "honda civic induction kit". You will then see a list of all the kits that are made specifically for that vehicle. It is best (and easiest) to buy a kit that has been designed to fit your specific car. It will come with everything you need to fit it, as well as detailed instructions showing how to fit it.

The only difficulties that may occur are when your specific car is not listed and you have to buy a universal induction kit. These are designed to fit onto many different cars but will need to be modified or have brackets made and fitted by the customer.

So induction kits are pretty straight forward to fit, and the cars computer (ECU) will adjust itself automatically and revise its fuel/air settings to get the best performance and efficiency. Compare it to just changing your dirty old panel filter for a clean new one. The ECU will automatically adjust itself to the new conditions. So nothing at all for you to do or worry about other than fit the kit and drive the car.

Advantages of induction kits :

Small gain in engine performance for a relatively small outlay, and then if you change your exhaust and other components for a performance items, you will get even better power gains.

Good quality induction kits will last for a lifetime, because unlike standard paper filters, they can be cleaned/washed and re-oiled, so will never need to be replaced.

Noise (some think it is a bad thing). Because your new induction kit is sitting in the engine bay and not in a box (airbox) like your old panel filter, you will have air being sucked into the engine through the cone filter. This is called the 'induction roar' and it will vary from manufacturer to manufacturer.

Disadvantages of induction kits :

You have thrown away the airbox that protected the original filter from heat and supplied it with cool air and now you have a cone filter sitting in your engine bay unprotected. If you have purchased an expensive and reputable induction kit it will probably come with extra pipework that you can fit in order to push cold air from outside of the car onto the new filter. If this cold air feed is not in place, your cone filter will be sucking in plenty of air but it will be warm air. Warm air into your engine is bad for performance and economy because it is less dense.

Noise, induction roar - some people don't think of this as a problem and actually prefer the sportier noise.

Notes I have had induction kits fitted to most of my petrol cars, Nova SR and a Renault 5 GT Turbo. Never had one fitted to the Vauxhall Calibra 4x4, just never got around to it. What I would say is make sure that you can buy the best induction kit that you can afford. There are many cheap (normally foam) performance induction kits available, all claiming to give you great power increases and not costing a lot to buy. You still need to be protecting the inside of your engine from airborne particles and debris, otherwise we could just take off our airfilters and have no airflow restrictions whatsoever.

Buy the best you can afford and avoid the cheap crap. Stick with reputable brands that you may have heard of or a mate already has fitted.

And finally, don't expect massive and stomach churning power gains. An induction kit will not rock your world, it won't make you a better lover and it WILL NOT turn your car into a drag racer. IT IS however, an important part of what should be looked at as a 'performance package'. Changing the airbox for the induction kit and leaving everything else standard, will give you a small increase in performance - that's good. But then when you start changing other parts such as exhausts, spark plugs ECU chips etc. then you notice a much greater increase in performance and improvement from the induction kit.

LATEST DISCOUNT VOUCHER CODES

Save on car parts and tools at -

www.carbasics.co.uk/dealsanddiscounts.htm