



FAQ

Which and how many filters are produced by BMC?

The filters we produce fall into 6 main categories:

COTTON AIR FILTERS FOR STANDARD AIR-BOXES (Replacement): can replace paper filters of various sizes and shapes (available for cars and bikes).

CDA: Intake and filtering system with carbon Airbox.

OTA: Intake and filtering system with carbon Airbox, plus special Trumpet air conveyor device.

DIA: Intake and filtering system with plastic Airbox.

CRF: Special carbon fibre air filters for high-end and sport vehicles (available for cars and bikes).

CONICAL FILTERS FOR DIRECT INTAKE: Conical filters for direct intake (need OEM airbox removal)
TWIN AIR and SINGLE AIR and VAS (Venturi Admission System)

Why are cotton air filters better than others?

In general, vehicles such as car or motorcycles require a total particle filtration efficiency up to a minimum size of 10 microns, to avoid any risk of passage of foreign objects that may damage the mechanical components downstream of the intake system (Air Flow Sensors, injectors, valves and segments).

OEM air filters are made of paper and their main function is to protect the engine. These filters have high resistance to the air flow, which reduces the inlet pressure and reduces the engine's performance. BMC's air filters provide a considerably greater air flow. Furthermore, compared to a conventional paper filter, which at the time of maintenance must be replaced, the BMC air filter (being reusable) has a life equal to that of the vehicle itself.

Another type of air filters on the market are synthetic filters, which BMC has produced for years only for non-road applications. The main difference between the BMC oiled cotton filters and filters made of synthetic material (for example plastic canvas) is the principle of impurities stoppage. The synthetics allow passage of particles in the size of the micro-filter material: it follows that a filter with 80 micron holes allows the passage of all items below that size, stopping only particles larger than the size of the hole (an example: the sand has a size of about 50 microns). The cotton has a larger plot, which favors the passage of a large flow of air and through the combination of different layers containing oil, ensure the stoppage of all the impurities from 7 microns up. To date, this concept is the best solution for both better filtration and higher performances.

What are replacement filters for standard air-boxes?

They are filters that replace original paper filters in the filter box. BMC Air filters replacing original ones are designed and made to guarantee greater air capacity than traditional paper ones. BMC filters use aluminium net treated with epoxy resin to guarantee resistance to fuel vapours and oxidising due to humidity. The filtering material is special cotton soaked in low viscosity oil to guarantee greater permeability to air.

Can BMC filters be regenerated?

BMC are all washable and regeneratable thanks to the materials they are made of. The filtering material is a special cotton soaked in low viscosity oil to guarantee greater permeability to air and can also be regenerated (impossible with paper air filters).

How do you regenerate a BMC filter?

We strongly advise regenerating the BMC filter using the original BMC washing Kit; the kit contains detergent and oil dispenser (spray or with batcher).

We advise regeneration every 15000 km to guarantee long lasting performance and duration. This value can change based on the environmental conditions the car is used in (e.g. non tarred roads, presence of pollen, dust,...).

The stages for correct filter washing and oiling are specifically indicated in instructions inside the pack.

How do you install BMC Replacement filters?

BMC panel filters just replace the original filters in the filter box.

First you need to open the filter box and, in some cases, remove the intake tube and flow gauge collector.

Does the air flow sensor risks to get damaged by installing a BMC filter?

No, it doesn't.

However, try not to put much more oil of what is indicated in the instructions of the filter regeneration procedure. With the right amount of oil, the air sensor will be fine.

Do BMC air filters need to be oiled before use?

No they don't. BMC air filters are pre-oiled.

We advise regeneration every 15000 km to guarantee long lasting performance and duration. This value can change based on the environmental conditions the car is used in (e.g. non tarred roads, presence of pollen, dust,...).

For my motor bike, what's the difference between NORMAL and RACE?

For some motors, the BMC catalogue (viewable on the Web site) can offer customers 2 air filters for a single motor bike model: one called STANDARD and the other RACE.

STANDARD filter: All BMC motor bike filters replace the original air filter (usually paper); that is they fit the series filter shape exactly and are installed in the air box with no need for any modification; but their characteristic and substantial difference is that the "filtering package" is different to the stock one, better performing. This means it lets more air through; the simple, effective process is that by letting more air through combustion improves, so engine power does too.

RACE filter: The difference between standard and race lies in the "filtering package", making the air passage to engine concept even more extreme: the RACE filter has an even greater air breathing capacity compared to the standard one and its installation is only, exclusively advised for motorbikes used on a race track as carburetion or injection could be weak (for carburetion the air quantity present in the mixture is greater than the quantity considered necessary, while for injection, despite the modern gearcase capacity to adapt itself within certain ranges, at times the excessive air increase is not handled correctly by the gearcase itself). To avoid problems of this kind and recover the right stoichiometric air/petrol relations, you need to increase petrol capacity. To do this, you normally use a gearcase, remapped or replacing the original. Otherwise for carburetion motor bikes you can have additional carburetion kits.

RACE filters have the words "RACE" on their recognition code (e.g. FM 482/08 RACE) and a yellow line inside the filtering package making them easily recognisable.

What is CDA?

The CDA filtering system (patented) is a cylindrical shaped Carbon Airbox containing a washable, regeneratable filter. Replacing the original filter box with the CDA one, the fresh air flows directly to the filter and is taken in by the engine through a flow switch with minimum load loss. The CDA Kit also includes a flexible aluminium tube (60 cm long) to connect the system to a front air inlet. The CDA comes in 2 sizes:

Type 1 (70-130) is for engines up to 1600 cc,

Type 2 (85-150) for higher levels.

Each type is also available in the different diameters needed to connect to the engine. Bench and track tests with Datron Laser have proved the effectiveness of the CDA dynamic filtering system.

What is an OTA?

OTA stays for Oval Trumpet Airbox. It is BMC newest direct intake system, the evolution of the famous CDA.

Do you get better vehicle performance by installing CDA or OTA?

Thanks to dynamic air intake you can convey fresh air to the Airbox at a much higher speed and capacity than traditional intake and filtering systems. The dynamic air intake is further accelerated by the flow switch inside the carbon fibre Airbox. Mounting a BMC kit gives you decided advantages in the increase in the amount of comburant oxygen in the burst chamber compared to a conventional air filter. These elements guarantee a considerable increase in engine performance, in power and torque performance as proved in bench tests.

What are Special or customised CDAs?

The CDA and OTA are also available in several special versions, specific for single vehicle models, identified by the letters "SP" in the code.

Those are plug-and-play versions which don't need anything else to be mounted. A vehicle for which a Specific version doesn't exist can still get a CDA or OTA (Universal version), but it may need some additional accessories.

I can't find a specific CDA or OTA for my car.

There are Universal Versions, which can be easily mounted on any kind of vehicle with just some mounting accessories (hoses, pipes, reductors, etc...) depending on the engine layout. Please ask your tuner what you may need in order to properly mount a Universal CDA/OTA.

When you mount CDA or DIA do you need to re-program the electronic gearcase?

Mounting an induction kit does not necessarily mean reprogramming the ECU (new generation ECUs generally adjust work parameters automatically). However, it is true that as the amount of comburant oxygen increases the engine needs more fuel to burn. So to exploit CDA/OTA 100% you need to re-map the ECU. In any case, installation should be done by a set-up man.

Are CDA and DIA easy to install?

All BMC filters are sold with assembly instructions and all accessories needed to make assembly easy and fast. The OTA/CDA/DIA lets the propulsor breathe thick, fresh air, rich in comburant oxygen, unlike a traditional air filter. By mounting an air intake on a specifically favourable point of the car bonnet you can increase the speed of the air crossing the airbox considerably, with an advantage in the increase of fresh air capacity towards the engine.

UNIVERSAL versions of OTA and CDA may need some mounting accessories to fit correctly onto your vehicle (tubes, hoses, reductors, etc...).

BMC always suggest to let a professional mechanic/tuner carry out the kit's installation, since improper mounting can result in low performances.

Are there any useful tools for installing the direct intake kits (cone filters, CDA, DIA and VAS) produced by BMC?

BMC produces high quality accessories to install the different kits:

- Silicon accessories: couplings available in various sizes.
- Couplings with 90° bends in EPDM.
- Flexible aluminium tubes: available in various diameters.
- Flexible aluminium tubes with carton core: available in various diameters.
- Aluminium couplings with threaded bush for fixing: in various diameters.
- Nylon reduction: in various diameters
- Holed support brackets.
- Flow gauge couplings with rectangular flange.
- Inox steel bands: in various diameters.

How can I tell if a BMC air intake system (DIA, CDA, or OTA) is original or not?

Before buying a DIA/CDA/OTA online, if you're not sure about who's selling or simply where the item comes from, use these simple control techniques to see where your DIA/CDA/OTA comes from. The first and only product in the sector, with patent and deposited trade mark. The 4 things you can do are:

- 1 – Check that the trade mark BMC is visible inside the carbon cylinder, printed directly in the treated carbon itself, saying "Patented System".
- 2 – Check that the trade mark BMC stand outs in the flanges (engine side and air inlet side), pressed in when moulded.
- 3 – Check that the box contains the accessories in a plastic bag marked BMC.
- 4 – Then check that all distinctive elements are present in the box (together) with their respective BMC markings, as stated in points 1,2,3.

What is the DIA filter?

The Direct Intake Air System (DIA) operates in the same way as the CDA. Its special structure makes intake air flow to the engine at a higher speed and capacity than traditional systems, considerably improving engine performance.

The DIA is a plastic airbox containing flow switches and a regeneratable filter.

What is the difference between CDA and DIA?

At performance level, the CDA is the best of those listed as it is made with high quality materials. It has a cylinder shaped Airbox in real carbon fibre. Carbon has a high resistance to temperature and low heat conductivity allowing the filter and intake air to be insulated from engine heat. In this way, the fresh air from outside reaches the engine directly and, thanks to a flow switch, with minimum load loss.

The DIA (junior CDA kit) operates in a similar way to the CDA but with a plastic air-box.

What is a CRF?

CRF stays for Carbon Racing Filter. CRFs are special full-carbon fibre air filters, designed for the best sport cars.

I would like some information on BMC direct intake cone filters.

BMC direct intake cone filters can be installed on any kind of car eliminating the original filter box. If necessary, to complete the application, there are several flexible connection tubes, support brackets, bends, reductions and rubber couplings available. BMC conical filters come in two versions:

- SA (Single Air) just with side air flow, .
- TW (Twin Air) with central and side air flow; available with metal, plastic and carbon tops.

BMC direct intake cone filters are made in the characteristic red rubber making the coupling fit especially resistant to both mechanical and heat stress with no temperature deforming. The special filter pack support netting enables creation of filters for power up to 700Hp (in the case of NOS or Turbo) with no intake filter deforming.

I would like to buy one of your CDA or DIA filters. I would like to know whether there are any counter indications as the car is new and still in guarantee and whether it can cause any problems to the flow gauge.

There are no counter indications for mounting the CDA or OTA on any new car or on one that is a few years old with a certain number of kilometres. If the car is new the warranty does not lose validity as the CDA or OTA can be dismantled and the original airbox reinstalled.