

Fiat 500 Abarth Induction Kit





## STANDARD AIR INTAKE REMOVAL

Removing the standard intake is fairly straight forward. The first step is to disconnect the turbo hose and the recirculation hose by releasing the two spring hose clamps. These clamps need to be prised open. With the two pipes disconnected the engine cover filter assembly can be removed by removing the securing bolt and pulling the air box upwards to remove from the grommets.



The next step is to remove the turbo pipe. The pipe has three breather hoses attached that must be disconnected. Two to the left and one oil breather pipe at the base. These are easily removed by releasing the hose clamps. Once the breathers have been disconnected the pipe can be fully removed by releasing the one remaining clamp on the turbo.



All of the stock items including the clamps can be stored safely as the new kit is supplied with all the necessary fittings.



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### Pre instillation modifications

# Due to the limited amount of space available and the complex nature of the kit several modifications to the vehicle are needed before the new kit can be fitted.

#### Oil breather hose

In order to refit the oil breather pipe to the new turbo hose the rubber neck must be stripped from the pipe on the lower turbo side. To make the modification remove the pipe from the vehicle by releasing the second clamp and slide the pipe to the left.



**Before modification** 



After modification

With the pipe removed from the vehicle, use a sharp knife to slice vertically through the rubber. The rubber can then be peeled off the pipe. Any remaining bits of rubber can then be scraped off the pipe using the blade.

Once the modification is complete the pipe can be refitted to the vehicle in its original position.

#### Scuttle panel modification

In order to source the coolest air possible the cold air feed is taken from behind the scuttle panel. This requires the scuttle panel to be modified to feed the ducting through. (Please note when returning to standard the scuttle panel is relatively inexpensive to purchase from Fiat)

The scuttle panel must be removed for this modification.



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- 1. Remove rubber sealing strip from the front edge of the panel.
- 2. Remove the two plastic covers at the base of the windscreen wipers exposing the nuts that hold the wipers in place.
- Next the wipers must be removed. Before removing the wipers it is a good idea to mark the current positions using some masking tape to ensure they are correctly aligned when refitted. Remove the two bolts at the base of the wipers. To release the tension lift the blade of the screen then the wipers will slide off the mounts.
- 4. With the wipers removed the top panel will slide upwards out of the way.



5. The scuttle panel is secured by 6 bolts, two at each end and two in the centre. Once these are removed the scuttle panel can be fully removed from the vehicle.

Once the scuttle panel is removed a clearance hole for the inlet air ducting must be cut out. A sticker template has been provided to show the exact location of the cut. Place the sticker template in the position shown and carefully cut round the pink line and file down the two ribs as detailed on the template.





The final Modification is to remove the top breather hose from its current mounting bracket. This is located just behind the oil filler cap. This will give a little more flexibility. The bracket can then be closed and the small rubber strip can be glued to the top using superglue to prevent the new hose from rubbing.





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## Fitting ITG Intake kit

The ITG Kit has been supplied partially assembled to assist with the fitting. There are 3 main sections.

- Inlet ducting
- Air box
- Silicone Hose

The first stage of the process is to mount the air box. The air box has been supplied with the p-clips and brackets pre-installed in the approximate location. The air box is mounted using the original bolts in the locations shown. The tricky part of the installation is to line up the mounting points. The right hand p clip has been coated to allow some movement on the air box. It is easier to mount the rear bracket first then rotate the air box to line up and secure the front bracket. Do not fully tighten the bolts at this point to allow some flexibility until the remainder of the kit is fitted.



Once the air box is mounted in position the inlet ducting can be attached to the air box using the hose clamp supplied. The end with the air horn attached is secured in the position shown using the cable tie supplied.

Once the ducting is fitted the scuttle panel can be replaced.





It is now time to fit the silicone hose between the air box and the turbo. In order for the hose to fully fit onto the turbo a slot needs to be cut into the hose to fit around the location tab. This is easily done by loosely fitting the hose in position, marking around the tab and cutting with a sharp knife.



The hose can then be secured at both ends using the hose clamps supplied.

The two breather hoses to the left can be reattached to the spouts. The larger hose is secured using the hose clamp, the smaller hose is a push fit onto the connector.

The oil breather pipe to the right can be pushed into the spout and secured using the hose clamp supplied.

Once the hose is attached the air box mounting bolts can be fully tightened and the upper scuttle panel and wipers can be re fitted.





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# Instructions for cleaning, maintaining and re-oiling

# MAXOGEN AIRFILTERS

#### PLEASE NOTE THAT YOUR FILTER IS SUPPLIED DRY AND REQUIRES TO BE OILED BEFORE USE

### **CLEANING**

The recommended method to clean a maxogen filter is to use ITG air filter cleaner, part number CL-1. If this product is not available in your region/country then you can use liquid detergent (washing-up liquid) and warm water to remove the oil/dust/dirt when the filter has been oiled with our Dust Retention Coating JDR-1 (white coloured oil). The adhesives and materials used in the filter are petrol resistant but the adhesives are not totally water-resistant when they are soaked and left for a few hours, so washing in warm water is tolerated, but under no circumstances should the filter be left to 'soak' to aid cleaning, as in time this will break down the foam adhesives.

Massage the filter foam firmly with your hands whilst in the water/detergent mix. If using petrol then wear suitable protective clothing and dip the filter in the petrol and massage as above. This massaging will help dissolve the oil and pull the dirt particles out of the filter. Repeat with a clean detergent solution if the filter is particularly dirty. Then rinse the foam through in clean water 2-3 times to remove any remnants of the detergent used to help remove the dirt. Repeat until the water runs clear and the filter is completely washed clean.

Water encountered in normal use (i.e. rain, spray etc) will not have adverse effect on the filter performance.

After cleaning, the filter should be allowed to dry thoroughly (shaking out the excess will help speed up this process). DO NOT use a high pressure air line or a hot air blower to speed up the drying process.

### **RE-OILING YOUR FILTER**

Only use specific foam air filter oils, such as ITG part number JDR-1 racing dust retention oil or ITG part number JDR-2 air filter oil for normal road/off road/occasional track use. The air filter oils generally have a coloured dye to show where the filter has been coated. Holding the aerosol about 50mm or 2" from the filter, then spray in a circular motion all over the foam surface until the course foam pores start to fill up with oil. Then wearing protective gloves, 'massage' the oil into the depth of the foam. Oiling on both sides of the foam will offer maximum protection, though the inside layer only needs to be a light coating. There is no need to oil the grey gasket.



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**NOTE:** <u>Under no circumstances use cotton gauze filter oil or any other oil not</u> <u>specifically manufactured for foam air filters, as the oil will not stick to the foam and thus</u> <u>may allow dust through the filter causing engine damage.</u>

Under no circumstances use a highly alkaline cleaner above PH-8, such as powder based cleaners or a clothes detergent, to clean a foam filter. Using a highly alkaline cleaner will breakdown the foam structure and destroy the effectiveness of the filter. If in doubt of what is safe to use, contact ITG or your local dealer for advice.