MultiAir Oil Strainer/Filter Replacement

Avoiding expensive MultiAir bills with proper maintenance

Alfa and Fiat's MultiAir engine gets an unjustified amount of bad press for major and catastrophic MultiAir Unit failures. These are actually very rare, but of course when it happens it is an expensive fix and owners quite rightly tell others on social media.

But this does give rise to a belief that the issue is prevalent, when in actual fact it is not. That being said, there are three primary reasons for the MultiAir Unit failure, and any one or combination can be disastrous for your MultiAir MiTo:

1. Use of the incorrect oil,
2. The MultiAir Oil Strainer/Filter clogging up (usually due to the incorrect oil) and
3. Lack of regular oil changes and maintenance.

So in this newsletter, we're going to tackle one of those potential causes, the MultiAir Oil Strainer/Filter replacement.

The strainer/filter itself is not expensive and is readily

available from your local Fiat or Alfa dealer, or online at the usual shops such as Shop4Parts for around £27. The part number is 55238665, and is the same part number at a Fiat dealer as the part is used on lots of Fiats such as the 500.

But the part goes by various names including the MultiAir filter, the gauze filter, the gauze strainer and the MultiAir oil strainer (or any combination of those words!).

We have seen crafty online sellers at the usual auction sites charging much more, and even prices at dealers seem to vary slightly, which is disappointing. So always buy the part based on checking and double-checking the part number.

My advice would be to replace (or at least clean) the MultiAir Filter at alternative oil changes, though I am now committed to changing, cleaning or at the very least checking with each oil change. That way I and any future owner can be sure of no failures (as I only use the correct oil and maintain the car regularly!), and now I've replaced it once it should only add another fifteen minutes or so to each oil change.

Of course, if you prefer to have your dealer or specialist maintain your MiTo, then at the very least ensure you instruct them to replace the filter and have them document the part number and the fact that they replaced it on your service receipt.

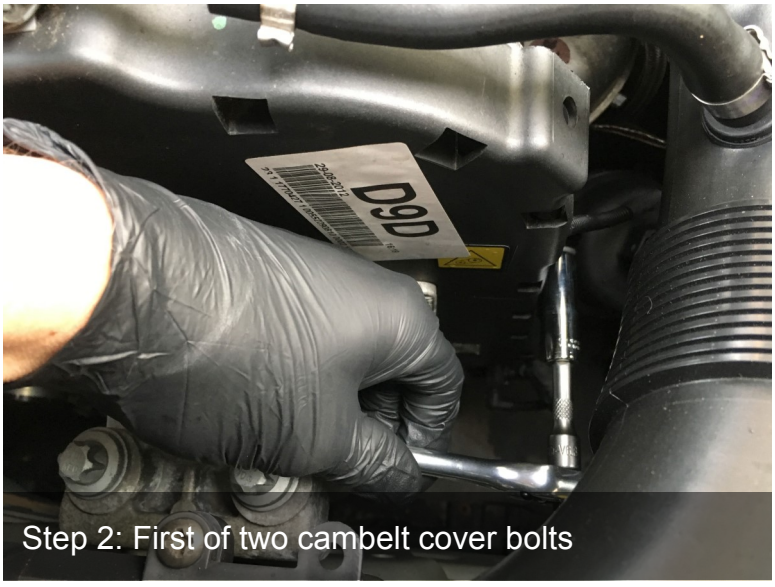
But for those happy to give it a go yourself, this is the 8 step guide. I say 8 steps, but there are actually 7 steps with 1 optional step, depending on your tools! All will become clear as you read the steps…

Step 1.

Remove your engine cover and become familiar with the layout of the engine.

Hopefully by now you know how to remove your engine cover. But if not, it just needs a good tug to free it from the rubber mounts. There are no bolts or special tools required! The cambelt cover is on the left side of the engine (on my engine it has the big sticker with "D9D" on in the first three pictures - I have no idea what D9D signifies as it seems to have no relation to the part number, engine type or model year, but I digress).

Step 1: Engine cover off exposing cambelt cover



Step 2: First of two cambelt cover bolts

Step 3: Second of two cambelt cover bolts

Steps 2 and 3.

The cambelt cover has two bolts, each of which need to be removed. Take care not to drop them down in the engine bay or you'll spend the rest of day trying to recover them! Do not try to remove the cambelt cover yet until the next two steps are complete…

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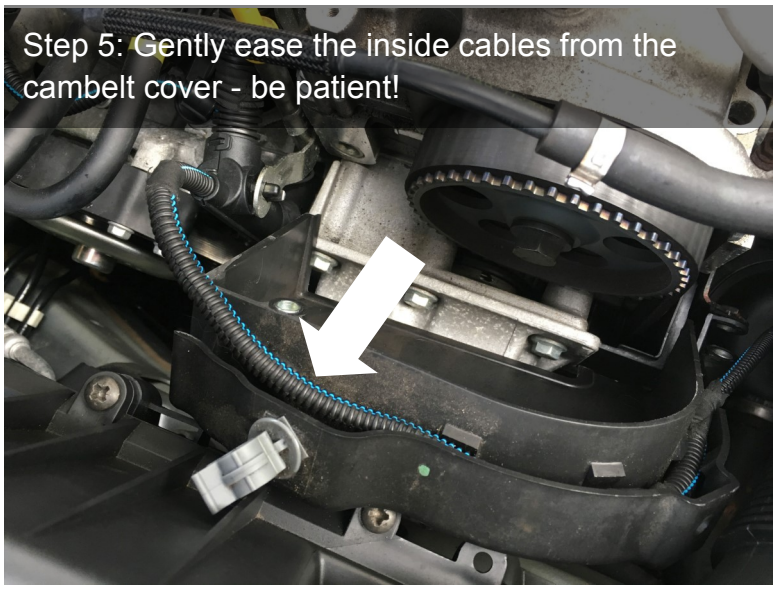
Step 4.

You may have noticed that the cambelt cover has cabling attached to the top. Using a flat-head screwdriver, gently prise the holding clip apart to free the cabling. It comes apart very easily as long as you are gentle with the screwdriver. You should not need to force it.

Step 4: Gently prise open the cable clip to release the cables from the top of the cambelt cover



Step 5: Gently ease the inside cables from the cambelt cover - be patient!

Step 5.

By gently easing away the cambelt cover, you will see that there is more cabling attached to the *inside* of the cover.

Using a small amount pressure, ease that cabling out from the inside of the cambelt cover by opening the gap of the cover with one hand and gently pulling the cable with the other.

Apply the pressure to the cover to create a wider opening rather than the cable which you should not pull hard. It will come, just be patient and keep trying! You may need to gently prise the gap a little wider with a flat-head screwdriver, but take care not to cause any damage to the cabling - this step is very much about easing rather than forcing.

Step 6.

Once the cables are free, gently remove the cambelt cover and you will get your first look at the MultiAir Filter (arrowed)!

Step 7 (optional).

Now, we have reached an awkward point, depending on your tools!

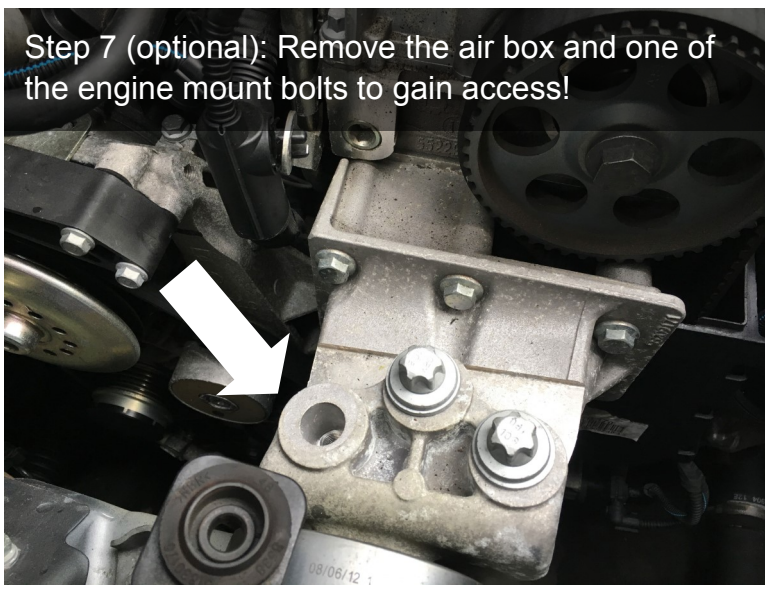
The MultiAir Filter needs a 10mm hex, which I have as a socket. Unfortunately, due to a combination of the engine casing design, the engine mount bolts, the airbox, my sausage fingers and my ancient socket set, I could not get a straight angle on the MultiAir Filter without removing both the airbox and one of the engine mount bolts (arrowed in its absence).

Hopefully, you won't have the same issue and you can get clear access to the MultiAir Filter with a 10mm hex in which case you can skip to Step 8, but as you can see from the image for Step 8 I had to clear enough space to use my old socket wrench with a short extension. If you do need to remove the airbox it is very simple: just loosen the jubilee clip on the air intake pipe and tug the airbox free (it is just held in with grommets).

Step 8.

You are about the remove the MultiAir Filter, but you need to take care that no oil gets near the cambelt! Only a small amount will come out with the filter, but get a clean rag or cloth and pack it around the filter and the cambelt to ensure no oil gets near the belt. Once that is in place, remove the MultiAir Filter taking care to catch any oil and leave the rag in place while you inspect the filter.

Step 6: Once the cables are free, ease the cambelt cover off. You can now see the MultiAir Filter!



Step 7 (optional): Remove the air box and one of the engine mount bolts to gain access!

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I found that the MultiAir Filter was certainly not blocked, but it did have sediment in the gauze so I was pleased I replaced it.

Replacement is obviously the reverse of removal, but it is a lot easier on the return trip! Be careful not to get any dust or dirt anywhere near the cambelt.

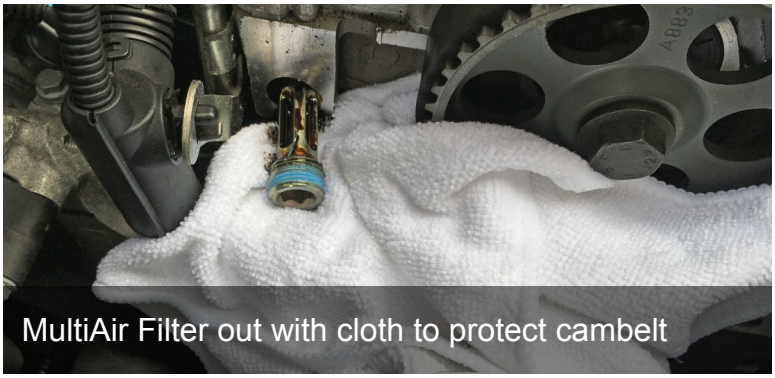
Before (top) versus new

The torque setting for the MultiAir Filter is 27Nm, which as it happened was exactly the same as my "pretty tight but not overtight" initial attempt. You will notice that the MultiAir Filter thread comes pre-coated with blue thread-lock, which is a coating for locking and sealing and normally cures in the absence of air and stops the filter loosening from vibration.

For those without a torque wrench, you can probably use the same logic as tightening an oil filter – "pretty tight but not overtight" is my normal rule of thumb, but I would strongly recommend adding a torque wrench to your toolbox. That way, you can spend ages on the internet trying to find torque settings of lots of things you never used to worry about…

Overall, changing the MultiAir Filter was relatively simple and took just over half an hour including removal of the airbox and an engine bolt. A worthwhile investment to protect my beloved MiTo, and definitely worth repeating with each oil change going forward.

Step 8: Remove MultiAir Filter (10mm hex)



MultiAir Filter out with cloth to protect cambelt