

OK, let's replace the R500's engine air filters.

Tools needed:

13 mm Socket

E8 Star Socket (female)

T25 Star Socket (male)

**Step 1:**

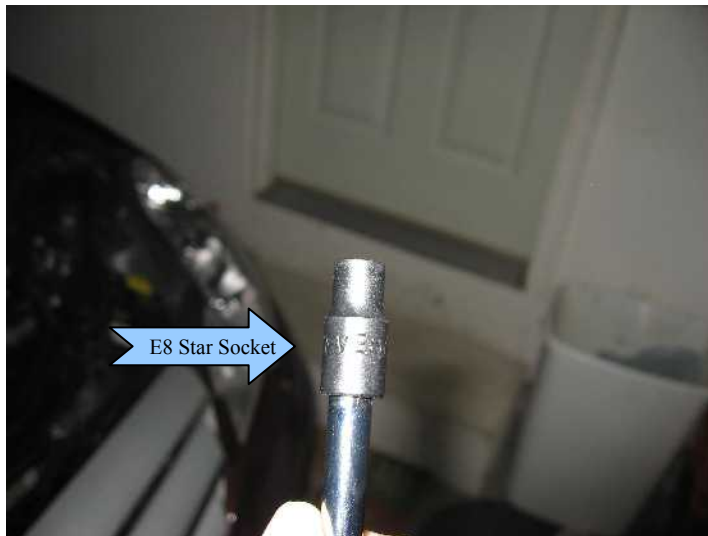
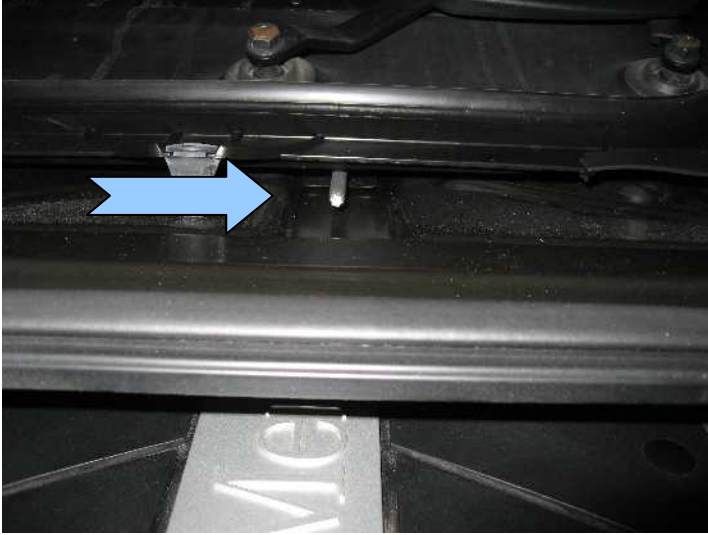
Make sure you have the air filters for your engine. For the R500 you need two of them, one for each side of the engine. The air filter box you see has two of them in there. I bought two boxes not knowing two were in each box. Guess I will store them for the next change.



**Step 2:**  
You will need to remove the engine cross support beam. There are two bolts on each side of the engine for you to remove. Use a 13 mm socket on these 4 bolts.



**Step 3:**  
You will now need to remove the long silver colored Torx headed bolt located in the center of the engine. You will need to get a Star Socket, the size is E8.



**Step 4:**  
Remove the rubber weather stripping at the corners of the cross support piece by pulling on them, you don't have to remove the whole thing, just detach it from the corners as shown in the pics below.



**Step 5:**

Now remove the cross brace by grabbing it in the middle and pulling straight out and up at the same time.

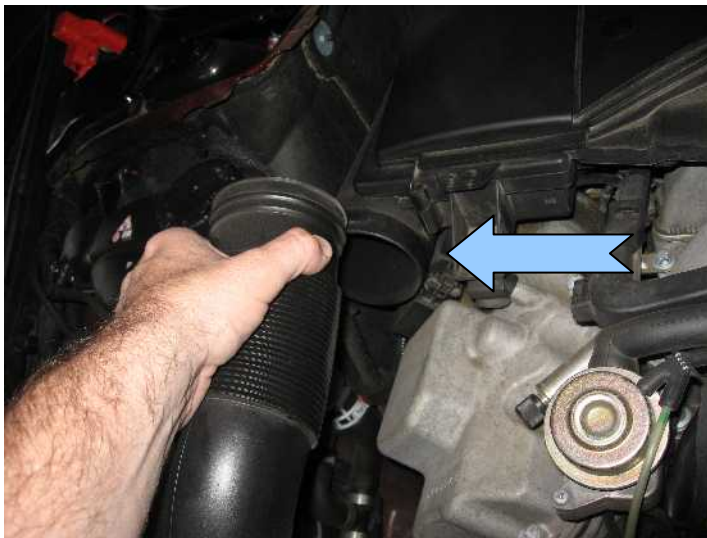
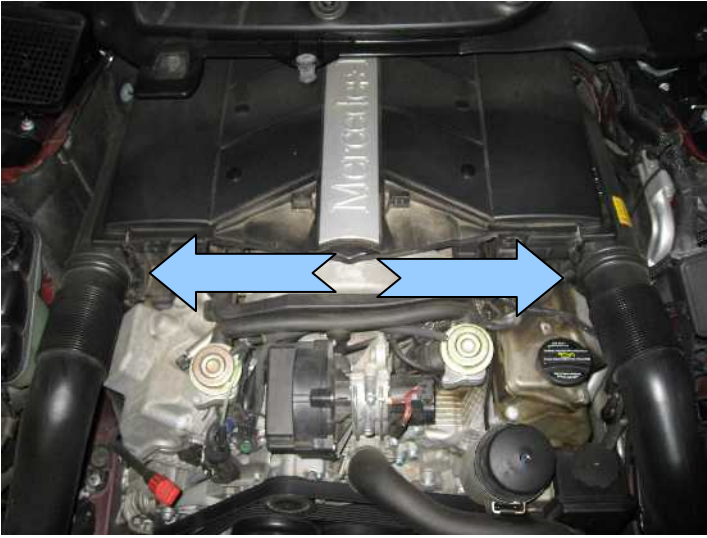


**Step 6:**

Remove the front engine cover by pulling up on the center of it to unhook the front connector, then pull out to unhook the back of it from the back side of the engine cover.

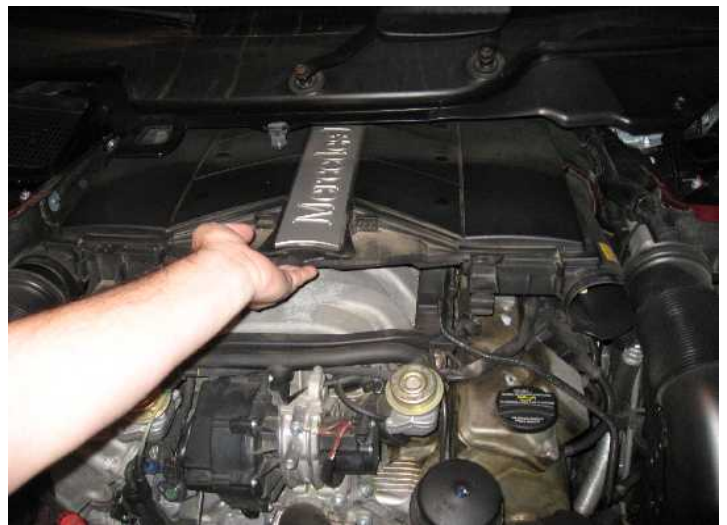


**Step 7:**  
Remove the two air tubes connected to the air filter boxes. You just need to pull them back in order to separate them from each other.



### Step 8:

Remove the air filters/rear engine cover by quickly pulling up on it. It is held on by metal clips (see locations in the pics below). There is also a connection point at the rear of the cover, where the air goes into the engine, you will need to pull out on the engine cover once you have the front connectors loose. Now pull it out of the car and set it on the ground upside down, you will need it upside down in order to get to the screws holding the air filter lids on.





### Step 9:

There are 4 screws you need to remove in order to get to the filters on each side of the engine cover. You need a Star T-25 bit for these screws. Once the screws are removed, separate the lid from the engine cover and remove the air filter. Notice all the debris in there and mine only has 26,000 miles on it!! I cleaned out the debris, tossed out the old filters, replaced with the new filters. Note: make sure new filter is firmly seated in the new air box. I had to press down on the orange rubber seal all the way around the edge of the filter to get it seated correctly. Now screw the lids back on. I took advantage of having the engine cover off and decided to clean off all of the dirt/dust on it.





### Step 10:

Now to put everything back on. Start with the rear engine cover, making sure that it is seated on the air intake (big round hole on the back of the engine) by firmly pressing down on the engine cover in the back. Then push down on the front left and right corners in order to get the metal clips to snap to the engine. Re-connect the air tubes to the air boxes. Re-Attach the front engine cover, by first connecting it at the rear (you will slide it into 2 rear holes and then push down on the left and right connectors to get them to snap into the holes (see the second pic on the right below, this is a shot of the front engine cover upside down to show you the connectors on it. Now push down on the front of the engine cover in order to engage the connector there. Now re-install the cross brace by sliding it back into place. Replace the long silver torx bolt in the center of the engine. Re-install the 2 bolts on each end of the cross brace. Push the rubber weather seal back into place on the left and right sides of the cross brace. You can call it done at this point. I documented the mileage amount in my maintenance book for when I replaced the air filters. One thing I noticed while having the engine covers off, I will have to get my dealer to look at the valve covers, looks like they are leaking oil!!!



The whole job took about 30 minutes for my first time. I bet I can do it again though in 15 minutes or less!!!

Here is a picture of my 206 R500. I am enjoying this vehicle, doing the 26,000 mile maintenance on it now. I will post the brake fluid flush procedures and brake shoe replacement procedures as soon as I get them done.

