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## DIY oil change on Lambda engines with top mounted canister oil filter

### Oil change in 20 easy steps w/ pictures

#### Disclaimer:

Originally posted by "eypuff" at <http://www.hyundai-forums.com/f70-4g-2006-sonata.htm>

#### Disclaimers:

If you or your car explodes/breaks, you probably did something wrong so don't blame it on me.

#### Materials you are going to need:



- Oil
- Oil filter
- Oil pan
- Ramps
- Wheel chocks
- Big wrench/rubber jar opener
- 10mm & 17mm socket



Oil: Regular, Synthetic Blend, or Synthetic.

Just make sure you buy the correct weight for your car.  
It should say on your oil cap.  
I used 5w-20 regular.

Oil Filter:

I bought OEM.

They included the rubber gasket (more info later) and why not pay 2 dollars more for quality stuff.

Oil Pan:

Just buy one that's bigger than 6 quarts. Don't dump it in the sewer, or the clowns will get you. Take it to your nearest auto parts store; they'll dispose of it for you.

Ramps:

If you plan on using the stock jack, take your car to a mechanic/dealer!

Because the stock jack, might fail. I had to take a friend to the emergency room, because his jack failed.

If you are going to use a jack, use jack stands!

Wheel Chocks:

Please use them. They might save your life one day.

Big Wrench:

I used an oil filter wrench (more info later).

Other people use a larger rubber jar opener.

10mm and 17mm Sockets:

If you don't have them, just buy them.



1) Put car on ramps/jack-stands

It'll probably be easier if you had a spotter.

When putting the car on ramps, be careful to not overshoot it or shoot the ramps out from beneath you. This will happen if you acceleration hard while on the ramps.

**\*\*Don't forget to use the parking brake and wheel chocks.**

2) Open hood and unbolt the six 10mm screws on the engine cover



3) Open the oil filling cap. Set aside, where you won't lose it.

4) Get underneath car, and unbolt 17mm oil drain bolt.



Make sure you put your oil drain pan underneath the bolt.  
Take into consideration of angle.



5) Wait for oil to drain, clean oil on floor, and grab beer/soda.

6) When you think most of the oil is out, put the bolt back in. First tighten it with your hand, then socket. Don't put it on too hard, just enough or else you risk stripping/breaking the bolt. Just make sure it's on tight.

7) Locate oil filter



8.) Take a rag and place it over the top of the filter casing.



Don't be too harsh on the lid, or you'll scratch it or even break it.  
Use the wrench only if you need it. Then turn it by hand.  
Using a rubber jar opener might be easier, not sure.

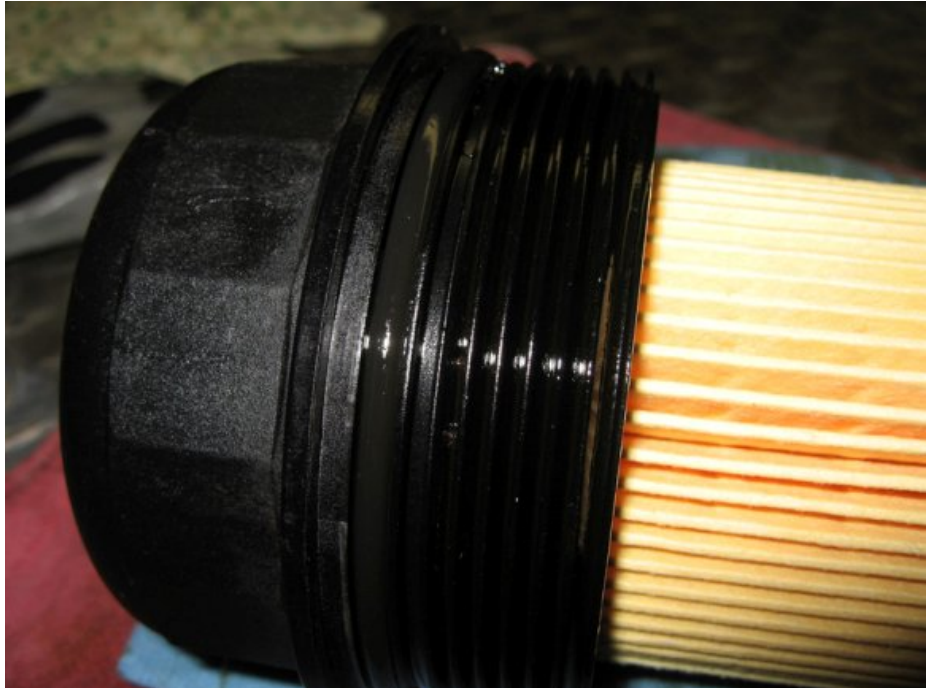
9) Take the filter out



10) Lay the filter assembly somewhere and pull the filter off the lid. It just comes off if you pull on it.



11) Change the rubber seal (if you've got them)



I've found using an awl very useful and handy

12) Clean the plastic assembly and put new filter on. Just push it on, you'll feel it click in



13) Put filter back in. When tightening the filter, be careful not to over tighten. You only need 25Nm, it says it on the lid. That's roughly 18 ft/lbs. I just hand tighten until I can't anymore and I give it a 1/4 turn.

14) Put oil in car. A funnel makes life easier.

-6 quarts in 3.3L  
-4.5 quarts in 2.7L

15) Close oil cap.

16) Turn on ignition and leave running for a couple minutes.

17) Turn off car and check oil level and for any leaks on floor. If you try to check the oil level when the car is on, you'll get cool things, but not an accurate oil level. Add oil if necessary.

18) Put engine cover back on. It's ugly when it's off.



19) Log your mileage in your warranty booklet, if you want to.  
This will help you keep track of your mileage.  
I do an oil change every 3000 miles.  
That's why I use regular oil, not blend or full syn.

20) Clean up, remove wheel chocks, and dispose of waste properly.

Some things that aren't necessary but make life easier:

- Funnel
- Shop Towels
- Carb cleaner (to clean oily stuff)
- Old Bed Sheets (to lie down on)
- Shop light
- Rubber/Latex Gloves
- Radio (it's boring)
- Gojo (hand cleaner)

FYI: Oil and filter cost me 21 dollars.  
OEM filter and 6 Castrol GTX 5w-20 quarts.  
Look in the sunday newspaper ad section,  
sometimes they have good deals for Kragen/Autozone/Pep Boys

Well I guess that's it.  
Feel free to comment or question any or all materials.

-EY