

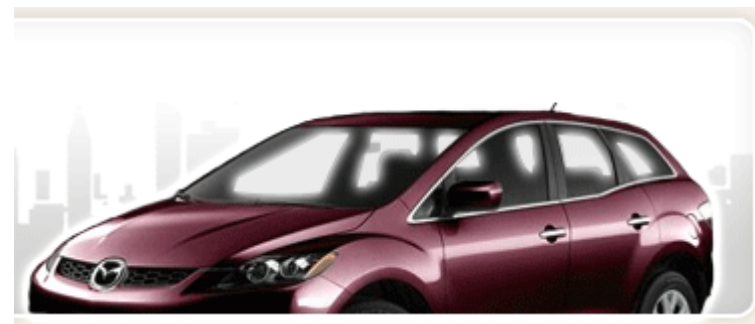
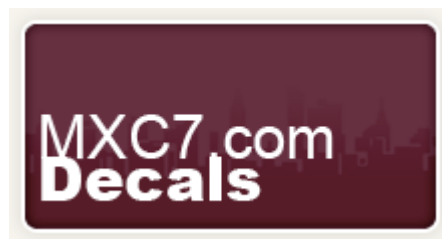
**Login**[New member](#)
[Lost Password?](#)

Username

Password

☐ Remember Me?**Login**

MCX-7

[MCX-7 Home](#)
[Register](#)
[FAQ](#)
[Members List](#)
[Calendar](#)[Search](#)[Mazda CX-7 Forums](#) > [The Tech Garage](#) > [The Do It Yourself Forum](#) > [How-To Articles](#)

How To: CX-7 Oil/Filter Change, now with pictures...

How-To Articles This is strictly for How-To's. Use the Discussion Section for questions and comments.Page 1 of 11 [1](#) [2](#) [3](#) > [Last](#) »**Thread Tools** ▾ **Display Modes** ▾

#1

02-24-2007, 11:11 AM

**Raider**
AdministratorJoin Date: Feb 2007
Location: Jacksonville, Florida
Posts: 6,236

How To: CX-7 Oil/Filter Change, now with pictures...

here are 2 how to's. The first, a text.

Right below, a pictorial one, thanks to tdli...

- 1) Put the car on ramps or a lift. Let it cool off a little, as hot engines suck to work on.
- 2) Remove the big plastic shield underneath the engine. There is a plastic press clip to pry off-use a small flat bladed screwdriver to pop up and pull out towards the back of the shield, and a host of 10mm bolts
- 3)Using a 17mm socket, wrench, or other device, remove the oil drain plug, and let the oil drain out completely. You will need a big drain pan, 6 freakin quarts of oil!!
- 4) Once drained, reinstall drain plug.

Ads by Google

Oil Changing Tips

Motor Oil 101 to
Technical Advice.
Learn From Castrol's
Car Experts.
www.Castrol.com

Mazda CX-7 Crossover SUV

Build your own CX-7
Crossover SUV.
Search your local
dealer inventory.
www.MazdaUSA.com

The 2010 Acura RDX

Looking for a used
luxury vehicle? See
Acura RDX photos
and specs.
www.acura.com

Oil change arlington

Trained Technicians
Will Get Your Car
Back to Normal,
Service Coupons
GrapevineFord.com/Service

Consider Buying a Hyundai

Hyundai Offers Great
Quality, Price Online
Quote or Call:
866-469-5555
Dallas-HyundaiDealer.com

5) Up on the bottom front of the engine, you will see the oil filter housing, with an allen socket keyed drain plug. Unscrew the plug, let the oil drain out.


6) Remove the base of the filter housing by unscrewing it. I had oil continue to drain out in spurts for every slight turn. It might be very tight, and require a lot of force to get it started, but it will eventually unscrew. I used a big adjustable oil filter wrench on my Speed3, I just was careful not to force it to much. It just needs help getting started.

7) Remove the oil filter. It is just the paper section. Match with new one for compliance. I received new rubber O Ring gaskets for the oil filter drain plug, and the filter housing base. Used a small flat blade to pry off and replace.

8) Wipe some a small amount of new oil on the O Rings for lubrication.

9) Install filter and housing base as you removed them.

Quote:

Originally Posted by **erhayes** 

I will suggest one additional important step to this very nice procedure. LUBRICATE BOTH ENDS OF THE FILTER CARTRIDGE BEFORE INSTALLING. This extra step reduces the twisting friction when the canister cap is tightened down. The result is less twisting force on the cartridge and no or much less distortion. I have found this actually works. Ed Hayes

10) Reinstall drain plug, and tighten to the specs on the housing, or just do what you know is right.

11) Go to the top of the engine, remove the 2 push clips with small flat-bladed driver, pull up and out on cover. Oil Filler is on the back left of the valve cover. Remove cap, fill engine up with 6 quarts of synthetic 5 w 30.

12) Reinstall oil filler cap, cover, and start motor. let run for a minute or so, and check underneath for oil leaks. Turn off engine.

13) If no leaks, pat yourself on the back. If leaks, have friend kick you in the seat of the pants, let them fix the leaks.

14) Reinstall shield as you removed it. Try not to grab and exhaust parts, they will not feet good.

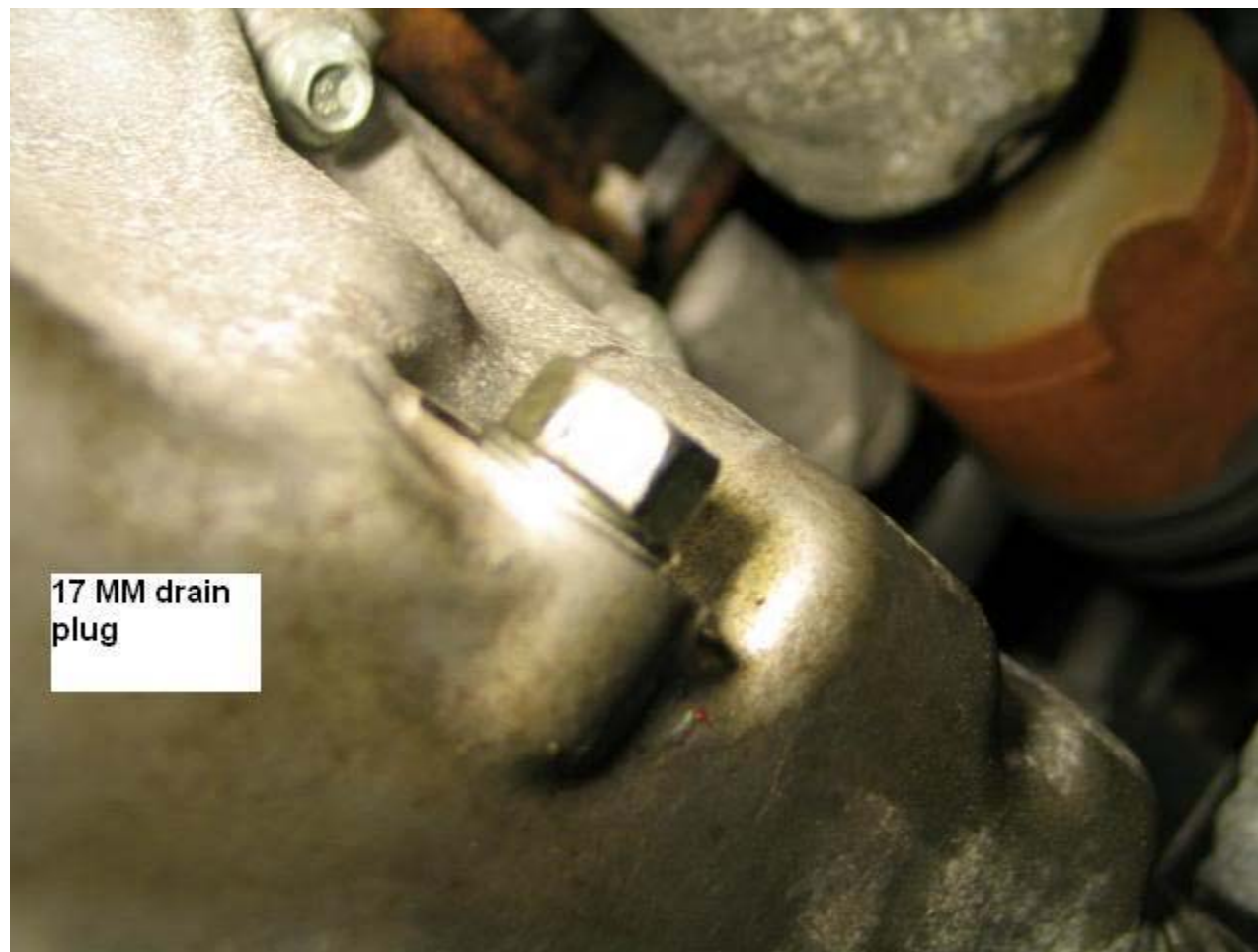
15) Remove from ramps, drive for 3,000-5,000 and repeat.

Here is the pictorial version...

Remove the under panel by removing these 8 bolts:



Remove the drain plug on the oil pan. The drain plug is on the opposite side of the oil pan, facing the rear of the car. There is also a crush washer on the plug and I think you are suppose to change the washer, too, but I did not.



17 MM drain
plug

Once drained, reinstall drain plug back on. I don't have the torque specs, but I made sure it was tight.



A bit more towards the front of the car is the oil filter housing, use a 6 mm hex socket (aka allen key) to remove the plug and let the oil drain out.



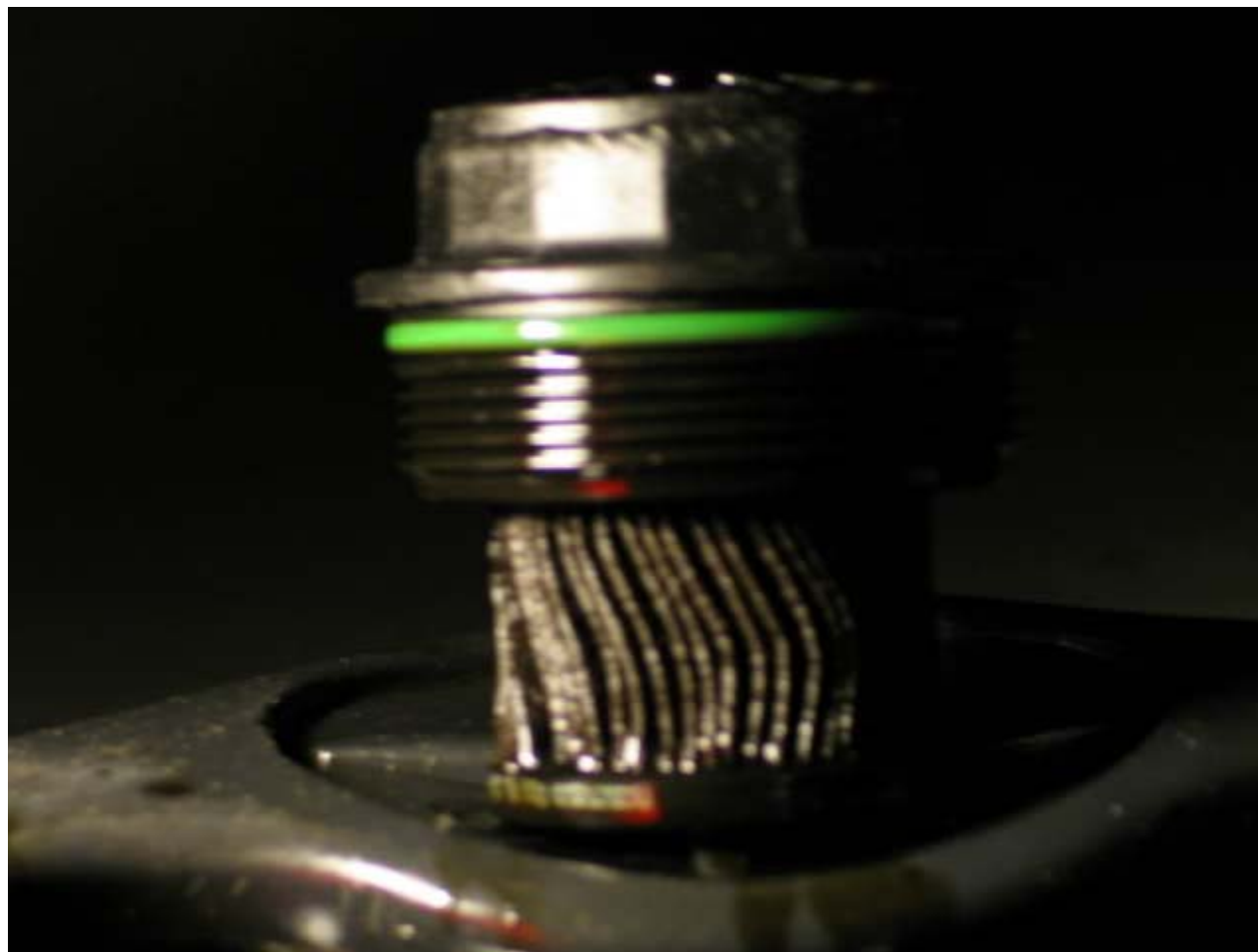


Remove the base of the filter housing. Mine was pretty tight so I had to use an oil filter socket. I tried the one from my IS300 (motor code 2JZ) and it was the same size. 😊





Remove the oil filter base and old filter. As you can see, my old filter was crushed (not sure which brand it was). I cleaned out the base and pried the old green o-ring off using a flat head and installed the new one. I also coated some oil on the o-ring and pure some oil into the oil filter base.





Install filter and housing base as you removed them. Again, since I had no torque specs to follow, I made sure it was installed back on tightly.



Pry off the old o-ring on the drain plug and replace it with the new one. I also coated this o-ring with some oil.





Level the car, fill the motor up with your preferred brand of oil. I dumped 5 quarts first (because 5 quarts came out) and the level on the dipstick showed that oil level was in between the min and max so I stopped there.



Reinstall oil filler cap and start motor. Let run for a minute or so and check underneath for leaks. If there are no leaks, turn off engine and reinstall the under panel. Be careful as some parts may be hot.

Remember to keep an eye on the oil level for the next few days and add some more oil if the level drops.

Eric, aka Raider...

DECALS! Click [HERE](#) for details and link to website ordering!

FAQ: <http://www.mcx7.com/showthread.php?t=4801>

Sign up for this reliability survey, too! www.truedelta.com



04-10-2007, 05:48 PM

#2

smartmx5

CX-7 Newbie

Join Date: Apr 2007

Posts: 1



Great information! Thanks for the information. It is timely.
Alan



04-10-2007, 11:52 PM

#3



Raider
Administrator

Join Date: Feb 2007

Location: Jacksonville, Florida

Posts: 6,236



the one piece held in with the phillips screw does not need to be removed, it can come out with the entire bottom cover piece, BTW

Eric, aka Raider...

DECALS! Click [HERE](#) for details and link to website ordering!

FAQ: <http://www.mcx7.com/showthread.php?t=4801>

Sign up for this reliability survey, too! www.truedelta.com



09-07-2007, 11:15 AM

#4

astraelraen

CX-7 Ace

Join Date: Jul 2007

Location: ID, US

Posts: 698





Where does that little seal go?

I just changed mine myself and could not find that little seal anywhere to replace it... so I just disregarded the new one.

I thought maybe it went down in the middle of the cartridge... where that tube thing sticks up into the middle of the filter, but I couldn't see an old one there, and I couldn't get it to fit for the life of me.



09-07-2007, 11:17 AM

#5



Raider
Administrator

Join Date: Feb 2007
Location: Jacksonville, Florida
Posts: 6,236



There is the allen bolt in the center that you remove in the center bottom of the oil cartridge housing. that has that gasket on there.

Eric, aka Raider...

DECALS! Click [HERE](#) for details and link to website ordering!

FAQ: <http://www.mcx7.com/showthread.php?t=4801>

Sign up for this reliability survey, too! www.truedelta.com



09-09-2007, 09:39 PM

#6



YOGI
CX-7 Newbie

Join Date: Sep 2007
Posts: 2



Great info - i`am about to change the oil next weekend (for the first time) ...Love my CX7 , thinking about cold air intake - (CPE CAI) bit pricey - any other brend for less \$\$\$?



09-09-2007, 10:11 PM

#7



Raider
Administrator

Join Date: Feb 2007
Location: Jacksonville, Florida
Posts: 6,236



Well, Direct from CPE is about \$270 for the intake, <http://www.cp-e.com/2035.html>.

I know AEM makes a short ram for a Mazda6 that will fit, but it is a lot louder. We have had the intake for nearly 9 months, and love it. I think it is well worth it.

For \$30, you can slap on an ebay intake. But I have no idea how long the filter will last. In the past, they were junk in months, rusted.

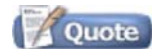
My feeling is, I spent 30 grand on the car with a very well engineered, turbocharged engine. With the amount of time spent to engineer the CPE intake to not throw CEL's, or cause other problems with performance and mileage, I am very happy I saved up for the intake. We feel it is part of the reason we get nearly 25 MPG.


Eric, aka Raider...

DECALS! Click [HERE](#) for details and link to website ordering!

FAQ: <http://www.mcx7.com/showthread.php?t=4801>

Sign up for this reliability survey, too! www.truedelta.com



 09-09-2007, 10:17 PM

#8


erhayes
CX-7 Ace

Join Date: Mar 2007
Posts: 863



The little seal/O-ring is used on the Allen screw at the bottom of the filter housing. You remove the screw to drain the oil from the housing before removing the cartridge.



 11-02-2007, 03:06 PM

#9

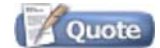
atthehop 
CX-7 Rookie Driver


Join Date: Oct 2007
Posts: 29

 **Little O-Ring**

Looks like no one replied to your question. The little o-ring goes on the oil filter drain plug. I DIY 5 vehicles and now that I have 2 Mazda's with under car covers that have to be removed to access the underside of the engine I invested in a battery operated 3/8" ratchet and it makes removing and reinstalling the numerous shield bolts a snap.

Last edited by atthehop; 11-02-2007 at 03:09 PM.



 11-02-2007, 03:40 PM


#10



Raider 
Administrator

Join Date: Feb 2007
Location: Jacksonville, Florida
Posts: 6,236



The answer is right above your post? 

Eric, aka Raider...

DECALS! Click [HERE](#) for details and link to website ordering!

FAQ: <http://www.mcx7.com/showthread.php?t=4801>

Sign up for this reliability survey, too! www.truedelta.com



Page 1 of 11 1 2 3 > Last » 

Bookmarks



Digg



del.icio.us



StumbleUpon



Google

« [Previous Thread](#) | [Next Thread](#) »

Posting Rules



Forum Jump

Posting Rules



You **may not** post new threads
You **may not** post replies
You **may not** post attachments
You **may not** edit your posts

BB code is **On**
Smilies are **On**
[IMG] code is **On**
HTML code is **Off**

[Forum Rules](#)

[How-To Articles](#)

[Go](#)

Similar Threads



Thread	Thread Starter	Forum	Replies	Last Post
Installing lowering springs in pictures (AutoExe)	leshii	How-To Articles	36	04-02-2009 12:26 PM
1st. oil & filter change, some interesting observations	garyoNC	How-To Discussion	11	05-12-2008 03:40 PM
776 miles and 1st oil change	thr_wedge	How-To Discussion	20	12-04-2007 11:10 PM
Pictures of Corksport.com CX-7 Exhaust System!	rexercx7	Aftermarket Performance	43	07-21-2007 12:33 PM
DST Change	GalaxyCX7	CX-7 Discussion	2	03-13-2007 12:19 PM

[Contact Us](#) - [Mazda CX-7 Forum Owners Club](#) - [Archive](#) -

A Mazda CX-7 community

All material copyright © 2004-2008 mcx7.com and respected owners

Powered by vBulletin® Version 3.8.4
Copyright ©2000 - 2010, Jelsoft Enterprises Ltd.