

## **Engine mounts Replacement.** 12361-50151 & Transmission Mount 12371-50200

After I got all the parts in I began working on the car this past Thursday. I started around 3:00 pm, removed the plastic underbody shield, and got a good look at what I was facing.

There are two lower bolts that you need to access that are on the cross member. These are the bottom bolts for the engine mounts. You will see a plastic black cap over an oval hole towards the ends of the cross member, pop these off and you will see the bolts (17mm). Then for the driver's side you need to loosen the bolt that keeps the oil dipstick in place, the bolt is accessible from the top of the engine and can be loosened with a 12mm basic socket. I didn't remove the dipstick, once I had removed the bolt there was a good amount of play in the shaft. Next is the hard part, There are four bolts holding the other top side of the motor mount to the engine. The rear two bolts that the front top bolt will come out without a problem, you will just need a 14mm socket and a flexible socket to reach them. The lower front (closest to the cross member and also the front of the car) will be a pain in the ass. I had to grind down one of my 14mm sockets so I would be able to get in there without stripping the bolt. Once the screws were a little loose I placed a jack under the oil pan (I put a piece of wood between the oil pan and the jack, so the jacks lifting force would be evenly distributed throughout the pan and not concentrated on one spot). I placed the second jack right under the bell housing of the transmission. I slowly began to lift them up until both the engine and tranny were positioned in a way that I could remove the mounts. 3-4 inches of lift I would say, just be careful not to break or damage anything. The passenger side mount can be finessed out from an opening towards the rear of the car, now the driver's side gave me a hard time so I removed the oil filter in order to be able to remove the mount.

Once out you can remove the one 17mm bolt that is attaching the top side of the motor mount to the base and reinstall the hardware on the new unit. For the installation pretty much reverse everything you did, start with tightening the 17mm bolt that holds the top base bracket on, then reinstall the 4 bolts that mount to the engine. Make sure the lower mount tabs fall into the appropriate holes on the cross member. (\*\*\*)Now I do not recommend tightening the lower two bolts for the motor mounts until you have lowered the engine back down. This is to limit the stress on the mounts and not to over exert them before you even finish the install.\*\*\* ) Once I was done with the four top bolts I just began on the transmission mount since the engine and tranny was still being held up by the jacks. This mount is very simple, just remove the (4) outer bolts on the steel transmission brace, then the (4) inner nuts that are located on the same brace. Then once that is out of the way remove the (4) last top bolts and the transmission mount should come right off. Reverse process for installation. Once the transmission mount was done I lowered the transmission and the engine then tightened the lower (2) motor mount bolts on each side, snapped on the black cover and was back in business!

Now as for that clunk I was experiencing I was reading up on the fact that we have a service bulletin out for a clunk in the front suspension. After reading that I went out to find that 3 out of the 4 sway bar bolts were loose to the touch!! I tightened up the bolts and the car is like new again, no more clunk, thump, vibration of any kind.

Front stabilizer bar-abnormal noise on turns/bumps. Fix: adjust bolt tightening torque of the mounting hardware. TSB SU003-02

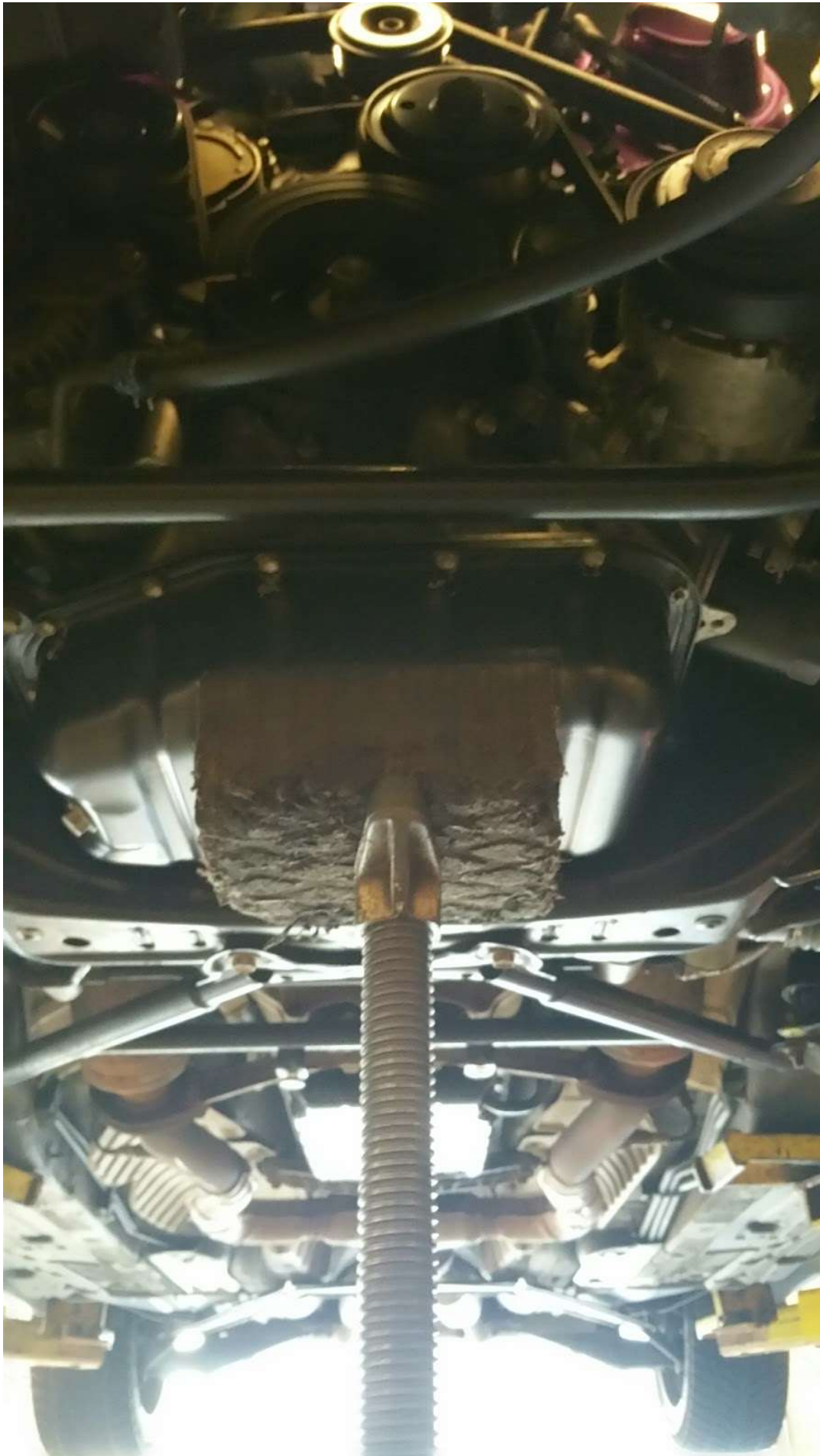
The only thing possible I can add is to buy a 3/8" drive 6-point 14mm universal socket that is very short. My wife went to Craftsman to get one after the left forward lower bolt just about kicked my azz... Put that socket onto about a 12" extension and that'll get those tight little bolts loose!

You need to support the engine and transmission assembly with a transmission jack. The whole car is lifted up, and then the front of the engine is supported by a tall front jack near the harmonic balancer, and another tall transmission jack is placed under the transmission. When the lower bolts on the engine are removed on the mounts, and the transmission mount is loosened, everything is lowered down so you can access the upper nut. It is a balancing act.

I had to remove the 4 bolts holding the assembly to the block on the passenger side of the engine. I took it apart when it came out, and reinstalled the mount on the bracket prior to installing it on the engine.

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With the car on the lift, a transmission jack was used at the edge of the oil pan to support the engine.



Undo the two bolts holding the motor mount onto the sub-frame and the four bolts that hold the complete mount to the engine block. It was easier to remove the complete mount as opposed to trying to loosen the one bolt up top for the engine mount itself. Once loose, you will have to use the transmission jack to lift the motor about an inch and a half so that the mounts can slide out.



The driver side mount was completely shot, as you can tell by the picture.



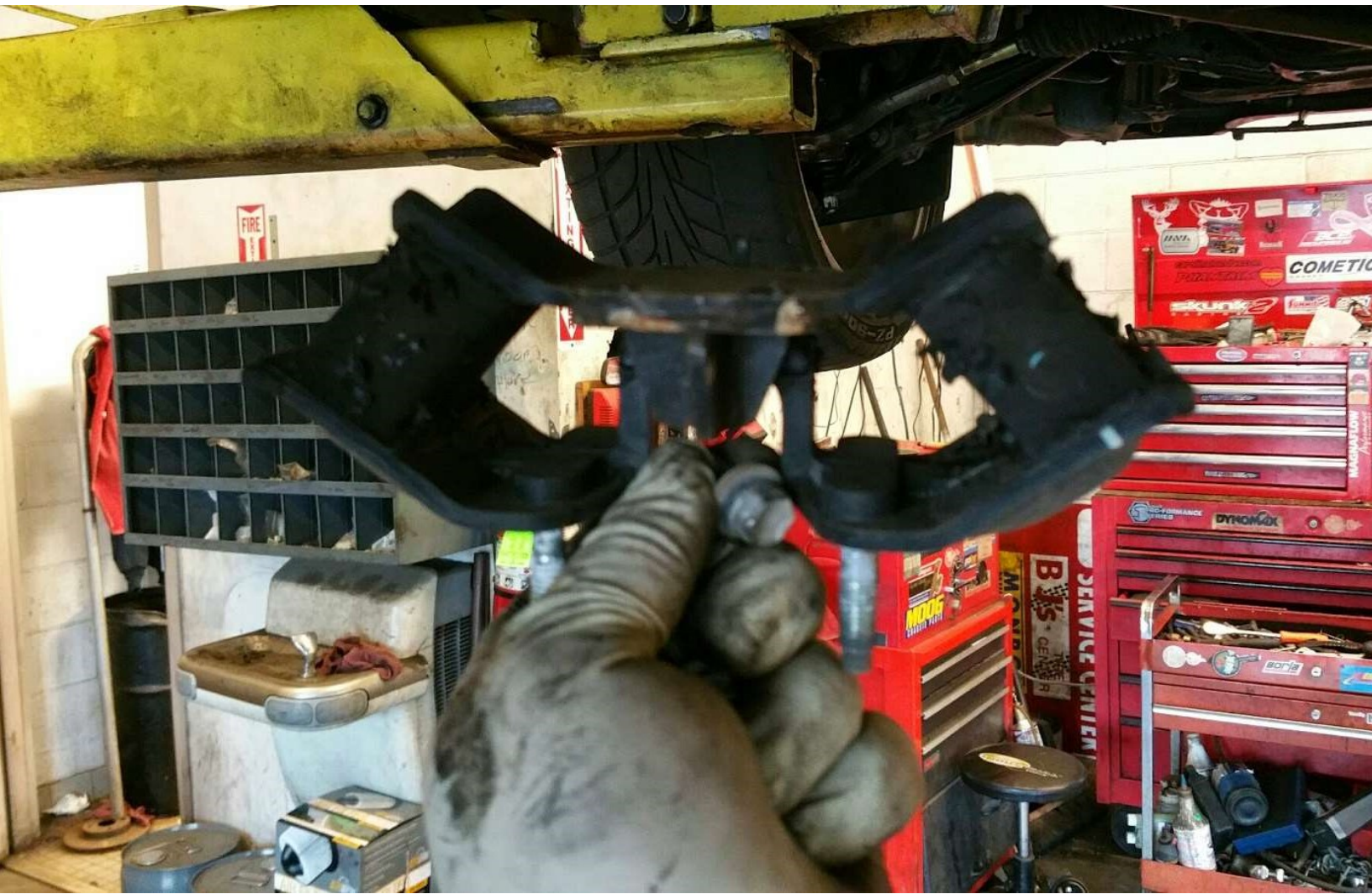
The passenger side mount was on its way out, might not be visible in the picture but the top had a rip in it and was starting to separate.



Replaced the engine mounts and did the same for the transmission mount. Used the transmission jack to support the transmission. Undid the 4 bolts and removed the transmission bracket and the 4 bolts that hold the mount to the transmission.



The transmission mount didn't look bad on a visual inspection. There was some sort of coating that was flaking as you can see in the pic but didn't look torn, or see any stress cracks etc.

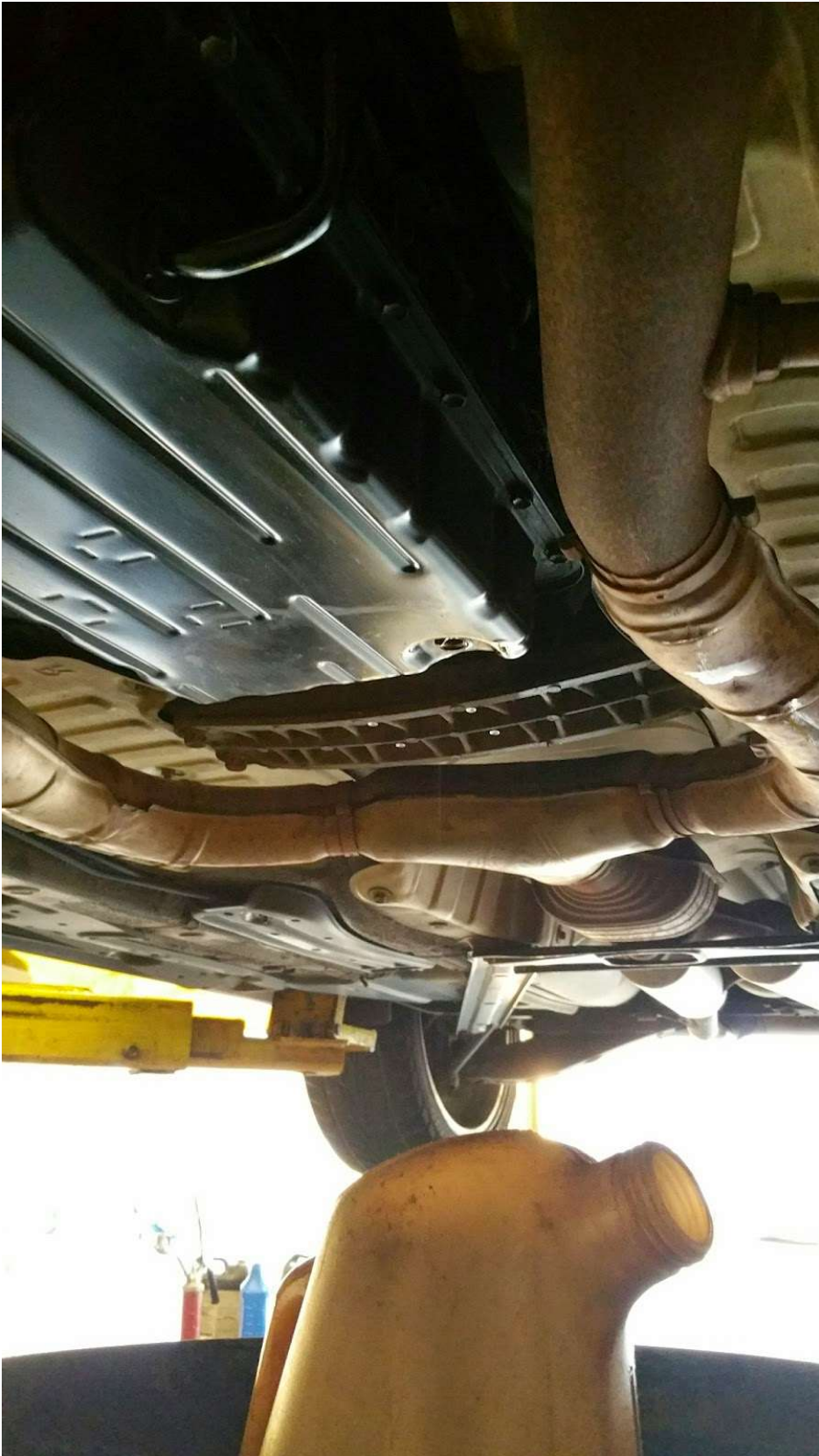




Replaced the transmission mount and then onto the transmission flush.



Drained the oil from the pan first, collected the oil in a measuring jar so that I could make a note of how much fluid was coming out. About 2 quarts came out from the drain plug and then proceeded to take the pan off.



Put the drain plug back in because there is still oil in the drain pan. I learnt from the last time a flush was done on my other car. With the pan off poured the oil in the pan into the measuring jar as well, there was about 1.5 quarts of oil in the pan.

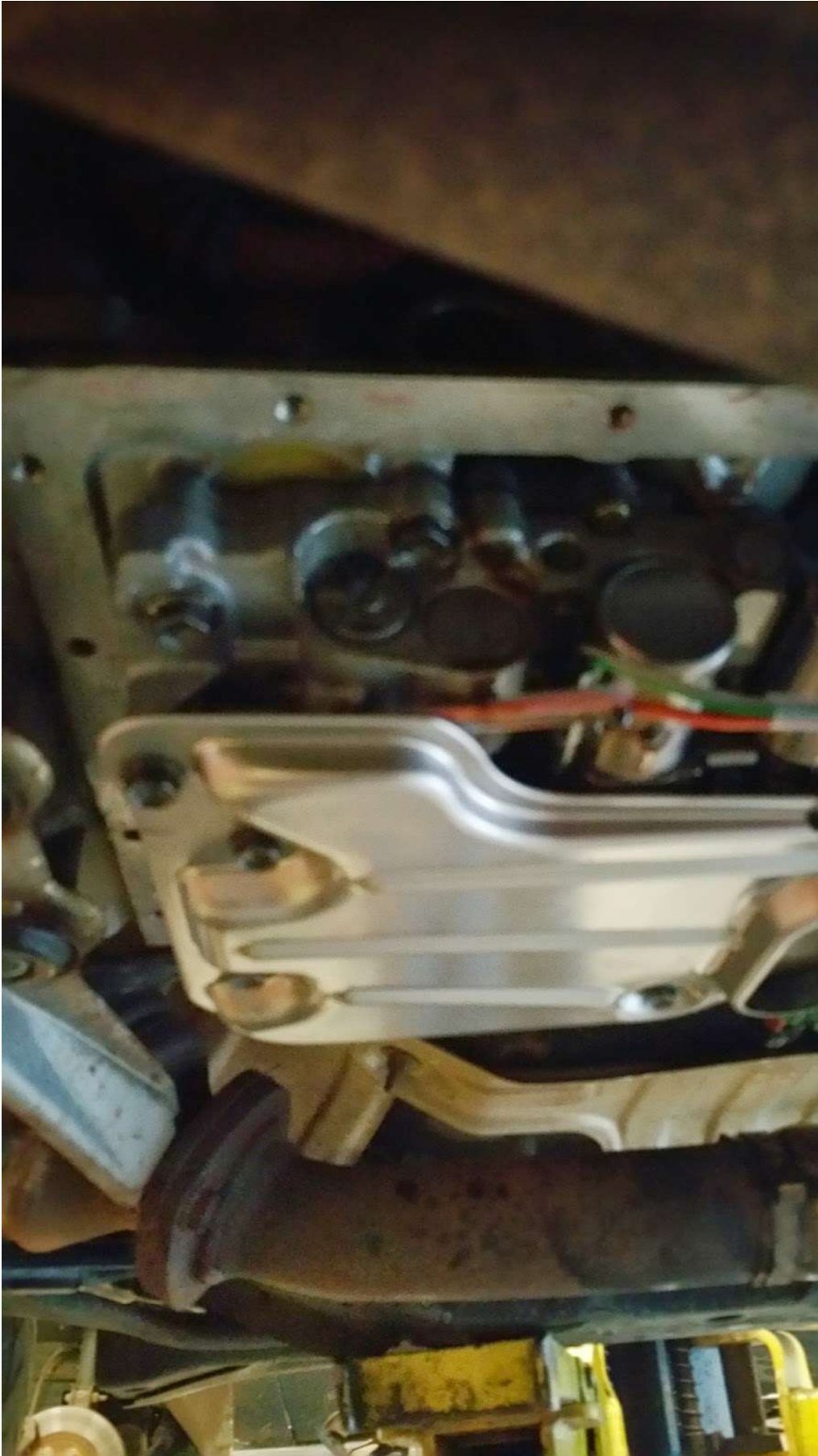
The oil was a dark brown and not the red it is supposed to be. Also two days prior to this I had put in 0.5 pints of Seafoam trans tune to help break down any build up etc in the transmission.



The transmission pan is held in place by Toyota Fipg so it'll take a little yanking to get the pan off. Cleaned up all the fipg off including the 3 magnets in the pan along with the pan itself. I didn't use fipg to put the pan back, instead Felpro makes a transmission pan gasket for it and that's what I used. I've used this method before and have had no issues. Just make sure you don't go ham on the bolts, snug it up there to about 15-18ft/lb where you see the gasket just starting to squeeze away from the pan a little.



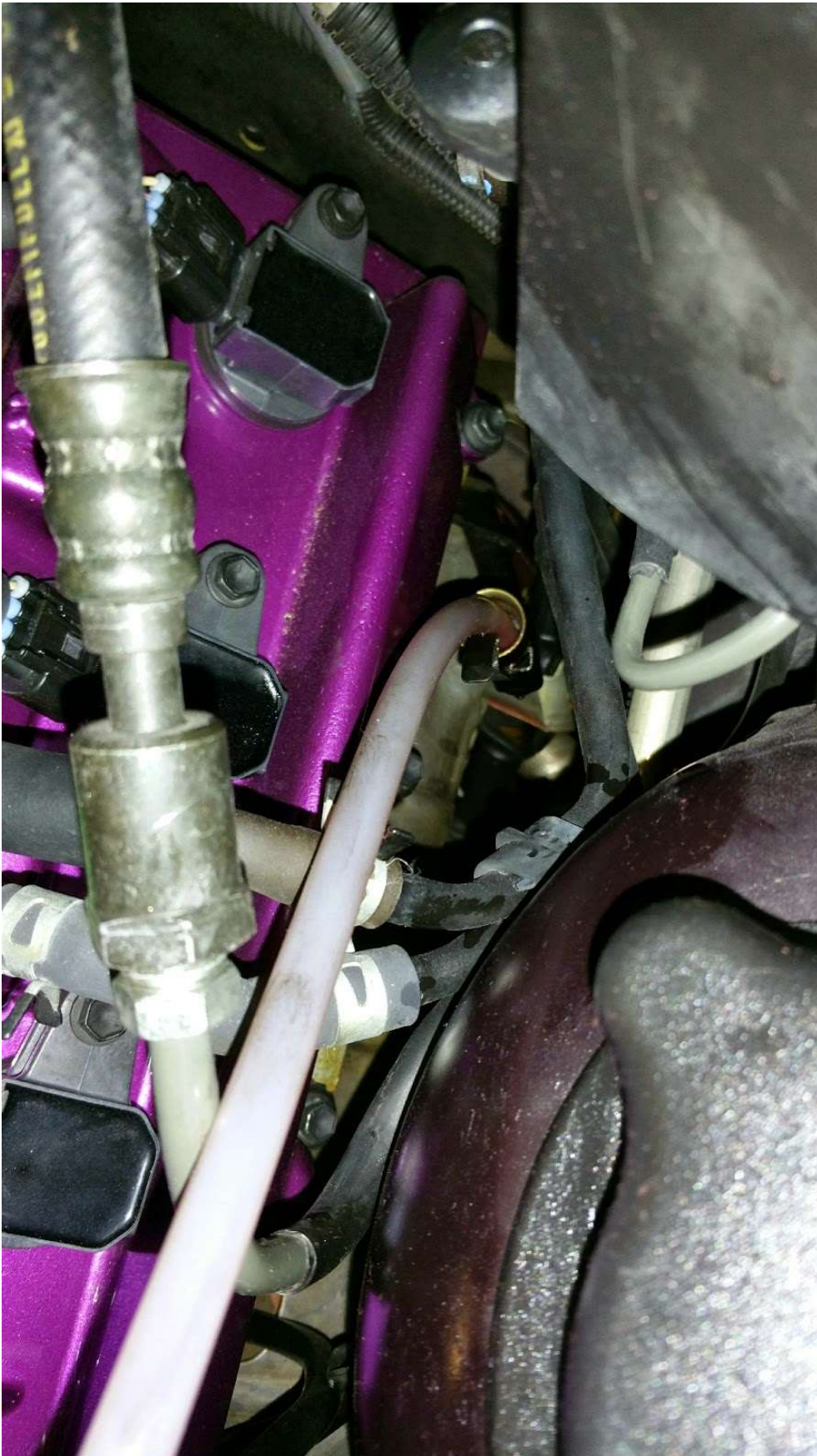
Installed a new transmission filter as well.



Also adjusted the pressure regulator on the tranny so it shifts faster. The pic shows the factory setting but pressing it in and turning it clockwise to the third setting increases the pressure resulting in faster shifts. Firmer faster shifts result in longer tranny life and has been well documented on Club Lexus.



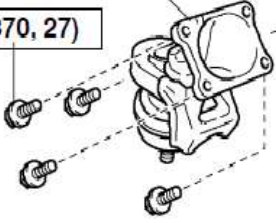
With the pan back in place filled fresh ATF through the dip stick. Just the 3.5 quarts that came out of the pan.





Engine Mounting Bracket  
Front No. 1 RH

36 (370, 27)

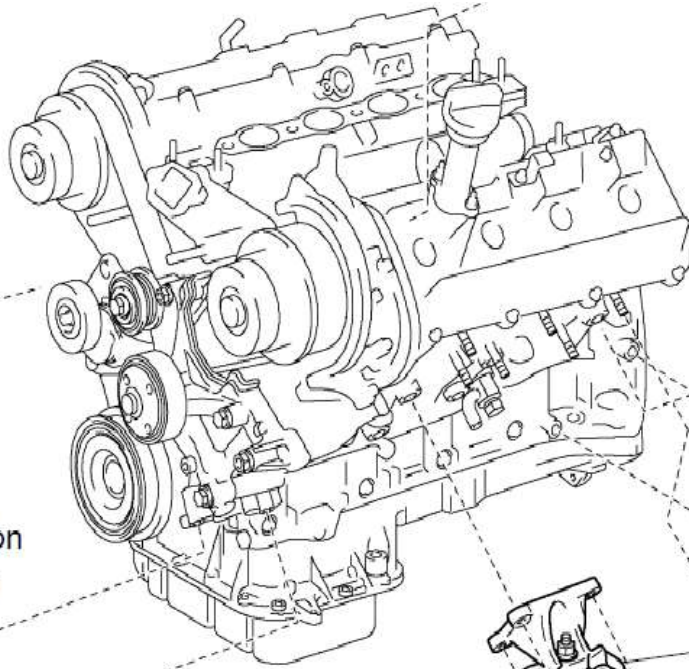


Crankshaft Position  
Sensor Connector

Crankshaft Position  
Sensor

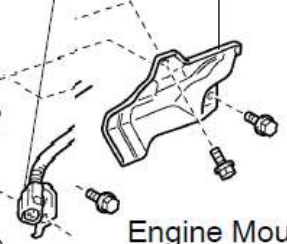


Oil Filter Bracket and  
Oil Filter Assembly



Heated Oxygen Sensor  
(Bank 1) Connector

Wire Harness  
Heat Insulator No. 2



Engine Mounting  
Bracket Front  
No. 1 LH



44 (450, 32)

Gasket

x 8

