

This message is marked as Important.

Subject: Transmission Removal Pictures (follow up to my post)

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Here are some pictures and a follow up story from my post last week.

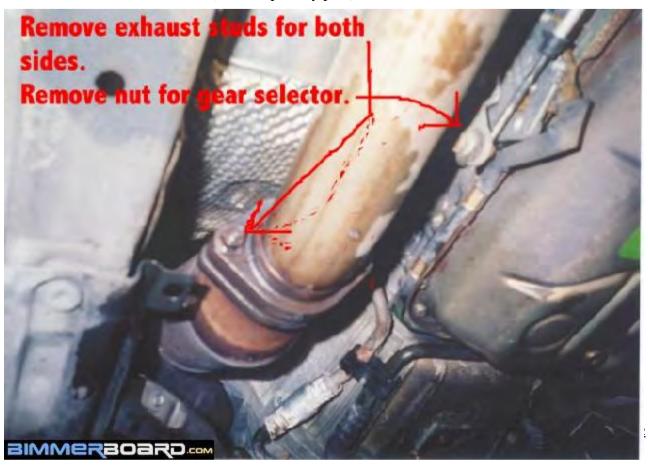
For those that missed it I wanted to document my transmission removal and front pump shaft seal replacement/Torque Converter seal replacement.

NOTE: This is a two person job. You will need assistance with removing the exhaust, drive shaft, and transmission.

1) With car on ground, disconnect the negative post from the battery. Raise car on lift and soak the left and right side exhaust studs in liquid wrench to help remove.

2) Disconnect the rear Oxygen sensor wires. It's not necessary to remove the rear O2 sensors from exhaust. Remove the front oxygen sensors and unclip O2 wires from wiring harness.

3) Remove nut that secures transmission gear selector on left side of transmission. It is not necessary to remove selector switch.

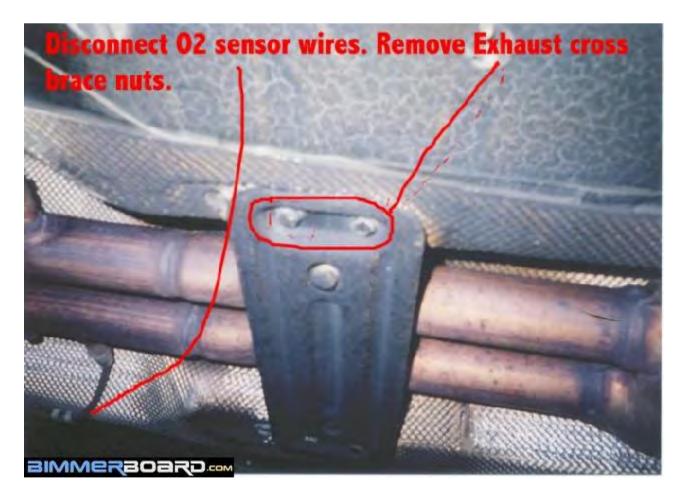


4) Remove the four nuts on left & right rear sides that secure the exhaust to rubber mounts.

5) Loosen and release, however do not remove, the muffler supports on left and right side at rear of muffler next to body.



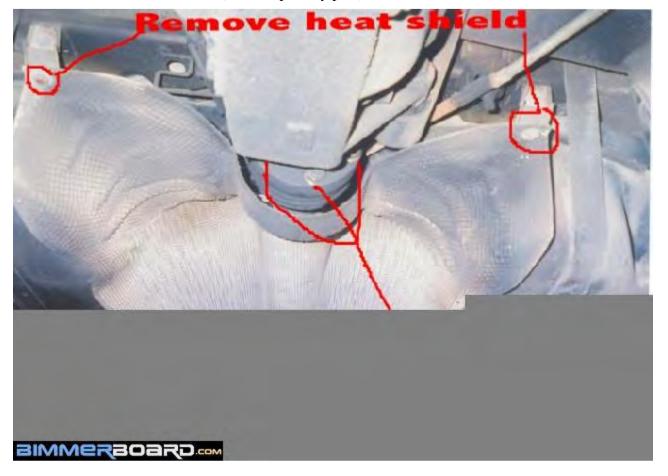
6) Then remove the 4 bolts that secure the center cross member for the exhaust.



- Transmission Removal Pictures (follow up to my post)
- 7) Prepare exhaust for release. Use jack or assistance of another person.
- 8) Move exhaust out of the way for drive shaft removal.



9) Remove heat shield It is attached with 4 machine screws in each corner. Position heat shield out of way.



10) Mark location of drive shaft balancing weights and using liquid paper, grease pen, or similar item, mark position of drive shaft in front and rear as you will need to align these marks during reassembly.

- 11) Mark front drive shaft location, remove 3 bolts & nuts that secure drive shaft to transmission.
- 12) Remove rubber mount.

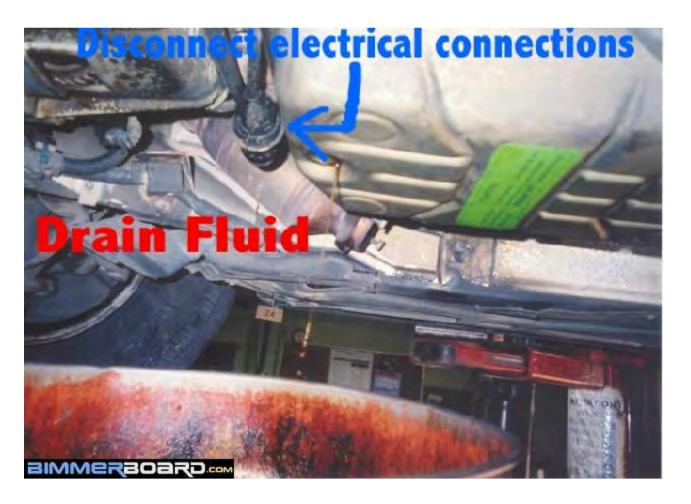


13) Mark rear drive shaft location and remove 8 nuts that secure drive shaft to differential.



Transmission Removal Pictures (follow up to my post)

- 14) Remove 2 nuts that secures drive shaft center cross member that secures drive shaft to body.
- 15) Remove drive shaft and position out of the way for transmission removal.
- 16) Drain transmission fluid to reduce transmission weight, and temporarily replace drain plug back into pan.
- 17) Disconnect all electrical connections to transmission at front and rear of transmission.
- 18) Disconnect transmission oil cooler lines on left and right side of transmission.



19) Position transmission dolly/jack under transmission pan and secure. Loosen rear transmission rubber mounts and remove 6 (six) transmission cross member to body bolts.

20) Remove round rubber transmission seal at torque converter/engine block housing.

21) Remove 4 bolts that secures the torque converter to flywheel. NOTE: Turn the motor over at the crank using a 28 mm socket to turn flywheel & torque converter. Removal of cooling fan is not necessary.

22) Remove 12 external torx screws (E-torx) from transmission housing; two E-torx screws at top of transmission are E10 size, remaining are E14 size.

23) Transmission is now ready for removal. Take care to insure that transmission clears cooler lines, catalytic converters, and electrical wiring harness.

24) Measure torque converter distance from edge of transmission case. Use liquid paper, grease pen, etc., to mark location of torque converter as it sits on rear splines. It must be in correct position for reassembly. Remove Torque Converter from transmission and place in container to prevent fluid from spilling.



25) Wipe seal area clean and using a pick or similar tool remove front pump shaft seal snap ring.



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26) Remove front pump shaft seal. Be careful not to damage the bearings behind seal during removal or installation of new seal. NOTE: bearing grease may be used to lubricate area where torque converter makes contact with seal lip.



27) Reassemble transmission and install transmission back into car. Remove transmission jack and install drive shaft, heat shield, exhaust system, and electrical wiring back into car.

28) Remove transmission pan fill plug located at rear right side of transmission, remove pan torx screws, remove pan and check condition of 4 magnets inside pan. Clean with clean shop rag and set aside. Remove 2 torx screws that secure transmission filter and remove transmission filter & O-ring. NOTE: Additional fluid will leak out when filter is removed. Remove pan gasket.

29) Install new transmission filter & O-ring, pan gasket and replace transmission pan.

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30) Using a dispensing pump, pump transmission fluid into transmission fill hole at rear right side of transmission. Initial fill should be 3 liters.



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