



Applies To: **2007-09 RDX** – ALL
2010 RDX 2WD – From VIN 5J8TB2H..AA000001 thru 5J8TB2H..AA004530
2010 RDX SH-AWD – From VIN 5J8TB1H..AA000001 thru 5J8TB1H..AA007495

January 8, 2014

MIL Comes On With DTC P0420

(Supersedes 12-036, dated November 21, 2012, to revise the information marked by the black bars)

REVISION SUMMARY

- Under CORRECTIVE ACTION and REPAIR PROCEDURE, information was changed to use the original fuel tank unit and replace the fuel tank reservoir only.
- Under WARRANTY CLAIM INFORMATION, a description and a flat rate time were changed.

SYMPTOM

The MIL is on, and DTC P0420 (TWC catalyst system efficiency below threshold) is stored.

POSSIBLE CAUSE

The flapper valve in the fuel tank unit may rub on the fuel filter. Under low fuel levels this may cause a lean fuel condition, which may result in damage to the warm up three way catalyst (WU-TWC).

CORRECTIVE ACTION

Replace the fuel tank unit reservoir (reuse the original fuel pump) and the WU-TWC.

PARTS INFORMATION

Fuel Tank Unit Reservoir:
P/N: 16011-STK-A00

Fuel Tank Unit Locknut and Gasket:
P/N: 17046-STK-A00

Warm Up Three Way Catalyst:
P/N: 18190-RWC-A00

Turbo to Warm Up Three Way Catalyst Gasket:
P/N: 18234-RWC-A01

Turbo to Warm Up Three Way Catalyst Bolt:
(2 required)
P/N: 90011-RWC-A01

Turbo to Warm Up Three Way Catalyst Nut:
P/N: 90212-RSR-E01

Under-Floor Catalyst Front Gasket:
P/N: 18229-SLJ-033

Under-Floor Catalyst Rear Gasket:
P/N: 18393-SS0-J30

Exhaust Pipe to Under-Floor Catalyst Nut
(3 required):
P/N: 90212-SA5-003

SH-AWD Only

Fill Washer, 24 mm:
P/N: 90441-PK4-000

Drain Washer, 18 mm:
P/N: 90471-PX4-000

REQUIRED MATERIALS

ATF-DW1 (SH-AWD Only):
(4 quarts)
P/N: 08200-9008A

TOOL INFORMATION

Fuel Sender Wrench: T/N 07AAA-S0XA100

WARRANTY CLAIM INFORMATION

The normal warranty applies.

OP#	Description	FRT
3101D2	Replace fuel tank unit reservoir.	1.1 hr
3111H0	2WD Models: Replace WU-TWC	1.3 hr
3111H0	SH-AWD Models: Replace WU-TWC	1.8 hr

Failed Part: P/N 18190-RWC-A00

Defect Code: 07403

Symptom Code: 03214

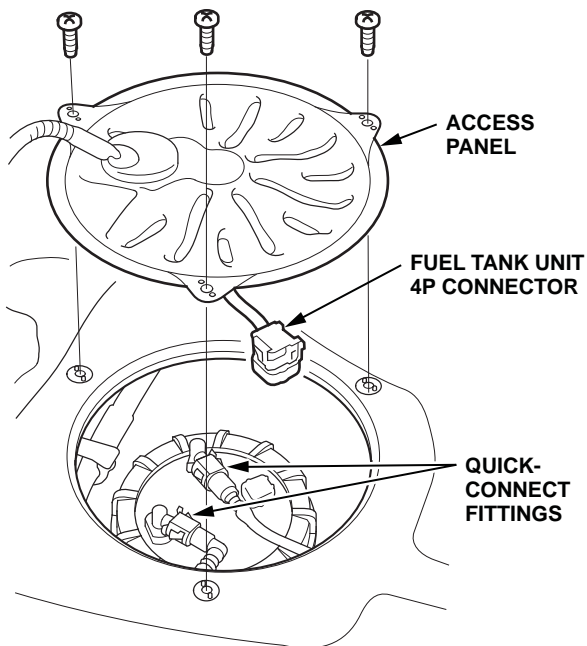
Skill Level: Repair Technician



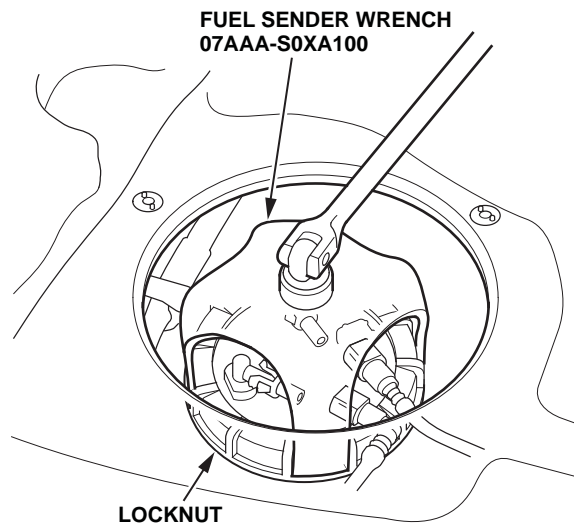
CLIENT INFORMATION: The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by “do-it-yourselfers,” and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Acura automobile dealer.

REPAIR PROCEDURE

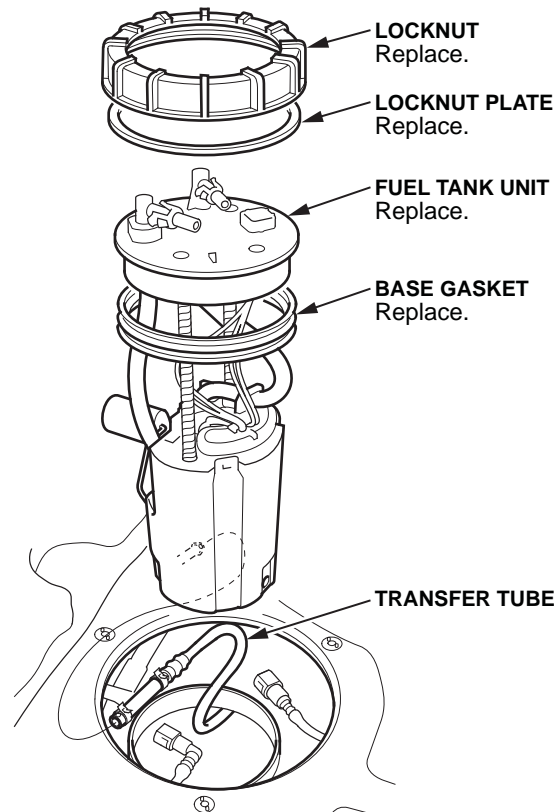
1. Relieve the fuel pressure as described in the appropriate service manual. Online, enter keywords FUEL PRESSURE, and select Fuel Pressure Relieving.
2. Remove the fuel cap.
3. Fold the rear seat down, then remove the left rear door sill trim.
4. Pull back the carpet to expose the fuel tank access panels.
5. Remove the access panel from the left side of the floor.
6. Disconnect the fuel tank unit 4P connector.
7. Disconnect the quick-connect fittings from the fuel tank unit.



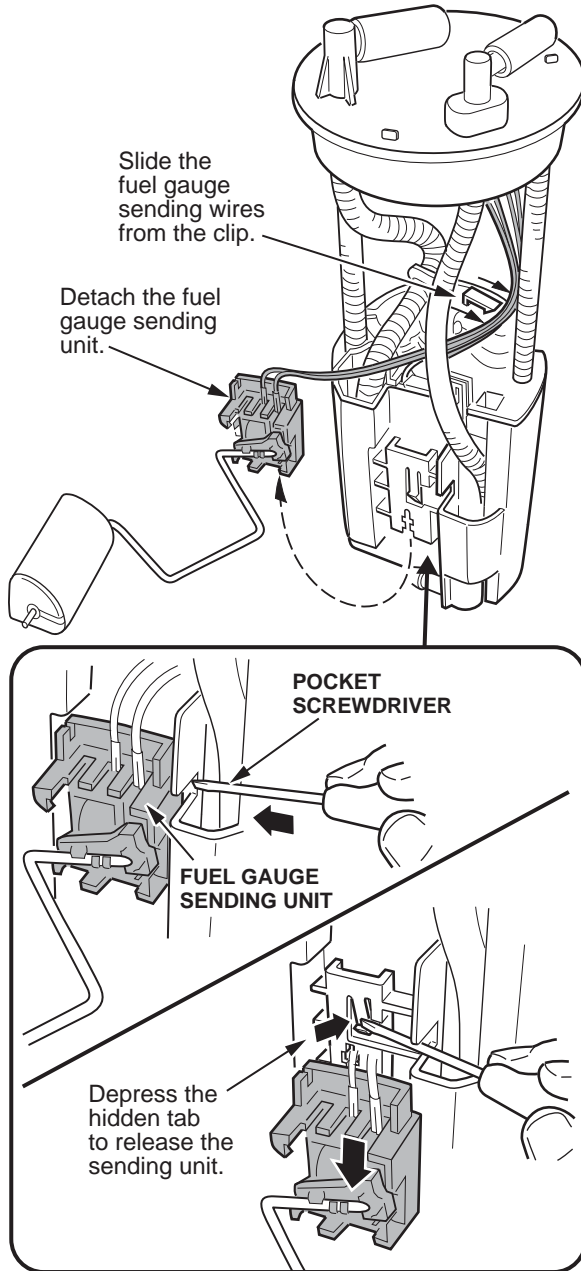
8. Loosen the locknut with a fuel sender wrench.



9. Remove the locknut and the locknut plate, and lift up the fuel tank unit from the fuel tank. Disconnect the transfer tube.

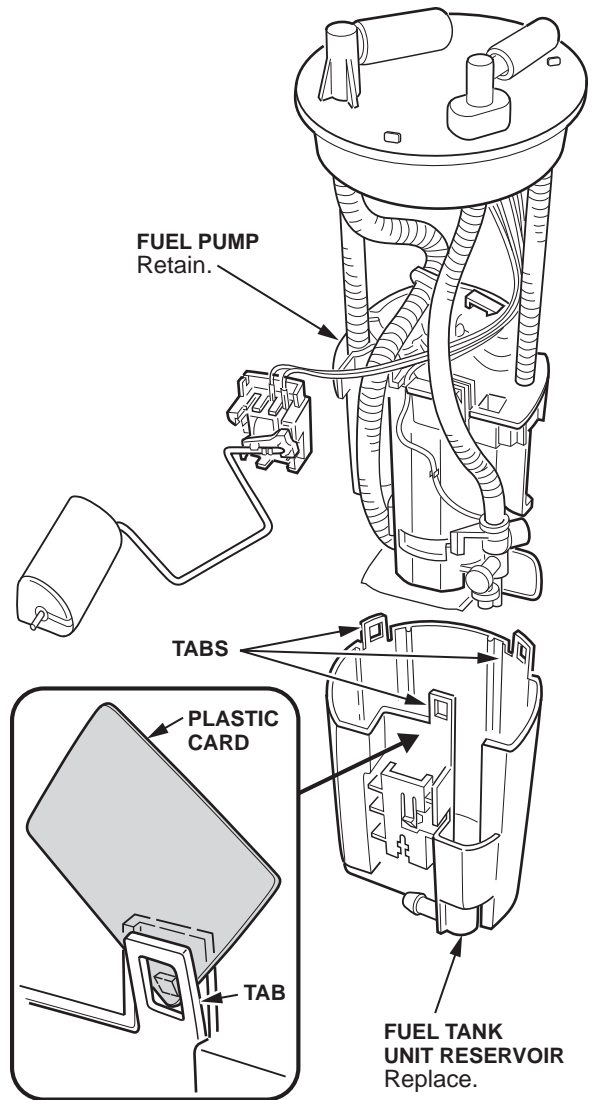


10. Slide the fuel gauge sending unit wires out from the clip on top of the fuel tank unit.
11. Detach the fuel gauge sending unit from the fuel tank unit.
 - Using a pocket screwdriver, press down on the tab that holds the sending unit to the fuel tank unit.
 - Slide the sending unit down.



12. Remove the original fuel tank unit reservoir from the fuel tank unit.
 - Insert a credit-card-sized plastic card between one of the three tabs holding the reservoir.
 - Unsnap the remaining two tabs and slide the original reservoir down from the fuel pump.

NOTE: Be careful not to stretch any of the fuel gauge sending unit wires.

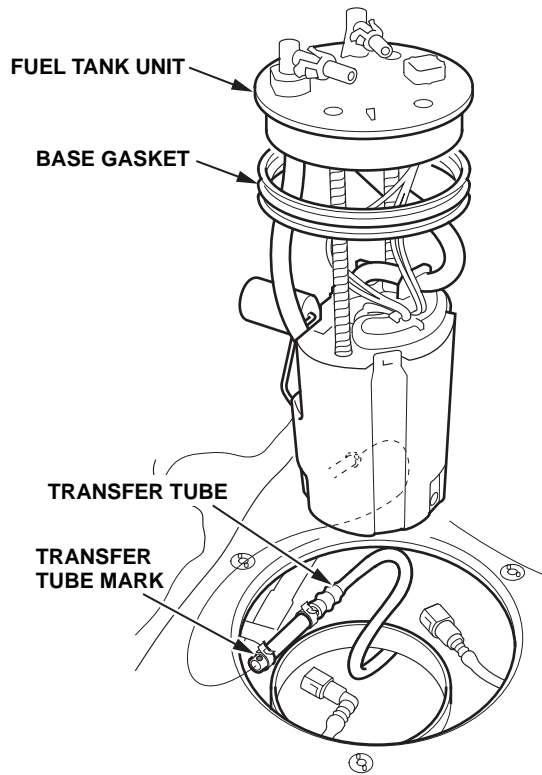


13. Install the new reservoir onto the fuel tank unit in reverse order.
14. Temporarily position the new base gasket on the fuel tank unit.
15. Make sure the mark on the transfer tube is facing up.

16. Connect the transfer tube, then insert fuel tank unit partially into the fuel tank.

NOTE:

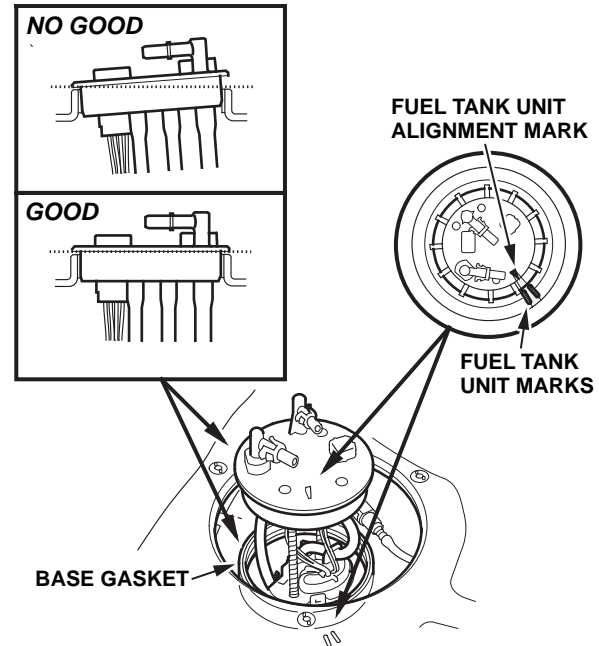
- Be careful not to bend the fuel gauge sending unit.
- Be careful not to damage the new base gasket.
- Do not coat the base gasket with oil.



17. Transfer the base gasket from the fuel tank unit to the fuel tank.

18. Align the marks on the fuel tank and the fuel tank unit, then insert the fuel tank unit until it sits on the base gasket.

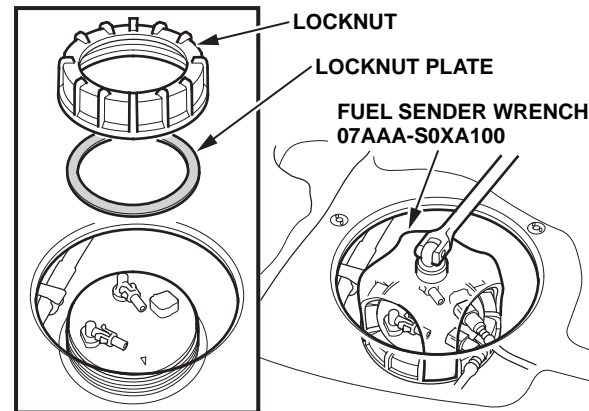
NOTE: To prevent a fuel leak, check the base gasket, visually or by hand, to make sure it is not pinched.



19. Using the fuel sender wrench, install a new locknut with a new locknut plate and torque it to **70 N•m (51.6 lb-ft)**.

NOTE:

- After torquing, make sure the marks are still aligned.
- After installation, check the base gasket visually or by hand again to make sure its not pinched.



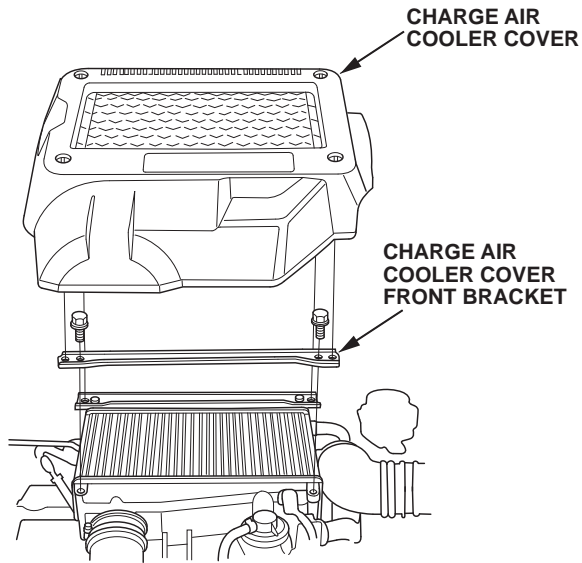
20. Connect the fuel tank unit 4P connector.

21. Reconnect the negative cable to the battery and turn the ignition switch to ON (II) (do not operate the starter motor) two or three times to raise the fuel pressure.

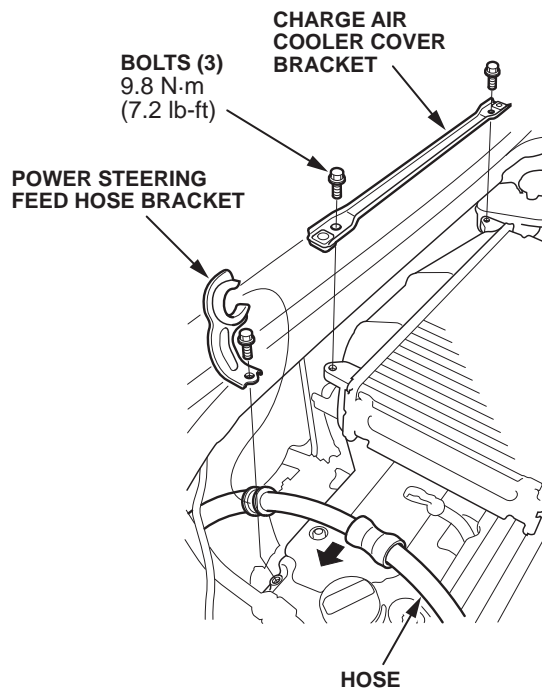
22. Check for leaks in the fuel supply system.

23. Reinstall the remaining parts in the reverse order of removal.

24. Remove the charge air cooler cover.

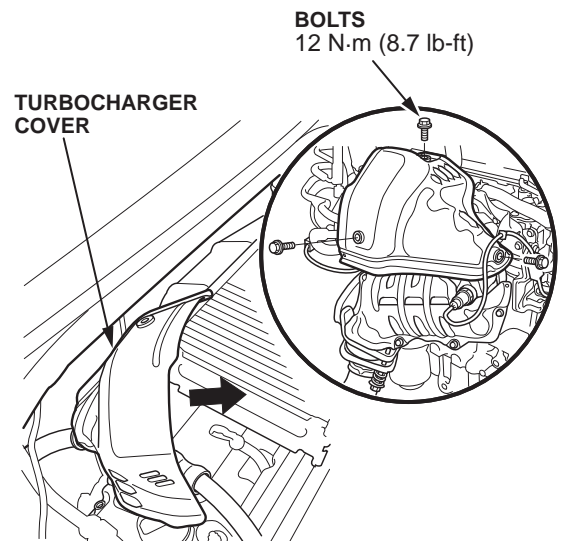


25. Remove the charge air cooler cover bracket.

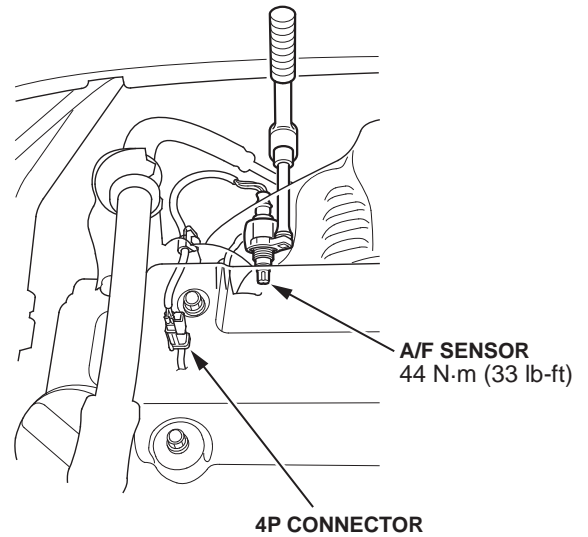


26. Remove the power steering feed hose bracket, then move the hose in the direction of the arrow.

27. Remove the turbocharger cover.



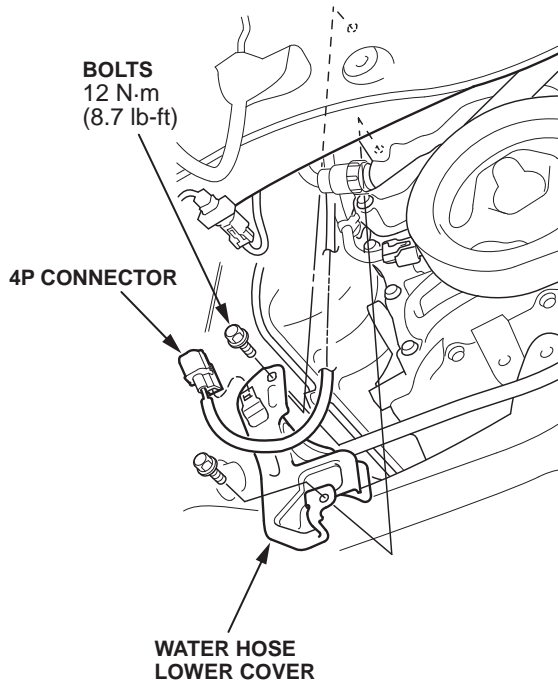
28. Remove the A/F sensor.



29. Raise the vehicle on a lift.

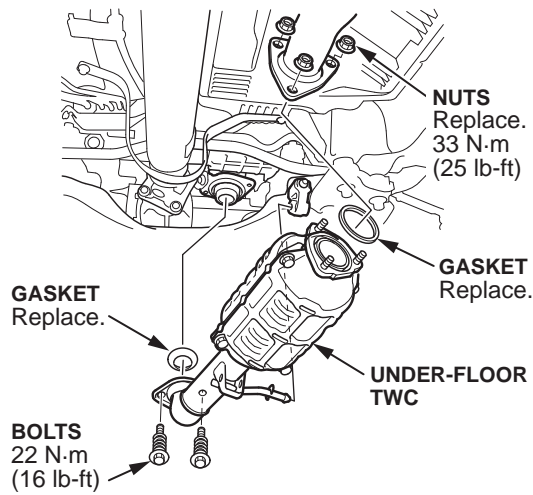
30. Remove the splash shield.

31. Remove the 4P connector from the water hose lower cover, then remove the cover.



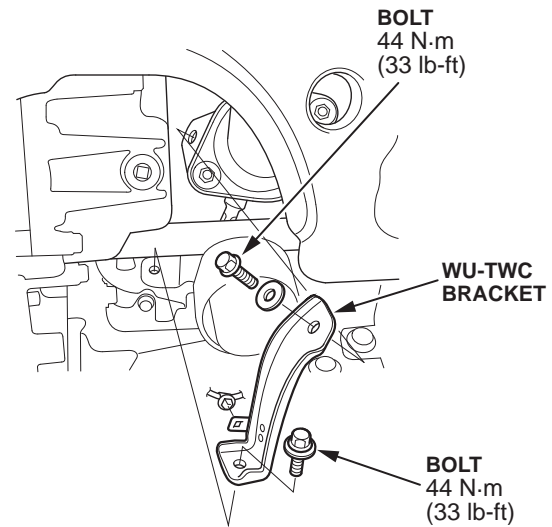
32. Remove the under-floor TWC.

NOTE: SH-AWD model is shown; 2WD is similar.

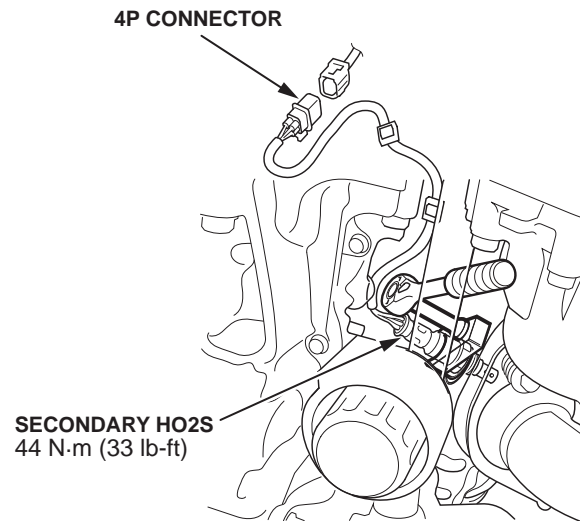


33. Remove the WU-TWC bracket.

NOTE: SH-AWD model is shown; 2WD is similar.



34. Disconnect the secondary HO2S 4P connector, then remove the secondary HO2S.

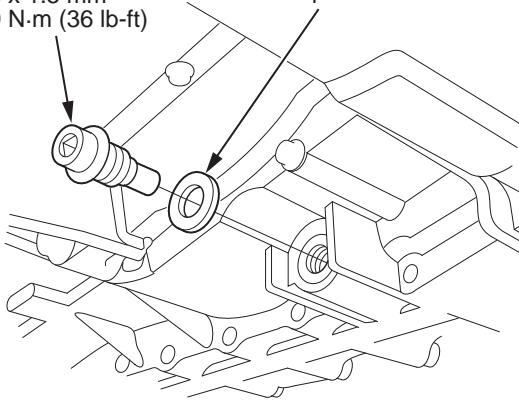


35. *SH-AWD Models Only*: Remove the transfer assembly.

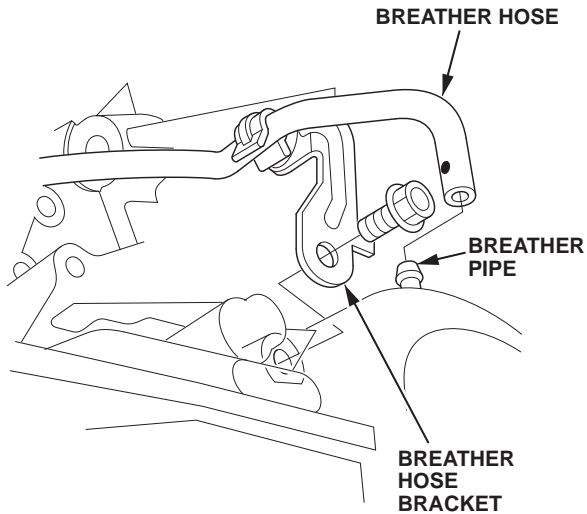
- Shift the transmission into N.
- Remove the drain plug, and drain the automatic transmission fluid (ATF).

DRAIN PLUG
18 x 1.5 mm
49 N·m (36 lb-ft)

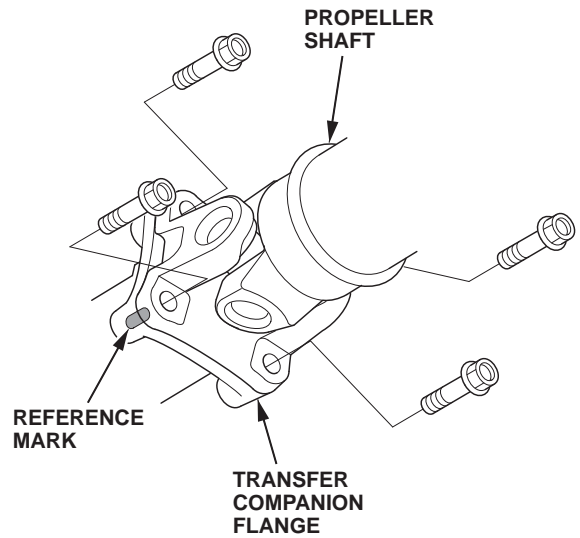
SEALING WASHER
Replace.



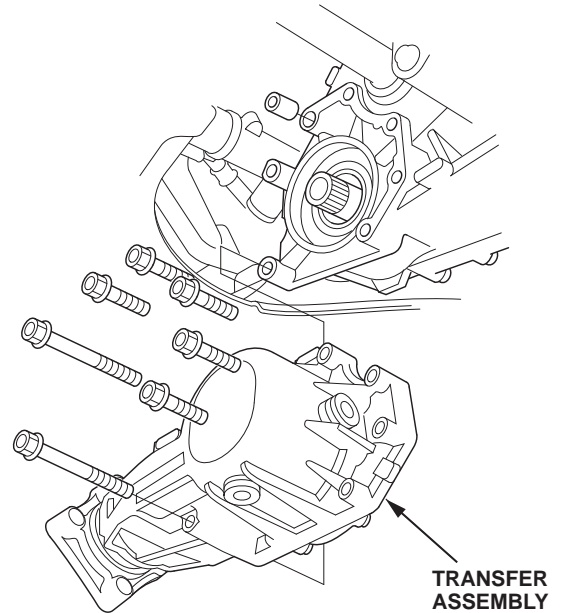
- Reinstall the drain plug with a new sealing washer.
- Remove the bolt securing the transfer breather hose bracket, and disconnect the breather hose from the breather pipe on the transfer assembly. Cap the breather pipe to prevent fluid from leaking out.



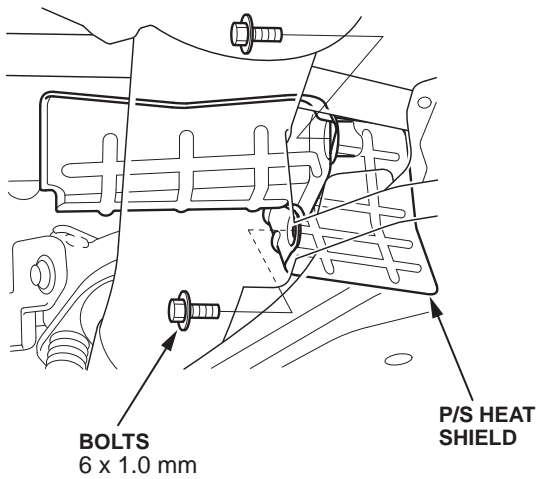
- Make a reference mark across the propeller shaft and the transfer companion flange.



- Separate the propeller shaft from the transfer companion flange.
- Remove the transfer assembly from the transmission.

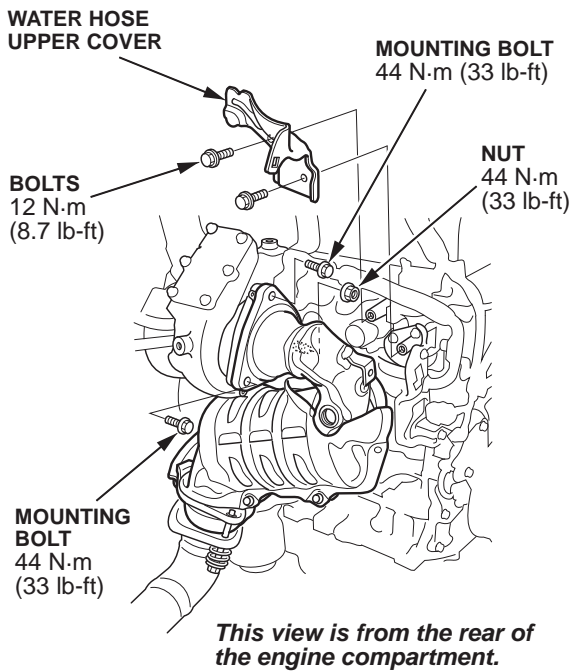


36. Remove the P/S heat shield.

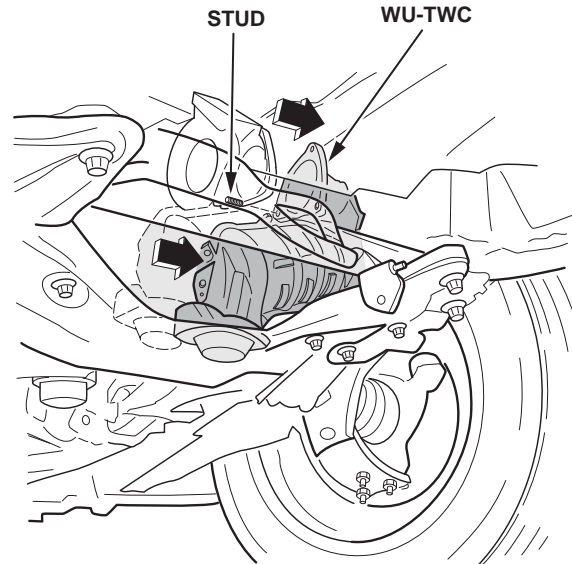


37. Remove the water hose upper cover.

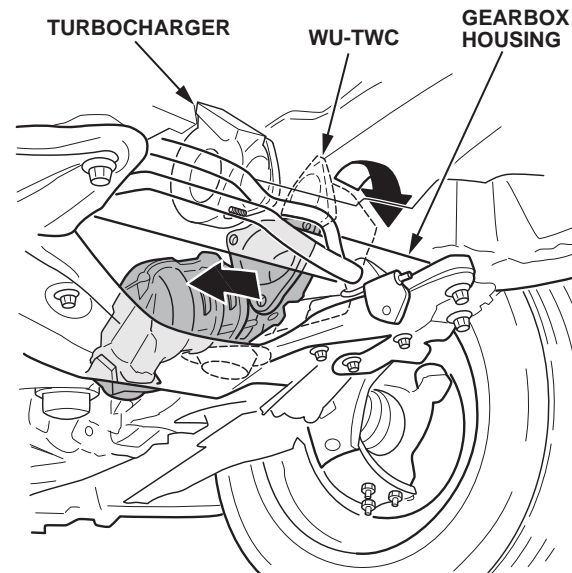
38. Remove the mounting bolts and nut from the WU-TWC.



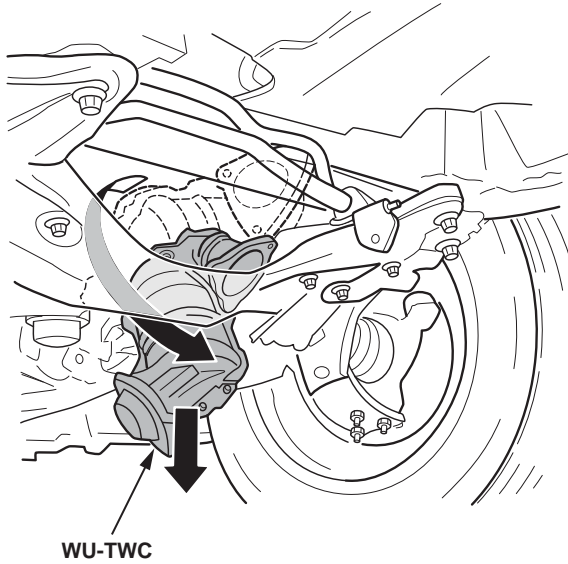
39. From under the vehicle, slide the WU-TWC toward the passenger's side to free the WU-TWC from the stud on the turbocharger.



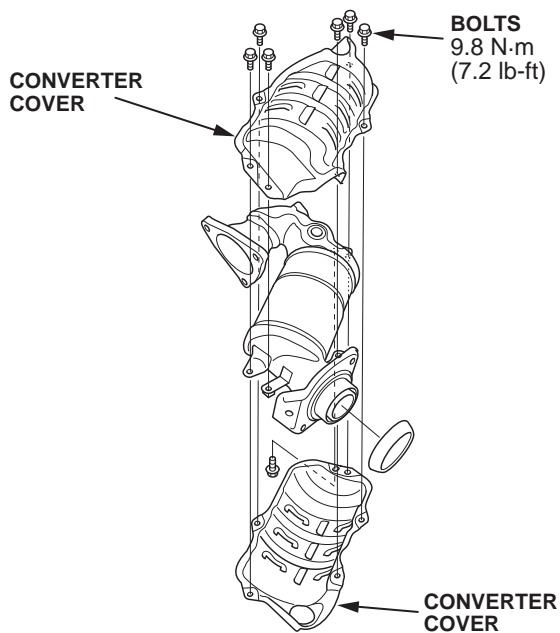
40. Rotate the turbocharger side of the WU-TWC down to the steering gearbox housing, then slide the WU-TWC toward the driver's side along the gearbox housing until the WU-TWC clears the turbocharger.



41. Lower and rotate the under-floor TWC side of the WU-TWC toward the passenger's side, then remove the WU-TWC from the subframe.



42. Remove the WU-TWC cover.



43. Install the converter cover onto the new WU-TWC, then insert the WU-TWC into vehicle.
44. Install the parts in the reverse order of removal.
- Replace the WU-TWC gaskets.
 - Replace the bolts and the nut that attach the WU-TWC to the turbocharger.
 - Replace the under-floor TWC gaskets and nuts.
45. *SH-AWD Models*: Refill the ATF – **2.9L (3.1 qt)**.