

**April 12, 2019**

Version 1

## Safety Recall: 2018-19 Odyssey Battery Terminal Inspection and Transmission Replacement

### AFFECTED VEHICLES

Year	Model	Trim	VIN Range
2018-19	Odyssey	Touring, Touring-Elite	Check the iN VIN status for eligibility.

### BACKGROUND

A momentary voltage loss to the TCM, usually caused by a loose battery terminal, can cause the transmission to shift to Park while driving. When this happens, the parking mechanism could get damaged, and the vehicle may move while the shifter is in Park.

Honda has developed software to correct this issue. See S/B 19-046. This service bulletin provides information to replace the transmission of vehicles that were identified as having their transmission shift to Park while driving. The new transmissions come with the new software.

### CUSTOMER NOTIFICATION

Owners of affected vehicles will be sent a notification of this campaign.

Do an iN VIN status inquiry to make sure the vehicle is shown as eligible.

Some vehicles affected by this campaign may be in your new or used vehicle inventory.

Failure to repair a vehicle subject to a recall or campaign may subject your dealership to claims or lawsuits from the customer or anyone else harmed as a result of such failure. To see if a vehicle in inventory is affected by this safety recall, do a VIN status inquiry before selling it.

### CORRECTIVE ACTION

- Replace the transmission (the new transmission comes with the new software).
- Inspect the battery terminals.
- Clean or replace the battery terminals and/or battery if the terminal inspection fails (an extremely small percentage of vehicles may require a new battery or battery terminals).

### PARTS INFORMATION

Part Name	Part Number	Quantity
Reman A/T Kit (2019 models)	06200-5MX-A83RM	1

**CUSTOMER 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 Honda automobile dealer.

Part Name	Part Number	Quantity
Reman A/T Kit (2018 models)	06200-5MX-A77RM	1
Flange Bolt (12 x 120)	90051-5J4-000	1
Flange Bolt (12 x 45)	90165-SDA-A00	2
Flange Bolt (12 x 85)	95701-12085-07	1
Flange Nut (12 mm)	90371-SAA-010	4
Flange Bolt (10 x 35)	90163-SDA-A01	2
Flange Bolt (10 x 103)	90163-SJH-000	1
Flange Bolt (10 x 25)	90167-SAA-010	4
Self-Lock Nut (10 mm)	90212-SA5-003	9
Pre Chamber Gasket	18393-SDB-A00	1
Exhaust Pipe Gasket (NOK)	18212-SA7-003	2
Split Pin (3.0 x 22)	94201-30220	2
Castle Nut (14 mm)	90365-STX-A00	2
Flange Bolt (12 x 30)	90161-SHJ-A00	8
Flange Bolt (14 x 140)	90165-TZ5-A10	2
Flange Bolt (14 x 125)	90165-TK8-A00	2
Spindle Nut	90305-S3V-A11	2
Snap Ring (32 x 2.2)	44319-STX-A01	2
Flange Bolt (10 x 30)	90163-SDB-A00	3

**NOTE**

An extremely small percentage of vehicles may require a new battery or battery terminals.

Part Name	Part Number	Quantity
Battery Plus Terminal (large)	32413-TG7-A02	1
Battery Sensor Assembly	38920-TZ5-A02	1
(L3) Johnson MSDS Battery Assembly	31500-TZ7-AGM100M	1

**REQUIRED MATERIALS**

Part Name	Part Number	Quantity
Antifreeze/Coolant Type 2	OL999-9011	2

## TOOL INFORMATION

### NOTE

The following tools are available through the Tool and Equipment Program.

Part Name	Part Number	Quantity
Torque Wrench (1/4" Dr, 20-150 in/lb)	Model 1501 MRH or Model 1501 MRPB	1
Battery Terminal Cleaner 	BTC7B	1
Engine Balance Bar	VSB02C000041	1
Engine Hanger	AAR-T1256	2
Subframe Adaptor	VSB02C000016	1

## WARRANTY CLAIM INFORMATION

The normal warranty applies.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
2181CJ	<b>2018 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Inspect battery terminals, and check torque.</b>	7.0 hr	6AN00	Y4K00	A19043A	28102-5MX-A610
2181CJ	<b>2019 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Inspect battery terminals, and check torque.</b>	7.0 hr	6AN00	Y4K00	A19043B	28102-5MX-A610

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
2181CK	<b>2018 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Repair one terminal.</b>	7.1 hr	6AN00	Y4K00	A19043C	28102-5MX-A610
2181CK	<b>2018 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Replace one terminal.</b>	7.1 hr	6AN00	Y4K00	A19043D	28102-5MX-A610
2181CK	<b>2019 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Repair one terminal.</b>	7.1 hr	6AN00	Y4K00	A19043E	28102-5MX-A610
2181CK	<b>2019 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Replace one terminal.</b>	7.1 hr	6AN00	Y4K00	A19043F	28102-5MX-A610
2181CL	<b>2018 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Repair both terminals.</b>	7.5 hr	6AN00	Y4K00	A19043G	28102-5MX-A610
2181CL	<b>2018 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Replace both terminals.</b>	7.5 hr	6AN00	Y4K00	A19043H	28102-5MX-A610
2181CL	<b>2019 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Repair both terminals.</b>	7.5 hr	6AN00	Y4K00	A19043J	28102-5MX-A610

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
2181CL	<b>2019 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Replace both terminals.</b>	7.5 hr	6AN00	Y4K00	A19043K	28102-5MX-A610
2181CM	<b>2018 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Repair both terminals, and replace the battery (includes internal resistance reset).</b>	8.0 hr	6AN00	Y4K00	A19043L	28102-5MX-A610
2181CM	<b>2018 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Replace both terminals, and replace the battery (includes internal resistance reset).</b>	8.0 hr	6AN00	Y4K00	A19043M	28102-5MX-A610
2181CM	<b>2019 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Repair both terminals, and replace the battery. (includes internal resistance reset).</b>	8.0 hr	6AN00	Y4K00	A19043N	28102-5MX-A610
2181CM	<b>2019 Odyssey -</b> Replace the transmission (includes alignment and neutral position memorization). <b>Replace both terminals, and replace the battery. (includes internal resistance reset).</b>	8.0 hr	6AN00	Y4K00	A19043P	28102-5MX-A610

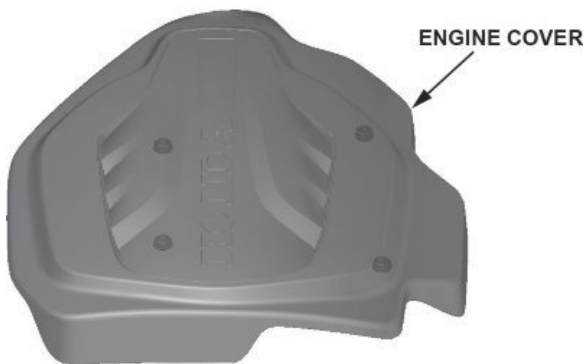
Skill Level: Repair Technician

## REPAIR PROCEDURE

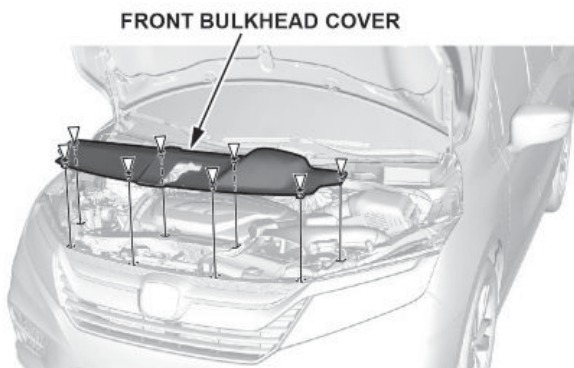
### NOTE

Do not drain the ATF from the old transmission. The replacement (Reman) transmission comes pre-filled with ATF.

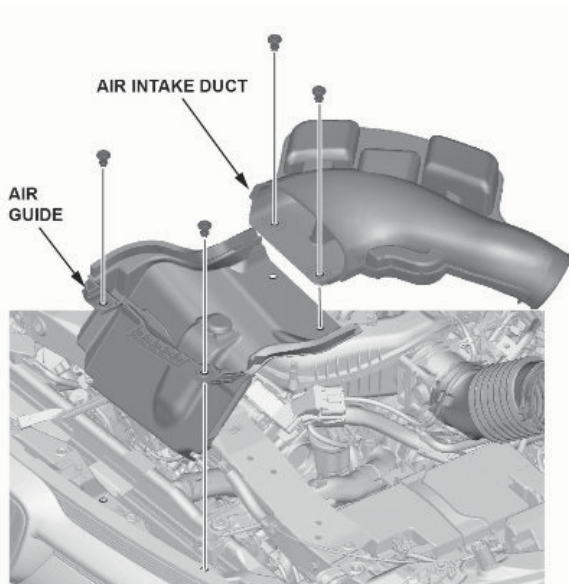
1. Remove the engine cover.



2. Remove the front bulkhead cover.



3. Remove the air intake duct.
4. Remove the air guide.



5. Disconnect the battery terminals.

5.1. Make sure the ignition is turned to OFF.

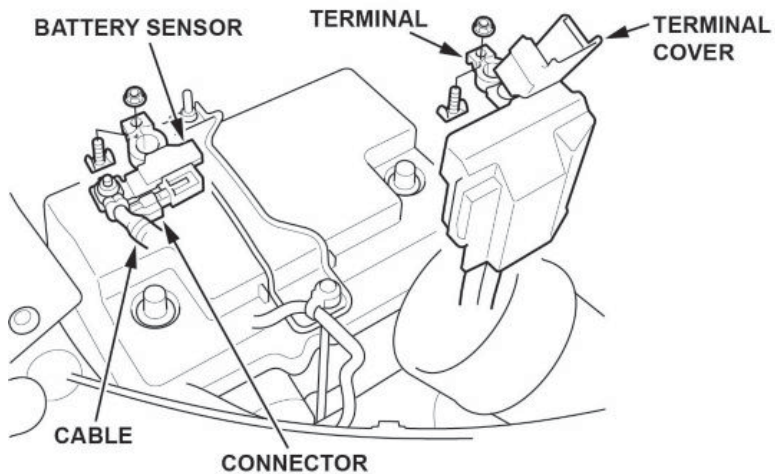
5.2. Disconnect and isolate the negative cable with the battery sensor from the battery.

**NOTES**

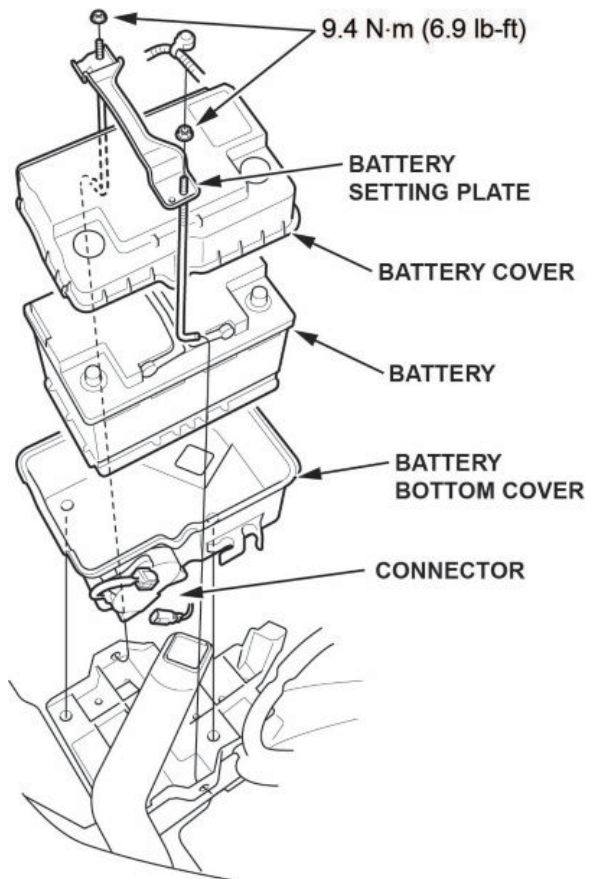
- Always disconnect the negative side first.
- To prevent damage, do not hold the connector when removing the battery terminal.
- Do not disconnect the battery sensor from the cable.

5.3. Open the terminal cover.

5.4. Disconnect the terminal from the battery.

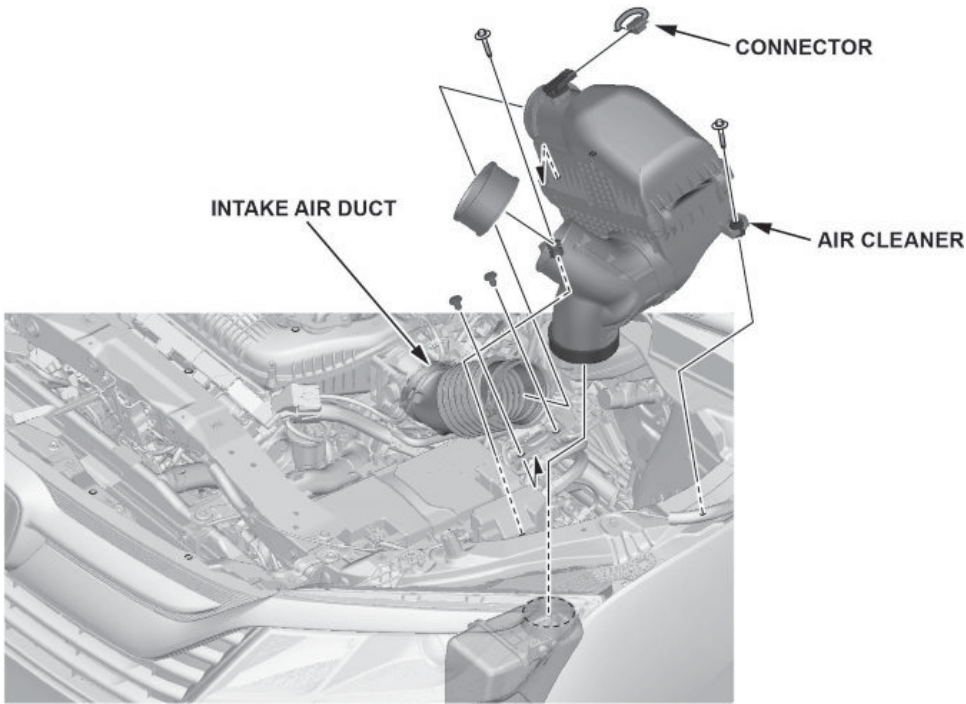


6. Remove the setting plate.
7. Remove the battery cover.
8. Remove the battery.
9. Remove the battery bottom cover.
10. Disconnect the battery fan motor connector.

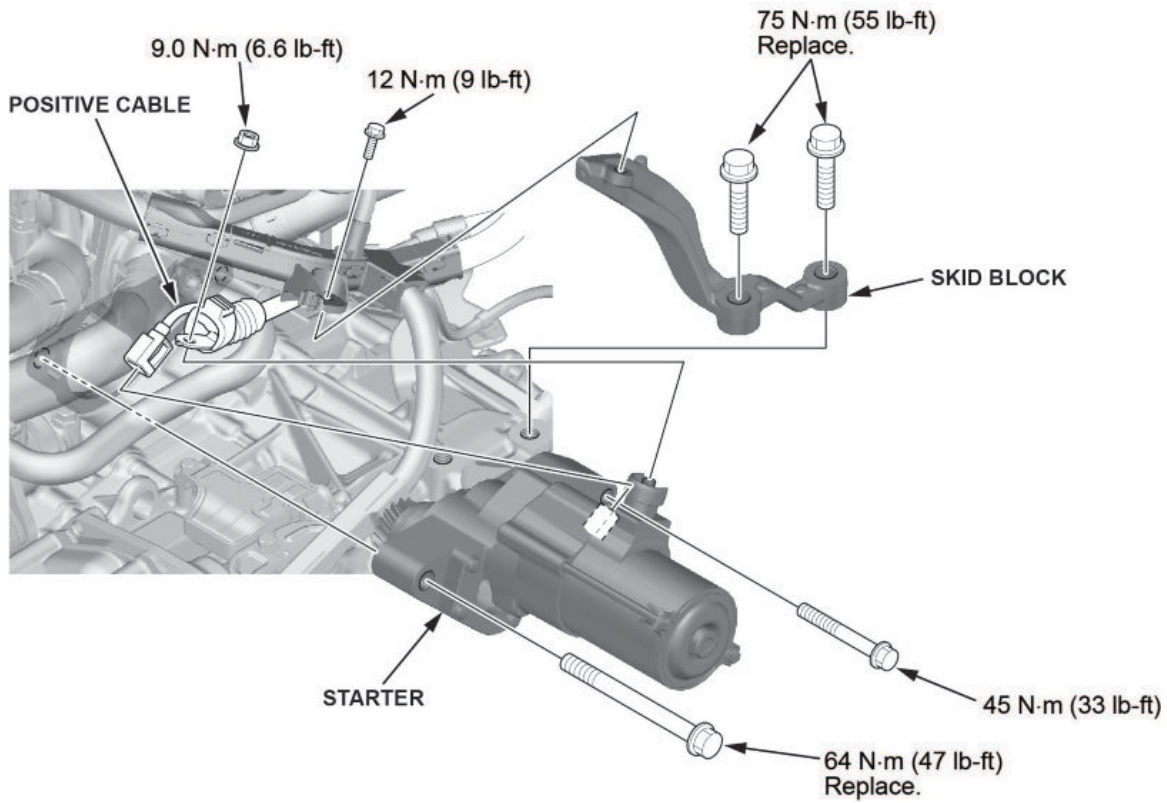




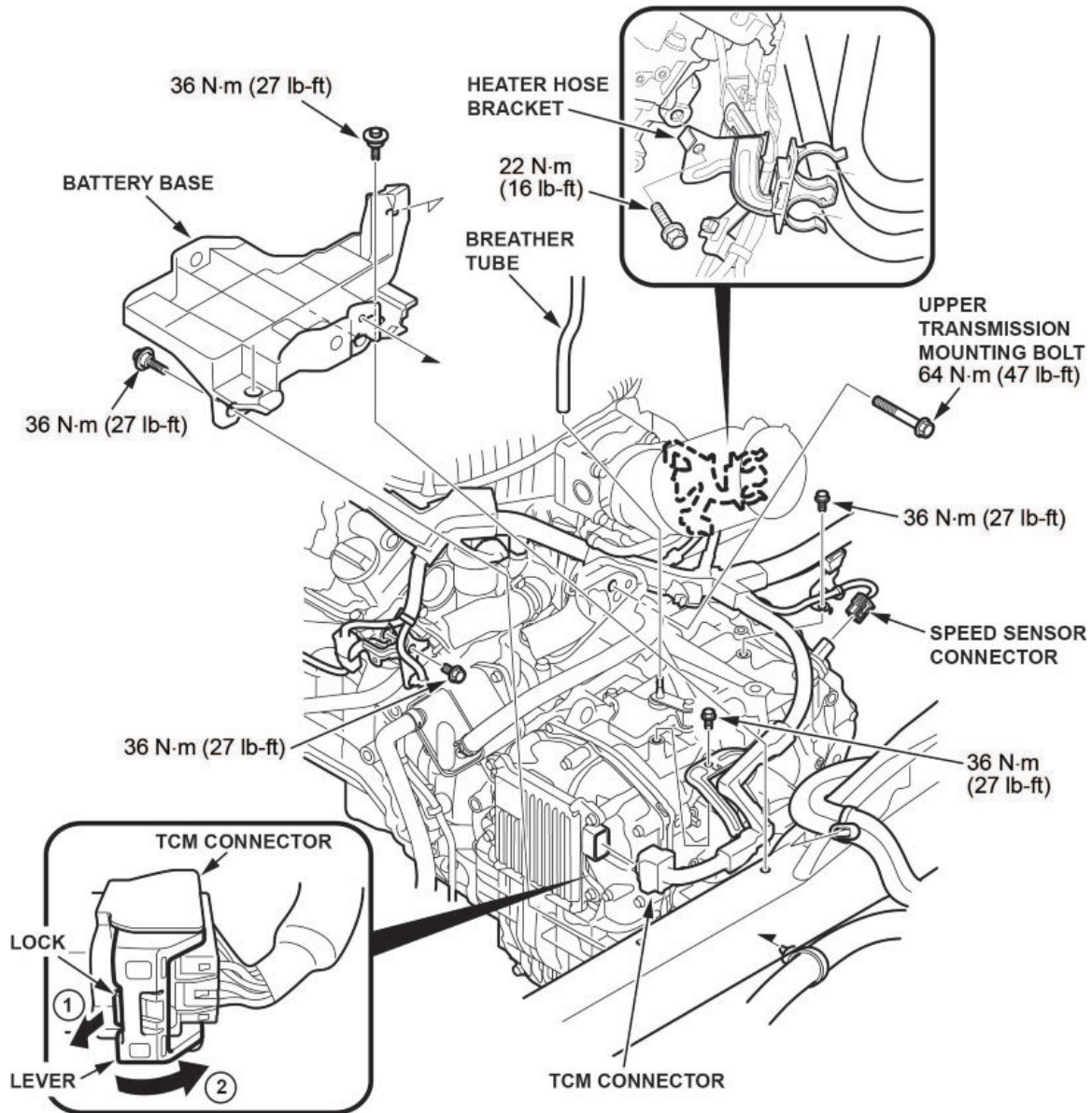
11. Remove the intake air duct.
12. Remove the air cleaner.



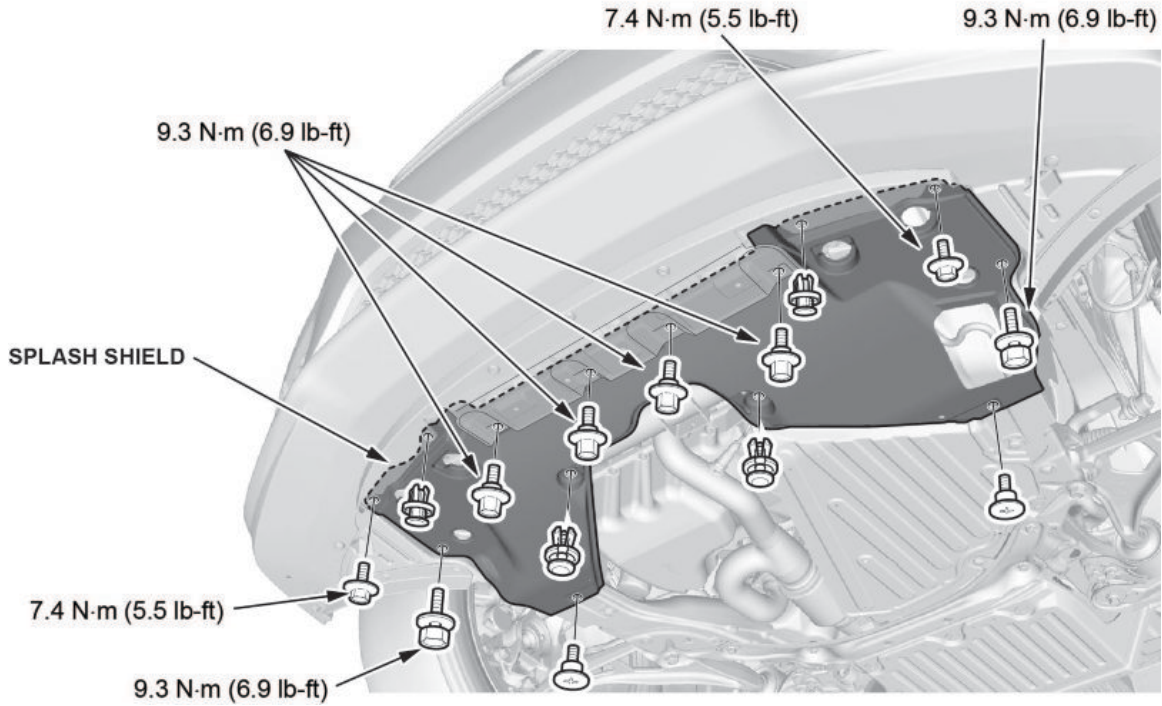
13. Remove the skid block.
14. Disconnect the positive cable from the starter.
15. Remove the starter and connector.



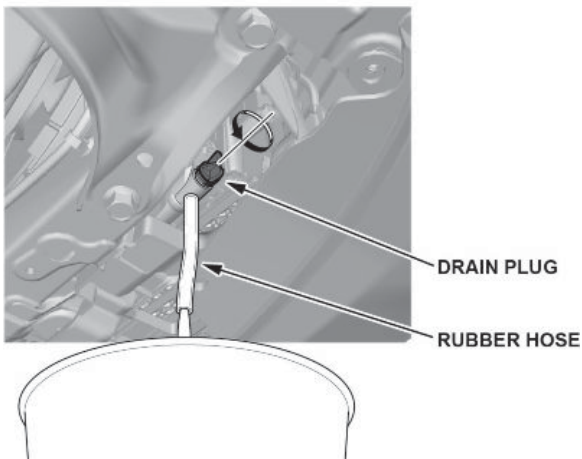
16. Remove the battery base.
17. Disconnect the breather tube.
18. Disconnect the TCM connector.
19. Remove the upper transmission mounting bolt.
20. Disconnect the speed sensor.
21. Remove the heater hose bracket.
22. Remove the harness bracket bolts.



- 23. Raise the vehicle on a lift.
- 24. Remove the splash shield.



- 25. Drain the coolant.
  - 25.1. Install a rubber hose on the radiator.
  - 25.2. Loosen the drain plug, and drain the coolant.

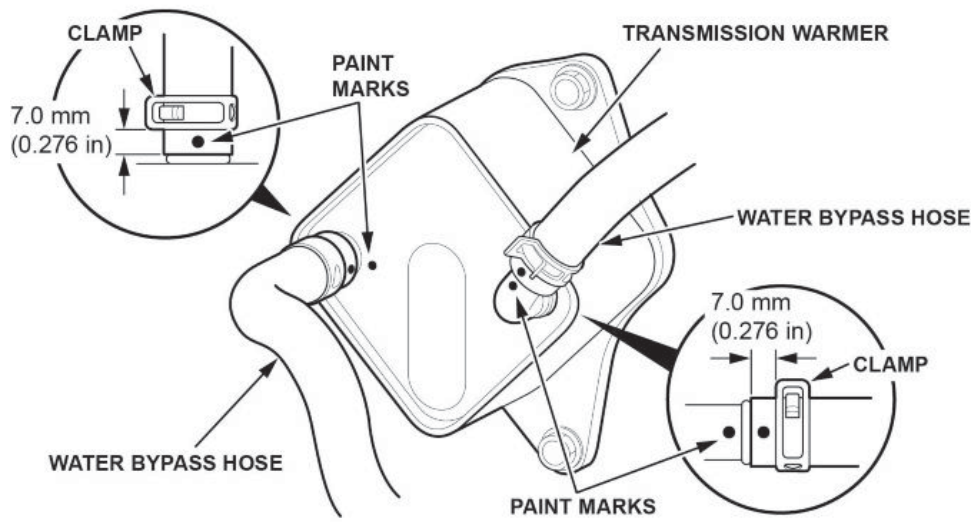


- 26. Lower the vehicle.

27. Disconnect the water bypass hoses from the transmission warmer.

**NOTE**

To prevent damage, do not bend the pipes excessively.

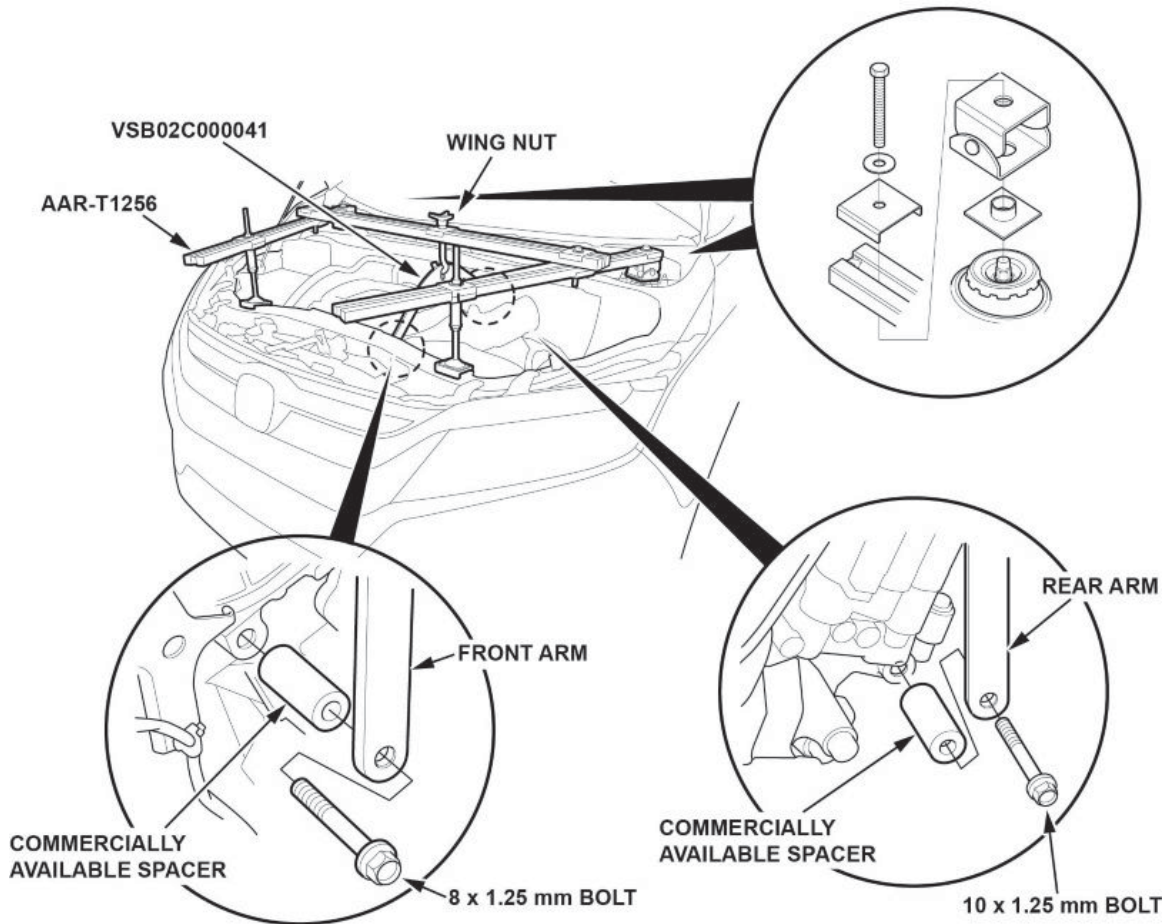


28. Install the engine support hanger.

**NOTES**

- Be careful when working around the windshield.
- Two sets of AAR-T1256 are required for stacking additional cross section bars.
- Be careful not to damage the hood opener cable when installing the engine support hanger at the front bulkhead.

28.1. Remove the front damper caps.



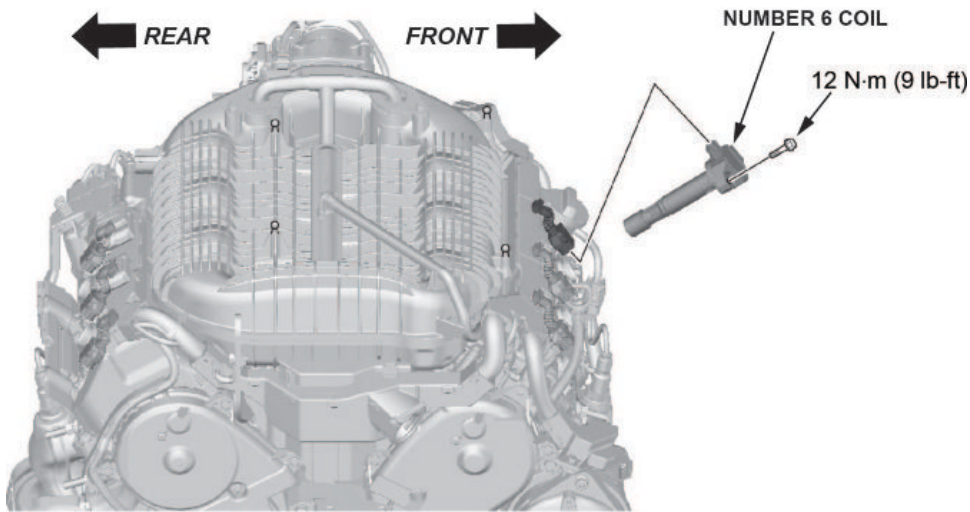
28.2. Install the engine hanger balance bar.

28.2.1. Attach the front arm to the front cylinder head with a commercially available spacer and a 10 x 1.25 mm bolt.

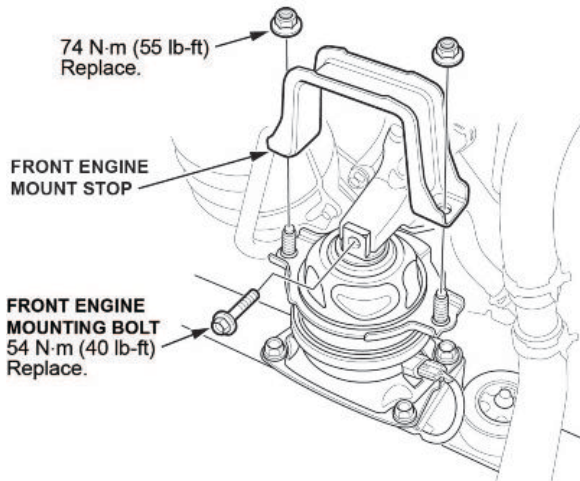
28.2.2. Attach the rear arm to the rear cylinder head with a commercially available spacer and a 10 x 1.25 mm bolt.

28.3. Install the engine support hanger as shown, and attach the hook to the slotted hole in the engine hanger balance bar. Tighten the wing nut by hand, and lift and support the engine/transmission.

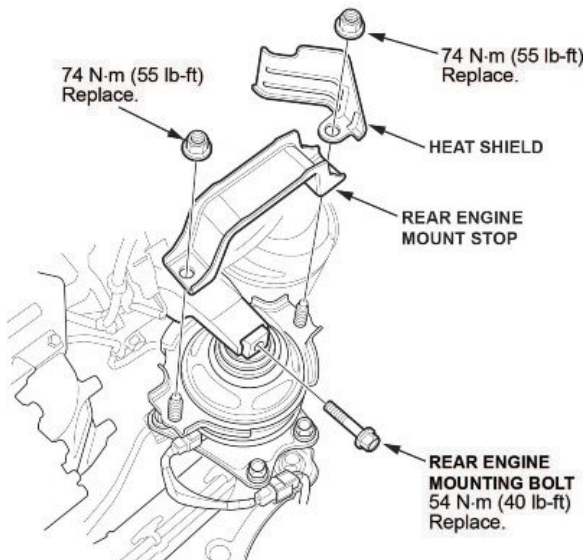
29. Remove coil number 6.



30. Remove the front engine mount stop and front engine mount mounting bolt.



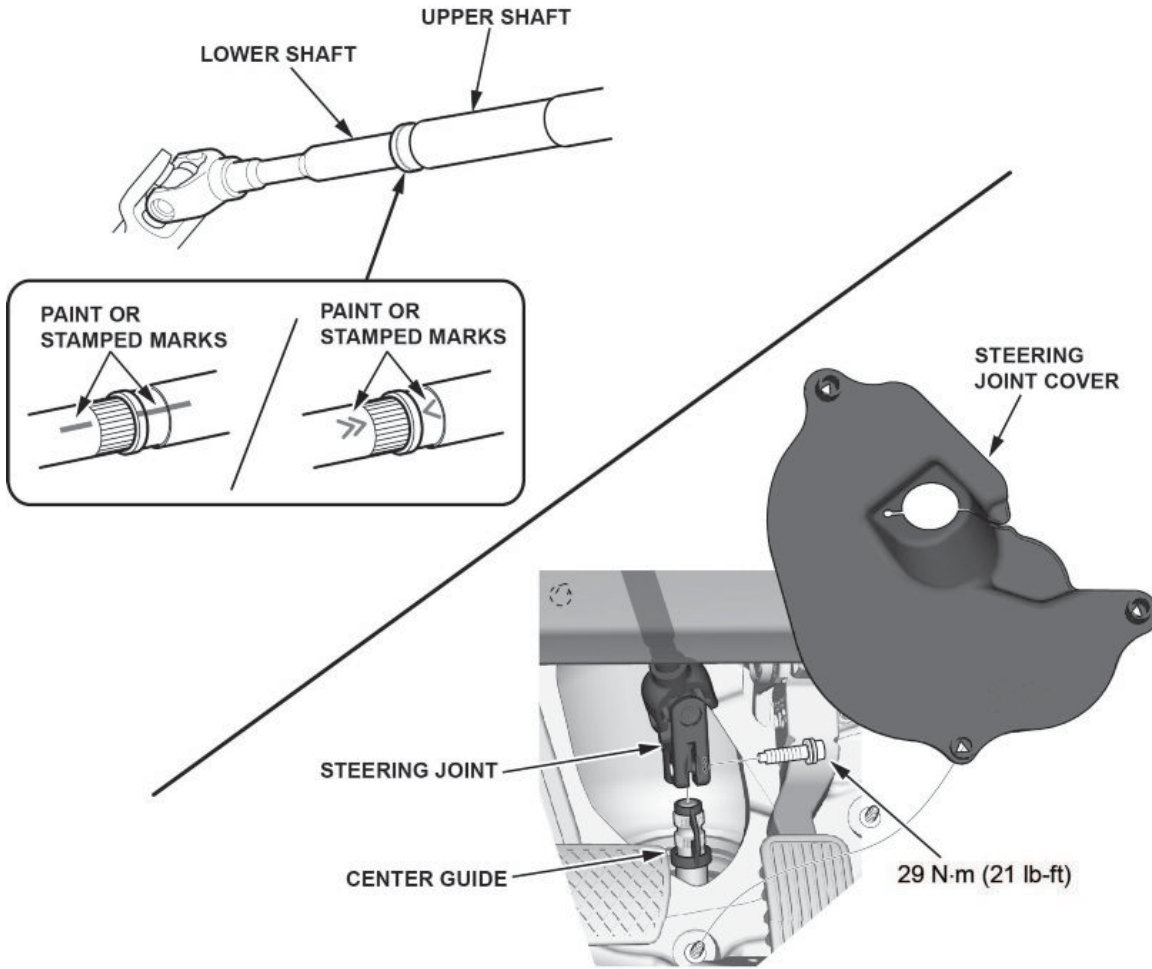
31. Remove the rear engine mount stop, heat shield, and rear engine mount mounting bolt.



32. Disconnect the steering joint.

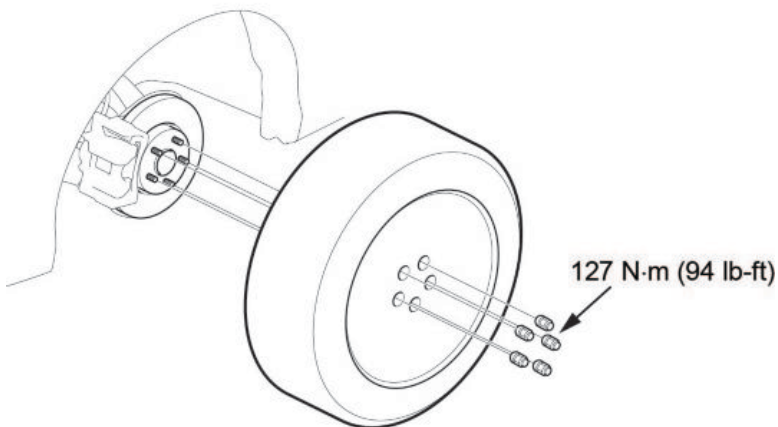
**NOTE**

Be careful not to pull out the lower shaft from the upper shaft. If it separates, use the aligning paint or stamped marks on the shafts to align them.

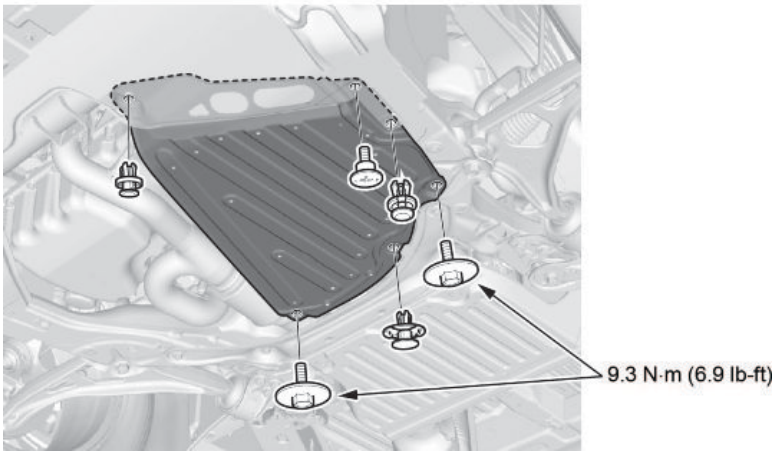


33. Lift the vehicle.

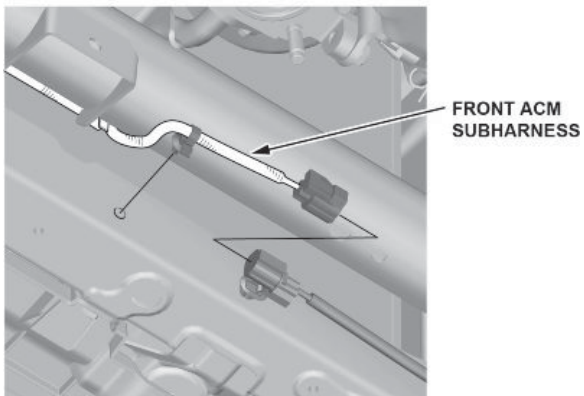
34. Remove both front wheels.



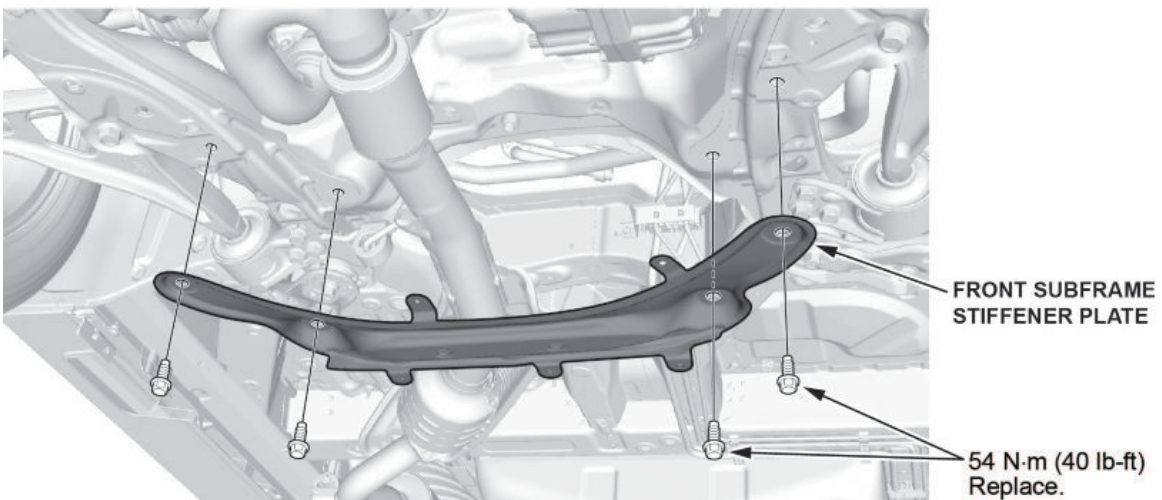
35. Remove the transmission undercover.



36. Disconnect the front ACM (active control engine mount) sub harness.

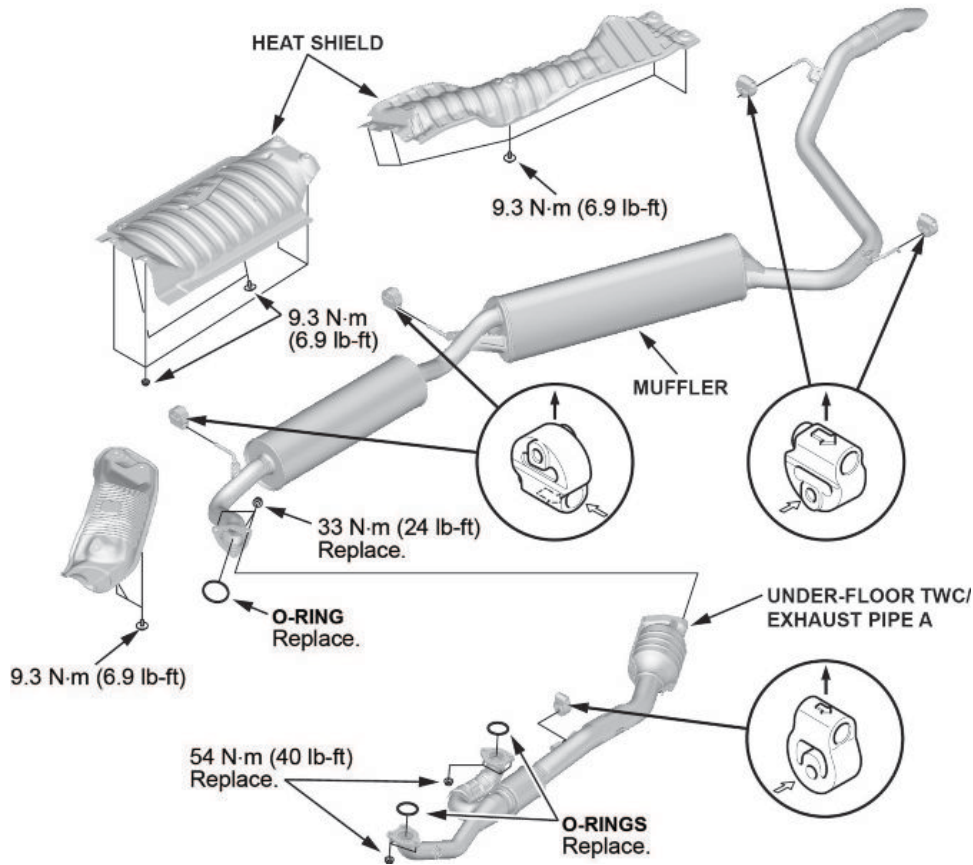


37. Remove the front subframe stiffener plate.

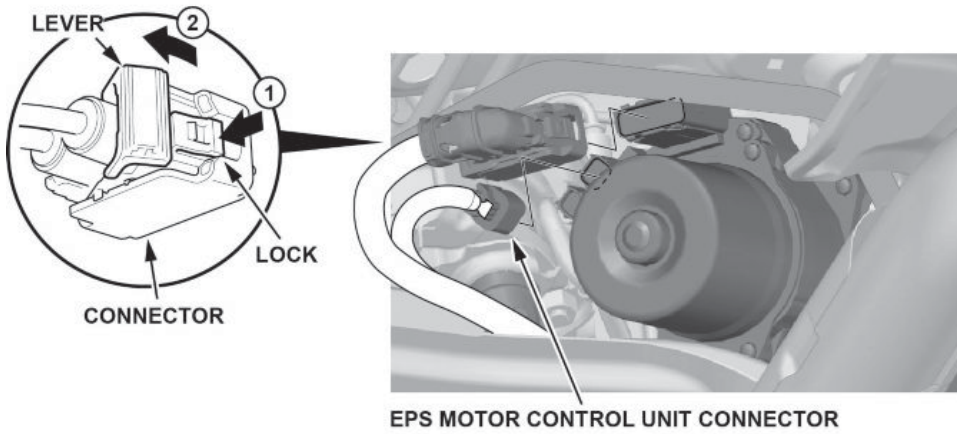




38. Remove the under-floor TWC and exhaust pipe.



39. Disconnect the EPS motor control unit connector.



40. Disconnect both tie rod end ball joints.

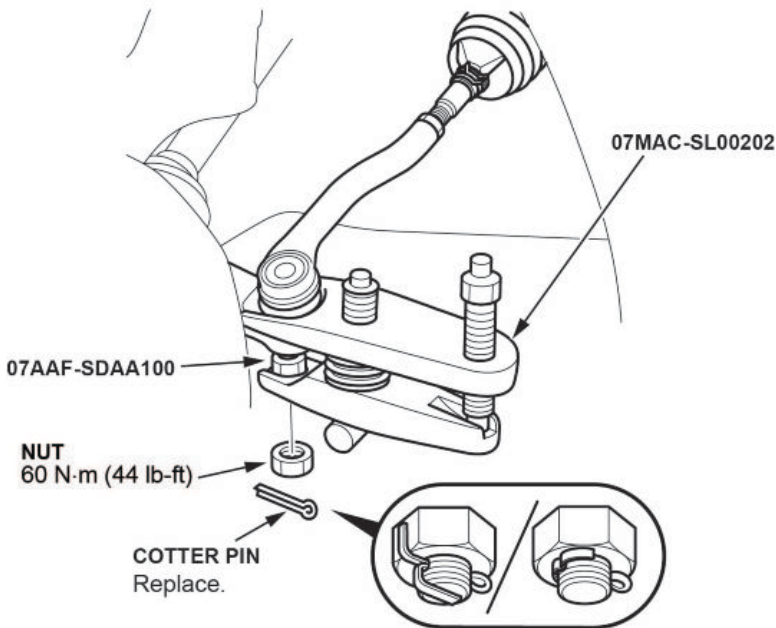
40.1. Remove the cotter pin.

40.2. Remove the nut.

40.3. Disconnect the tie-rod end ball joint from the knuckle using a ball joint thread protector and a ball joint remover.

**NOTES**

- Be careful not to damage the ball joint boot when using the ball joint remover.
- During installation, install the new cotter pin after tightening the nut, and bend its end as shown.



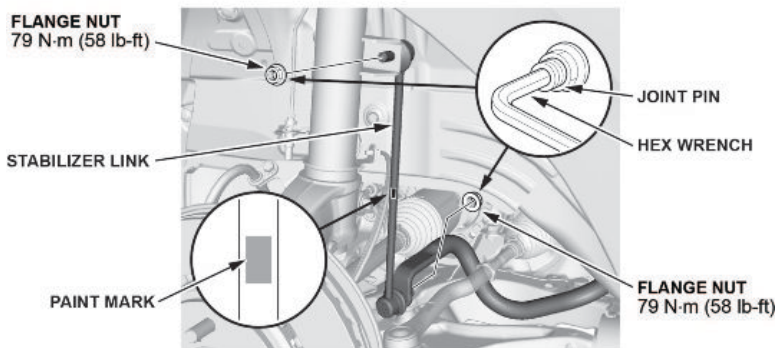
41. Disconnect both lower stabilizer links.

41.1. Remove the flange nuts while holding the respective joint pin with a hex wrench.

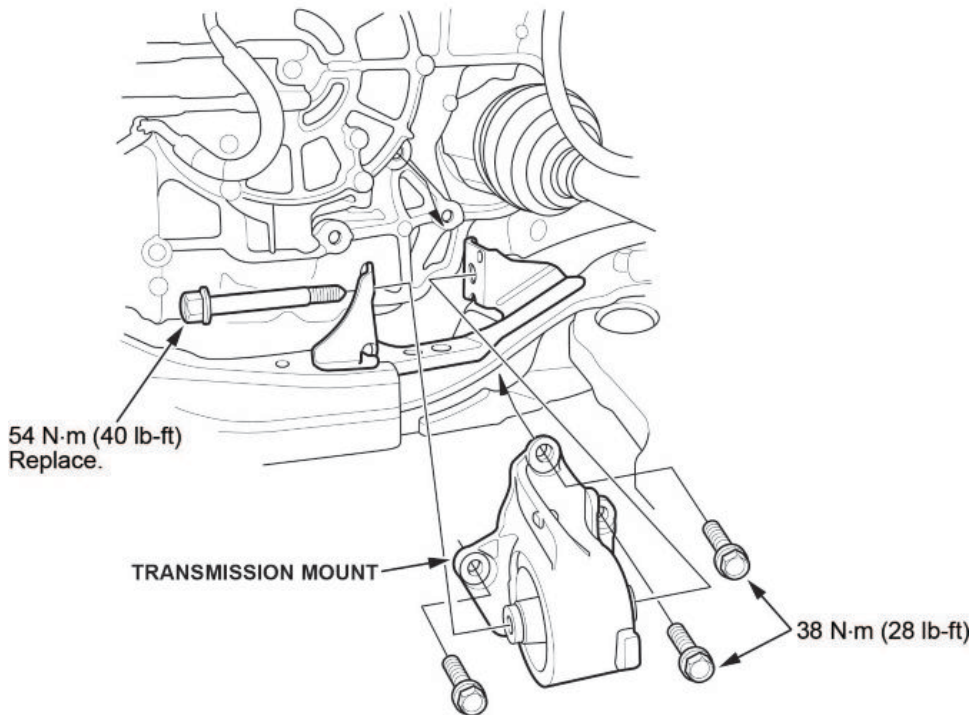
41.2. Remove the stabilizer link.

**NOTE**

The stabilizer link has a paint mark. The left stabilizer link is marked with green paint, and the right stabilizer link is marked with blue paint.



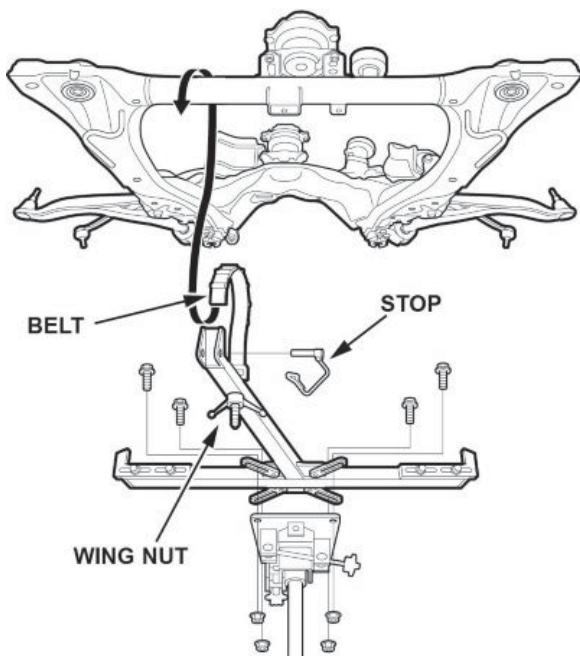
42. Remove the transmission mount.



43. Install the front subframe adapter tool.

43.1. Attach the subframe adapter to the front subframe by looping the belt over the front of the front subframe, then secure the belt with its stop, and tighten the wing nut.

43.2. Raise a transmission jack, line up the slots in the subframe adapter arms with the bolt holes on the transmission jack base, then securely attach them with four bolts.

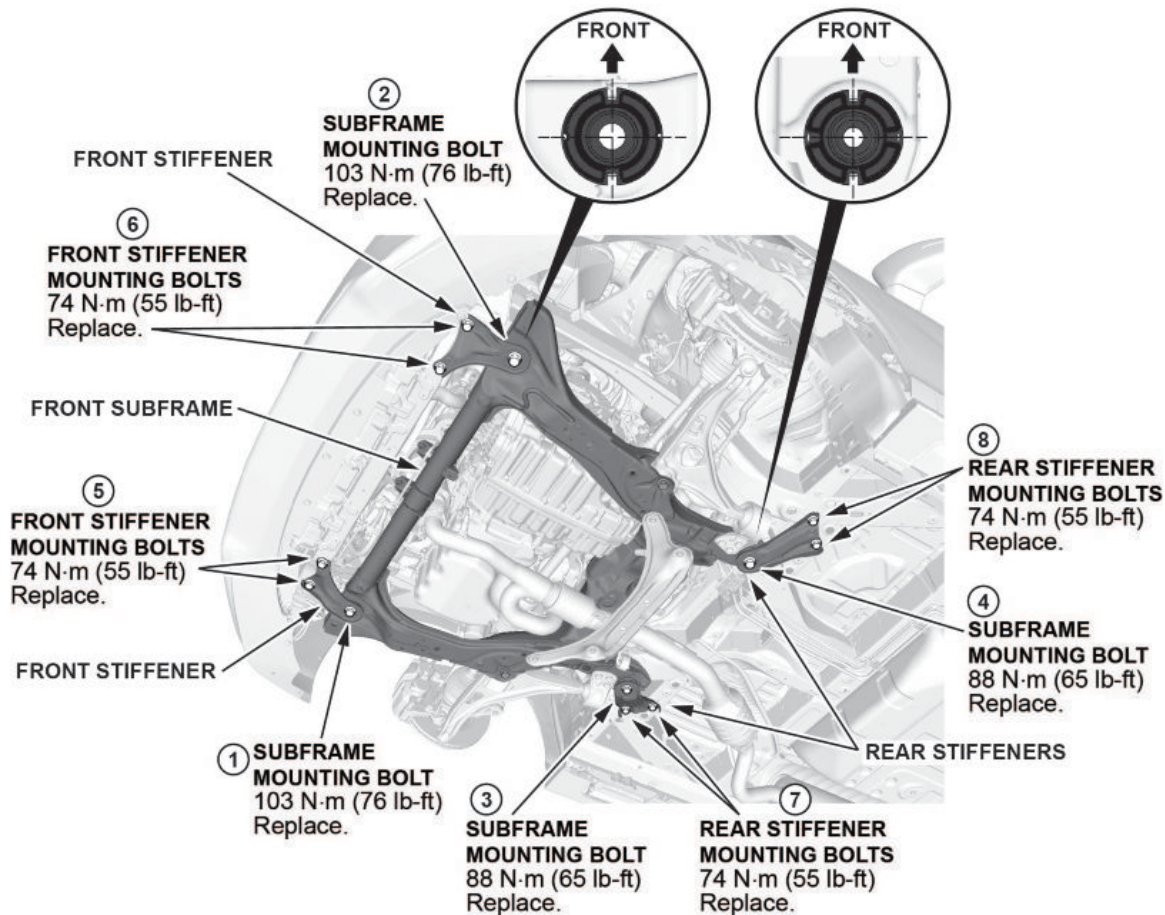


44. Remove the front subframe.

### NOTES

During installation do the following:

- After loosening the subframe bolts, be sure to replace them with new ones.
- Lift the subframe up to the body, and loosely install the new subframe mounting bolts, new front stiffener mounting bolts, front stiffeners, new rear stiffener mounting bolts, and rear stiffeners.
- Tighten the subframe mounting bolts to the torque specification as shown.
- Check all of the subframe mounting bolts, and tighten them if necessary.



45. Support the transmission with a transmission jack.

46. Disconnect both lower arm ball joints.

46.1. Remove the lock pin from the lower arm ball joint.

**NOTE**

During installation, install the lock pin as shown after tightening the castle nut.

46.2. Remove the castle nut.

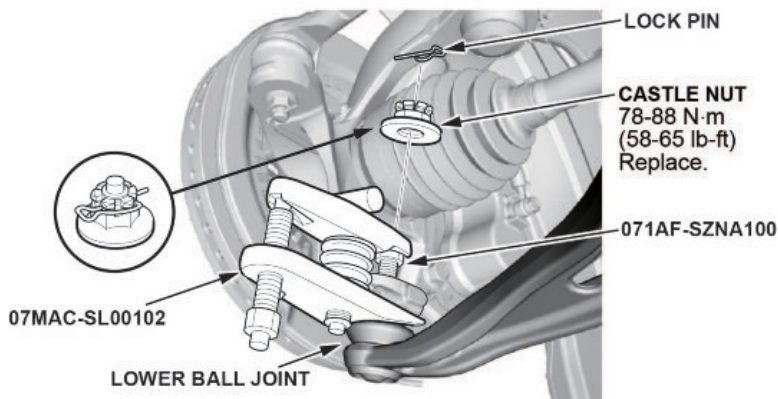
**NOTES**

- Use a new castle nut when installing.
- Torque the castle nut to the lower torque specification, then tighten it only far enough to align the slot with the ball joint pin hole. Do not align the castle nut by loosening it.

46.3. Disconnect the lower ball joint from the knuckle using the ball joint thread protector and the ball joint remover.

**NOTES**

- Be careful not to damage the ball joint boot when installing the ball joint remover.
- During installation do the following:
  - Be careful not to damage the ball joint boot when connecting the knuckle.
  - Degrease the ball joint before connecting the threaded section and the tapered portion of the ball joint pin, the ball joint connecting hole, the threaded section, and the mating surfaces of the castle nut.



47. Disconnect both inner driveline joints.

**NOTES**

Secure the driveshaft to the body on both sides with a nylon strap.

- Left driveshaft

47.1.1 Pry the inboard joint using a pry bar.

**NOTE**

Be careful to not damage the oil seal or the end of the inboard joint with a pry bar.

47.1.2 Remove the driveshaft as an assembly.

**NOTE**

Do not pull on the driveshaft, because the inboard joint may come apart. Pull the inboard joint straight out to avoid damaging the oil seal.

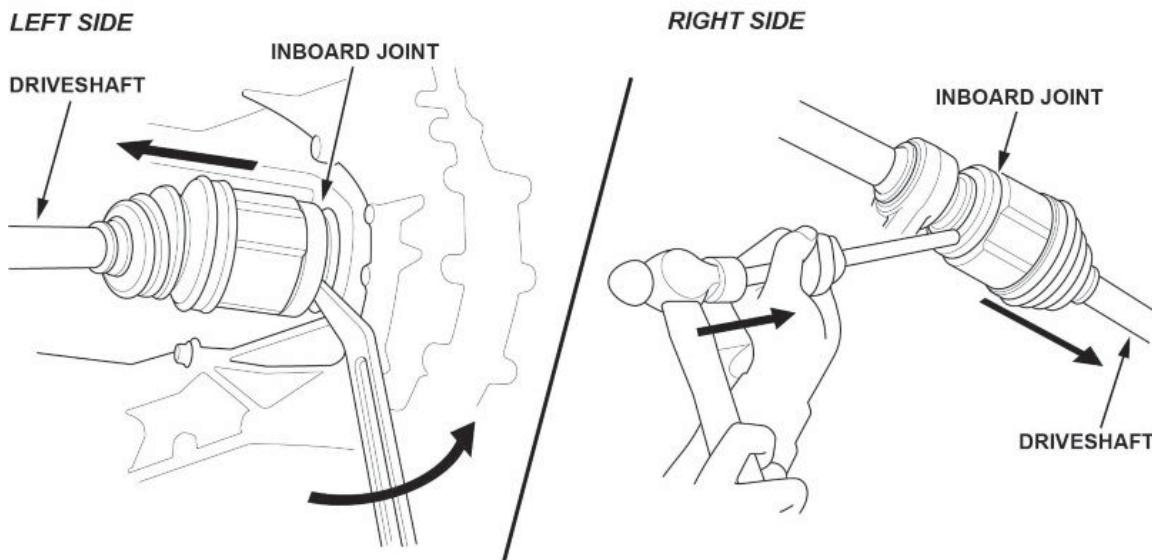
- Right driveshaft

47.2.1 Drive the inboard joint off of the intermediate shaft using a drift punch and a hammer.

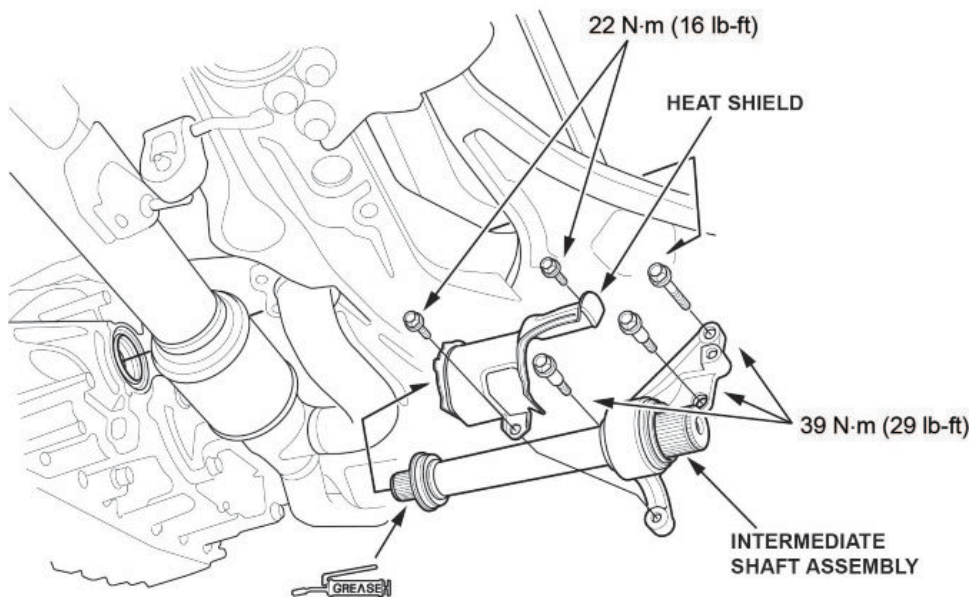
47.2.2 Remove the driveshaft as an assembly.

**NOTES**

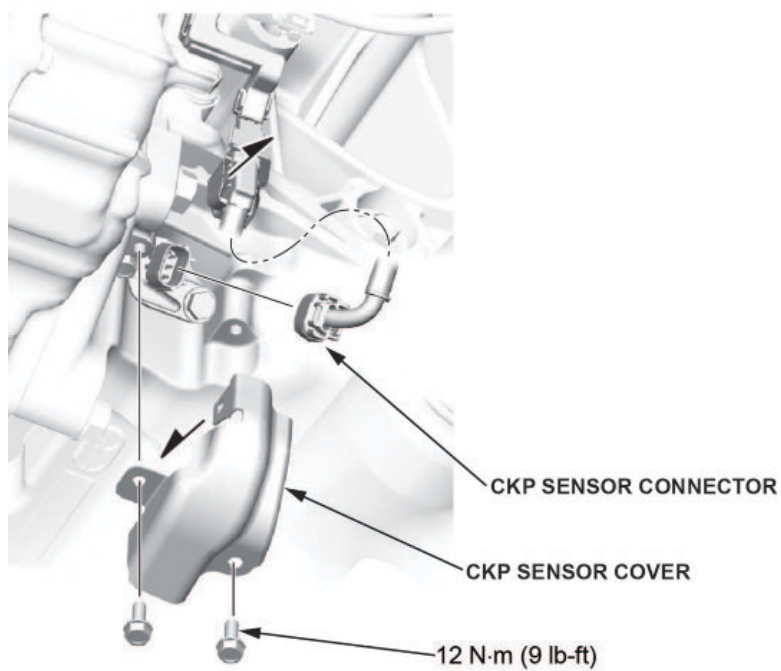
- Do not pull on the driveshaft, because the inboard joint may come apart. Pull the inboard joint straight out.
- Use new snap rings when installing the driveshaft.



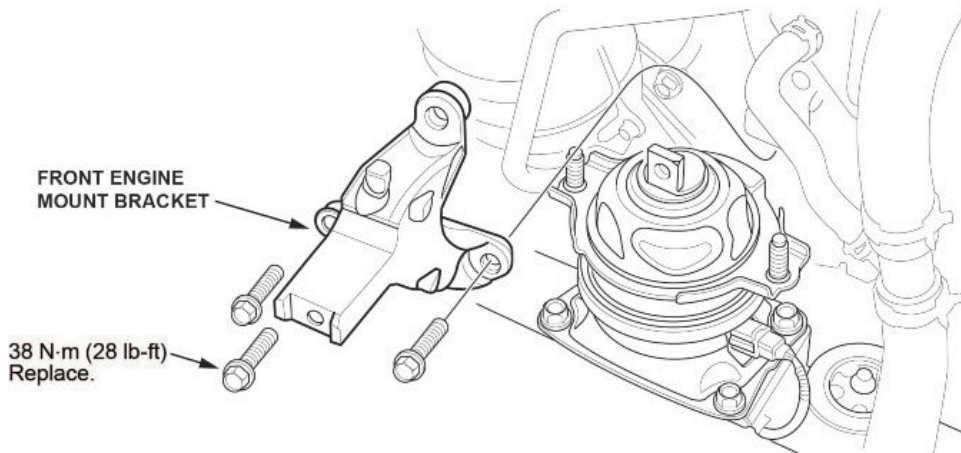
48. Remove the intermediate shaft assembly.



49. Disconnect the CKP sensor connector.



50. Remove the front engine mount bracket.



51. Disconnect the transmission ground strap.

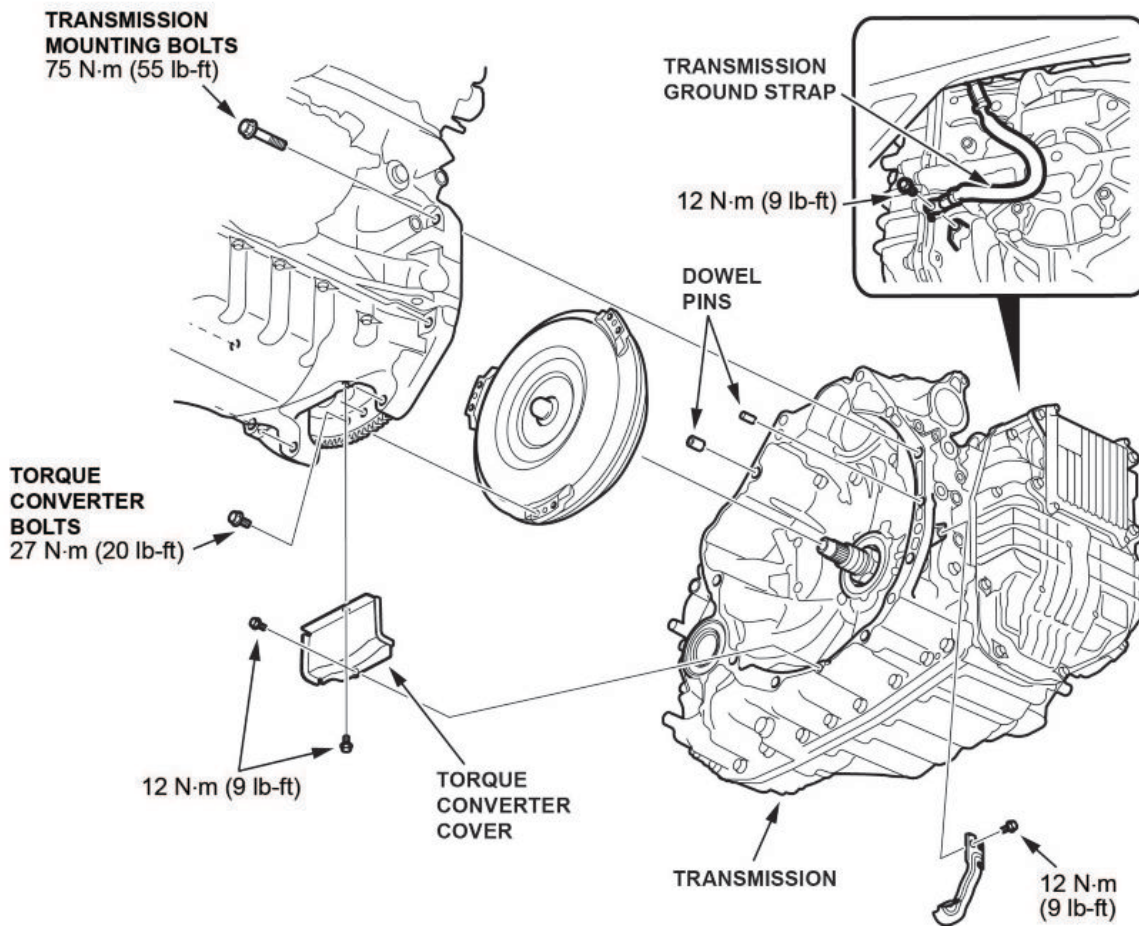
52. Remove the torque converter cover.

53. Remove the torque converter bolts.

54. Remove the remaining transmission mounting bolts.

55. Remove the transmission.

56. Remove the dowel pins, and install them on the new transmission.





57. Install the new transmission.
58. Install all removed parts in the reverse order of removal except the intake air duct and the front bulkhead cover. The battery terminals will still need to be inspected.

#### NOTES

- Make sure to replace all must-replace parts.
  - The reman transmission is prefilled with ATF. It does not need to be filled.
  - Use new snap rings when installing the drivelines.
59. Fill the cooling system with coolant.  
At coolant change: **7.4 L (1.90 US gal)** with coolant reservoir included.
  60. Do the keyless access registration.
  61. Go to BATTERY TERMINAL INSPECTION.

### BATTERY TERMINAL INSPECTION

1. Inspect the positive and negative battery terminals.

#### NOTICE

- Battery terminal installation on this vehicle is critical. Failure to follow the terminal installation or inspection procedures could cause electrical problems, stalling, and/or DTCs to set. Do not over torque the terminals, and do not use an impact gun.
- Battery terminal installation must be level or below the post. See GOOD and NO GOOD example pictures.

Compare both of the battery terminals to the examples below.

 GOOD



 NO GOOD



*Do the battery terminals look like the good example?*

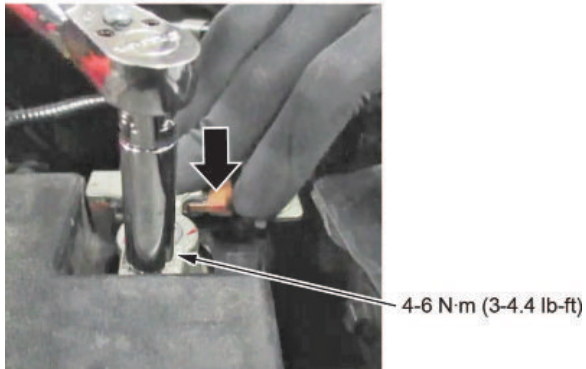
**Yes** - Go to step 2.

**No** - Go to TERMINAL REPAIR.

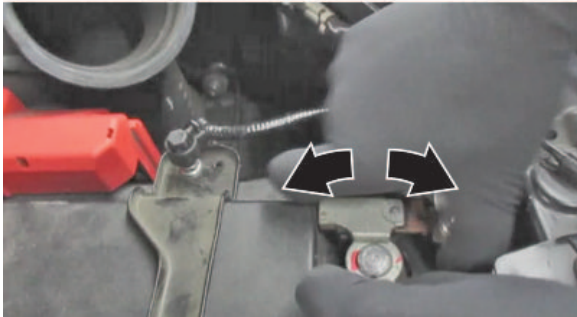
2. While holding down the terminal, torque both positive and negative clamps to **4-6 N•m (35-53 lb-in)**.

**NOTE**

Do not over torque the terminal.



3. Make sure the connection is tight by wiggling the terminals back and forth.



*Are both terminals secure?*

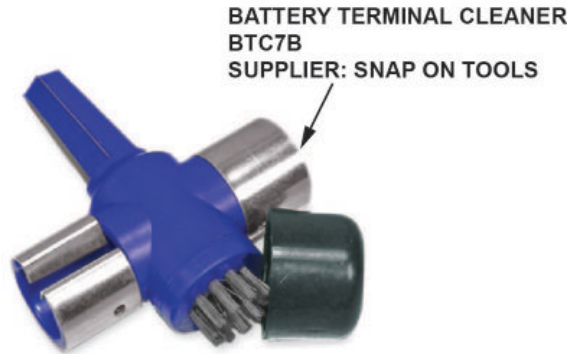
**Yes** - Apply multipurpose grease to the terminals to prevent corrosion, and install the air intake duct and the bulkhead cover. Then, do the following steps:

- 3.1. Check the front-end alignment.
- 3.2. Do the VSA Sensor Neutral Position Memorization procedure.
- 3.3. Test-drive the vehicle, and confirm the repair.

**No** - Go to TERMINAL REPAIR.

## TERMINAL REPAIR

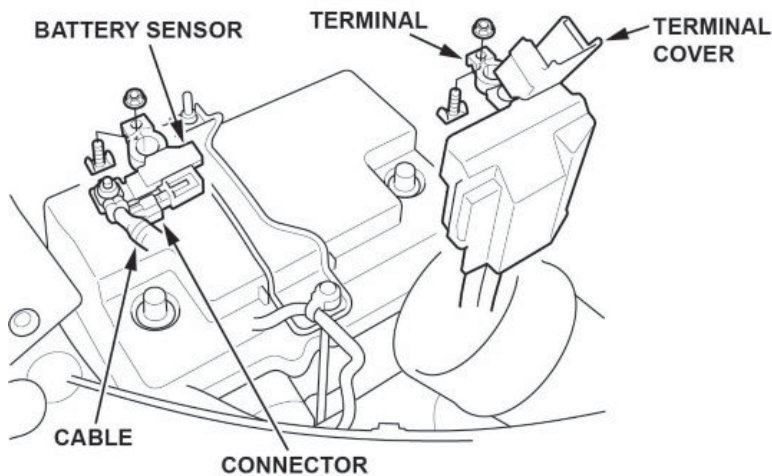
1. Remove the terminal or terminals, and clean the post using an approved battery terminal cleaner or equivalent.



- 1.1. Make sure the ignition is turned to OFF.
- 1.2. Disconnect and isolate the negative cable with the battery sensor from the battery.

### NOTES

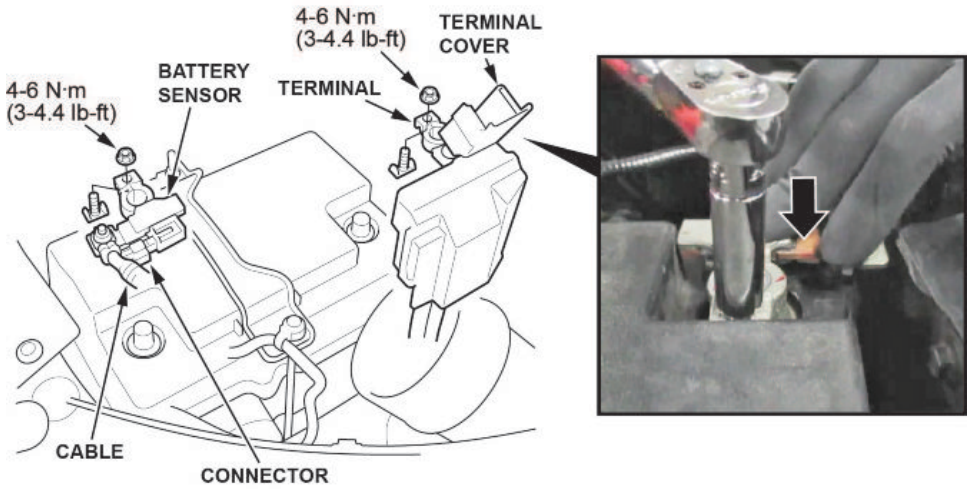
- Always disconnect the negative side first.
  - To prevent damage to the connector, do not hold it when removing the battery terminal.
  - Do not disconnect the battery sensor from the cable.
- 1.3. Open the terminal cover.
  - 1.4. Disconnect the terminal from the battery.



2. While holding down the terminal, torque both positive and negative clamps to **4-6 N•m (35-53 lb-in)**.

**NOTES**

- Do not over torque the terminal.
- Always connect the positive side first.



3. Compare both of the battery terminals to the examples below.

 **GOOD**



 **NO GOOD**

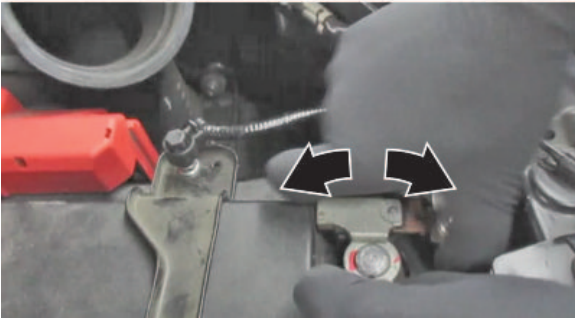


*Do the battery terminals look like the good example?*

**Yes** - Go to step 4.

**No** - Go to REPLACE BATTERY TERMINAL.

4. Make sure the connection is tight by wiggling the terminals back and forth.



*Are both terminals secure?*

**Yes** - Apply multipurpose grease to the terminals to prevent corrosion, and install the air intake duct and the bulkhead cover. Then do the following steps:

- 4.1. Check the front-end alignment.
- 4.2. Do the VSA Sensor Neutral Position Memorization procedure.
- 4.3. Test-drive the vehicle, and confirm the repair.

**No** - Go to REPLACE BATTERY TERMINAL.

## REPLACE BATTERY TERMINAL

1. Remove the battery terminal that does not sit at or below the top of the post.
2. Install a new terminal, and torque the terminal and clamp nut to **4-6 N•m (35-53 lb-in)** while holding it down.

### NOTES

- Always disconnect the negative side first.
  - To prevent damage, do not hold the connector when removing the battery terminal.
  - Do not disconnect the battery sensor from the cable.
3. Compare both of the battery terminals to the examples below.

 **GOOD**



 **NO GOOD**

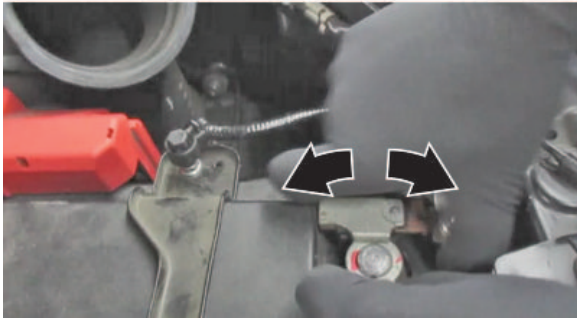


*Do the battery terminals look like the good example?*

**Yes** - Go to step 4.

**No** - Go to BATTERY REPLACEMENT, BATTERY RESISTANCE RESET PROCEDURE.

4. Make sure the connection is tight by wiggling the terminals back and forth.



*Are both terminals secure?*

**Yes** - Apply multipurpose grease to the terminals to prevent corrosion, and install the air intake duct and the bulkhead cover. Then, go do the following steps:

- 4.1. Check the front-end alignment.
- 4.2. Do the VSA Sensor Neutral Position Memorization procedure.
- 4.3. Test-drive the vehicle, and confirm the repair.

**No** - Go to BATTERY REPLACEMENT, BATTERY RESISTANCE RESET PROCEDURE.

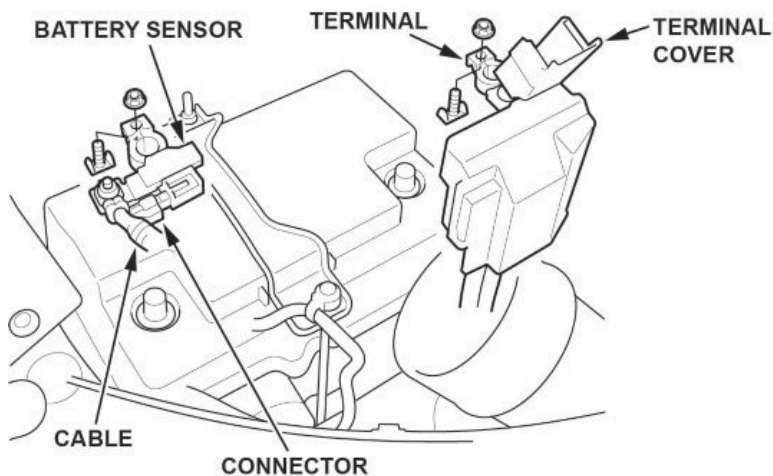
## BATTERY REPLACEMENT, BATTERY RESISTANCE RESET PROCEDURE

1. Disconnect the battery terminals.
  - 1.1. Make sure the ignition is turned to OFF.
  - 1.2. Disconnect and isolate the negative cable with the battery sensor from the battery.

### NOTES

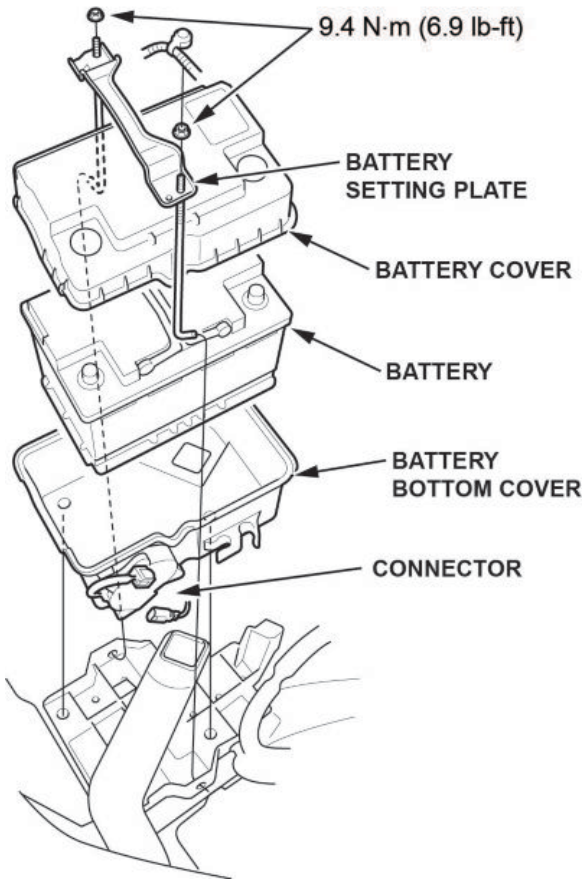
- Always disconnect the negative side first.
- To prevent damage to the connector, do not hold it when removing the battery terminal.
- Do not disconnect the battery sensor from the cable.

- 1.3. Open the terminal cover.
- 1.4. Disconnect the terminal from the battery.



2. Remove the setting plate.

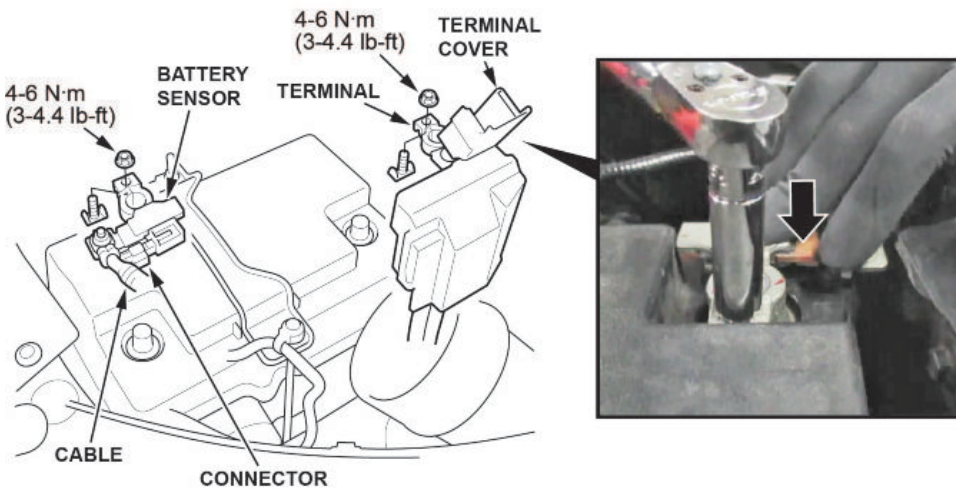
3. Remove the battery cover.
4. Remove the battery.



5. Install a new battery. Then reinstall the battery cover, and the setting plate in the reverse order of removal.
6. While holding down the terminal, torque both positive and negative clamps to **4-6 N·m (35-53 lb-in)**.

**NOTES**

- Do not over torque the terminal.
- Always connect the positive side first.



7. Compare both of the battery terminals to the examples below.

 **GOOD**



 **NO GOOD**

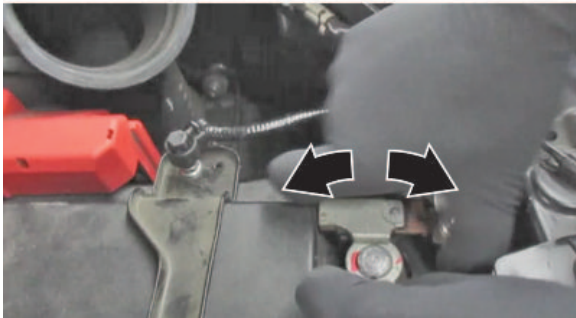


*Do the battery terminals look like the good example?*

**Yes** - Go to step 8.

**No** - Remove the terminal, and reinstall the terminals, then go to step 7.

8. Make sure the connection is tight by wiggling the terminals back and forth.



*Are both terminals secure?*

**Yes** - Apply multipurpose grease to the terminals to prevent corrosion, and install the air intake duct and the bulkhead cover. Then go to BATTERY INTERNAL RESISTANCE RESET.

**No** - Remove and reinstall the terminals, then go to BATTERY INTERNAL RESISTANCE RESET.

## BATTERY INTERNAL RESISTANCE RESET

### NOTE

**Do this procedure only if the battery was replaced.**

1. Make sure all electrical systems (A/C, audio, lights, etc) are turned off.
2. Turn the ignition to OFF.
3. Turn the ignition to ACCESSORY.
4. Turn the ignition to ON.
5. Start the engine, and let it idle for **1 minute** or more.
6. Turn the ignition to OFF.



7. Repeat steps 3 thru 6 at least four times.

**NOTE**

The internal resistance of the battery may not be updated if the engine starts up immediately from the OFF position. It has to go through the ACCESSORY and ON position.

8. Turn the ignition to ON.
9. Connect the i-HDS and select **PGM-FI**.
10. Check **IDLE STOP INHIBIT (BATTERY DETERIORATION)** in the **Data List**.

Normal - The battery internal resistance test is complete.

INHIBITED - Replace the battery, then do the battery internal resistance reset procedure again.

11. Turn the ignition to OFF, and disconnect the i-HDS.
12. Check the front-end alignment.
13. Do the VSA Sensor Neutral Position Memorization procedure.
14. Test-drive the vehicle, and confirm the repair.

END