December 8, 2022 Version 2

Product Update: 2021 CR-V CVT Replacement

Supersedes 22-053, dated December 2, 2022, to revise the information highlighted in yellow.

AFFECTED VEHICLES

Year	Model	Trim	VIN Range
2021	CR-V with AWD	EX, EX-L, SE, Touring	Check the VIN status for eligibility.

REVISION SUMMARY

- Under PARTS INFORMATION, the quantity was updated.
- Under REQUIRED MARTERIALS, a part number was changed.
- Under REPAIR PROCEDURE, a step was added.

BACKGROUND

Due to an improper heat treatment during the manufacturing process, the driven pulley in the CVT was not properly hardened. Over time, this may lead to abnormal wear to the driven pulley or damage to the CVT belt which may cause the vehicle to experience a slip accompanied by an abnormal noise and multiple warning lights. Some vehicles may not move forward after coming to a stop.

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. Repair these vehicles before they are sold.

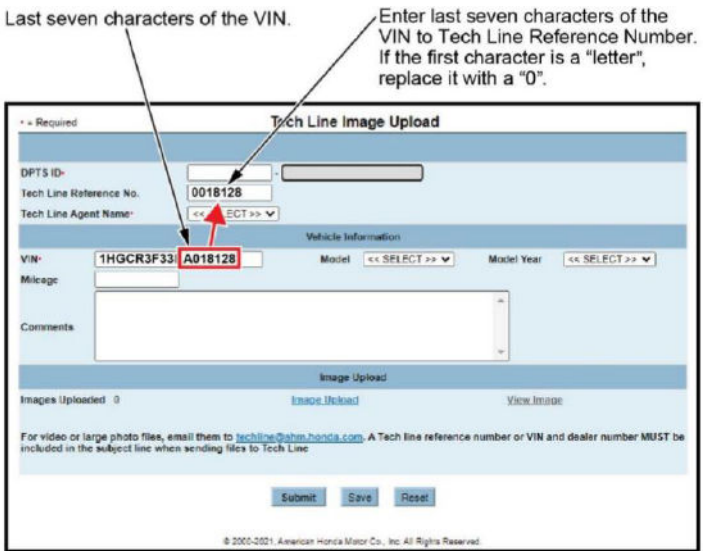
CORRECTIVE ACTION

Replace the transmission if VIN is affected/included.

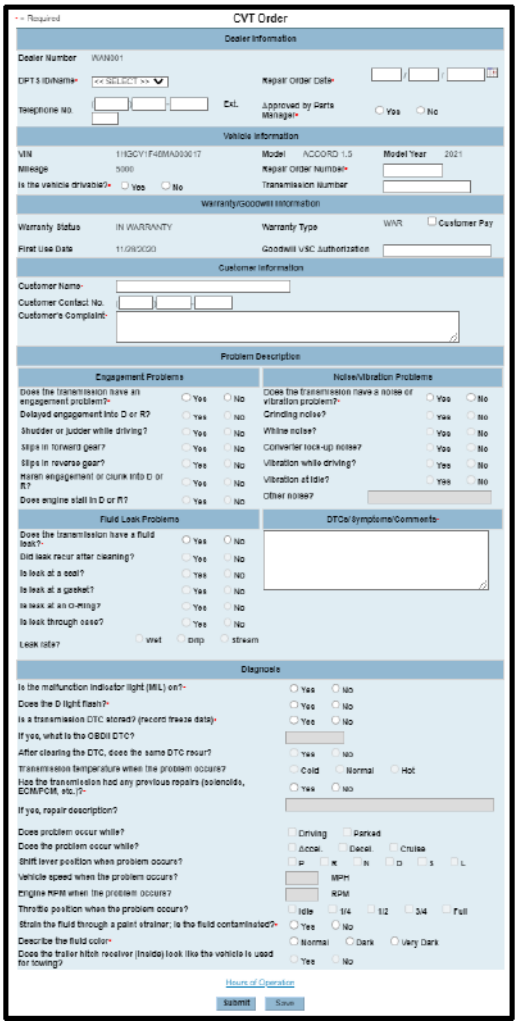
PARTS INFORMATION

Part Name	Part Number	Quantity
ATR Kit	06200-5RG-A21RM	1
Drain Plug Washer (18mm)	90471-PX4-000	1
Gasket (10mm)	90471-59C-000	1
Washer Bolt (8x20	93405-0802008	2
Exhaust Pipe Gasket	18302-SP0-003	2
Self-Lock Nut (10mm)	90212-SA5-003	8
Flange Bolt (12x35)	90164-T0A-A00	2
Flange Bolt (14x125)	90169-TLA-A01	1
Flange Bolt (12x50)	90167-TBA-A00	1
Flange Nut (12mm)	90371-TBA-A00	2
Flange Bolt (14x33)	90164-T6E-000	3
Split Pin (3.0x22)	94201-30220	2
Flange Nut (10mm)	90002-S10-000	2
Flange Bolt (14x50)	90181-TLA-A00	2
Flange Bolt (14x90)	90179-SDA-A00	4
Flange Bolt (14x79)	90170-SHJ-A00	2
Self-Lock Nut (12mm Clinch)	90215-SB0-003	6
Set Ring (28x2.0)	44319-SE0-000	2
!2 Point Bolt (8x21)	90113-S10-000	8
O-Ring (92x2.2)	91304-PRH-003	1
Flange Bolt (10x29)	90382-SH9-003	2

- To order a replacement transmission fill out **AT/CVT Order form under Reman Parts/Special Orders** section on iN.
- If you have not contacted Tech Line then use the last 7 digits of the VIN for the Tech Line Reference No.
- If the 11th character of the VIN has a letter instead of a number, replace it with a zero.
- **Select** Tech Line Agent Name-Tech Line.



- Fill out the **AT/CVT Order** form under **Reman Parts/Special** orders section on iN.



- Once the CVT order has been received, your order will be reviewed by RPO. Additional requests and images may be required by RPO before release of the CVT.

REQUIRED MATERIALS

Part Name	Part Number	Quantity
Super High Temp Urea Grease (One package will repair 10 vehicles)	08798-9002	1
HCF-2 (1 US QT)	08200-HCF2	9
Molykote M77 (One package will repair 10 vehicles)	08798-9010	1

TOOLS INFORMATION

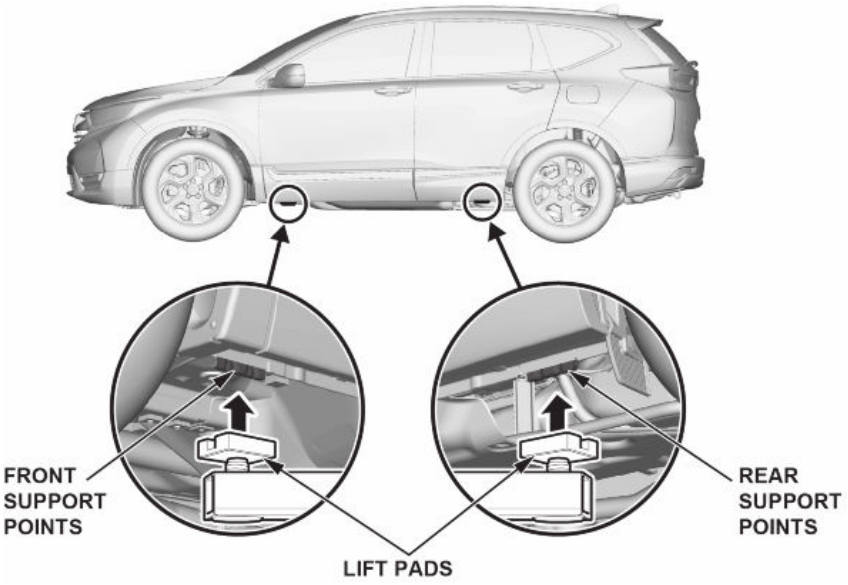
Part Name	Description
07AAF-SDAA100	Ball Joint Thread Protector
07AAF-SDAA100	Ball Joint Remover
VSB02C000016	Subframe Adapter
070AG-SJAA10S	Subframe Alignment Pin
AAR-T1256	Engine Support Hanger
07AAK-SNAA120	Universal Lifting Eyelet / SUB HANGER STAY

WARRANTY CLAIM INFORMATION

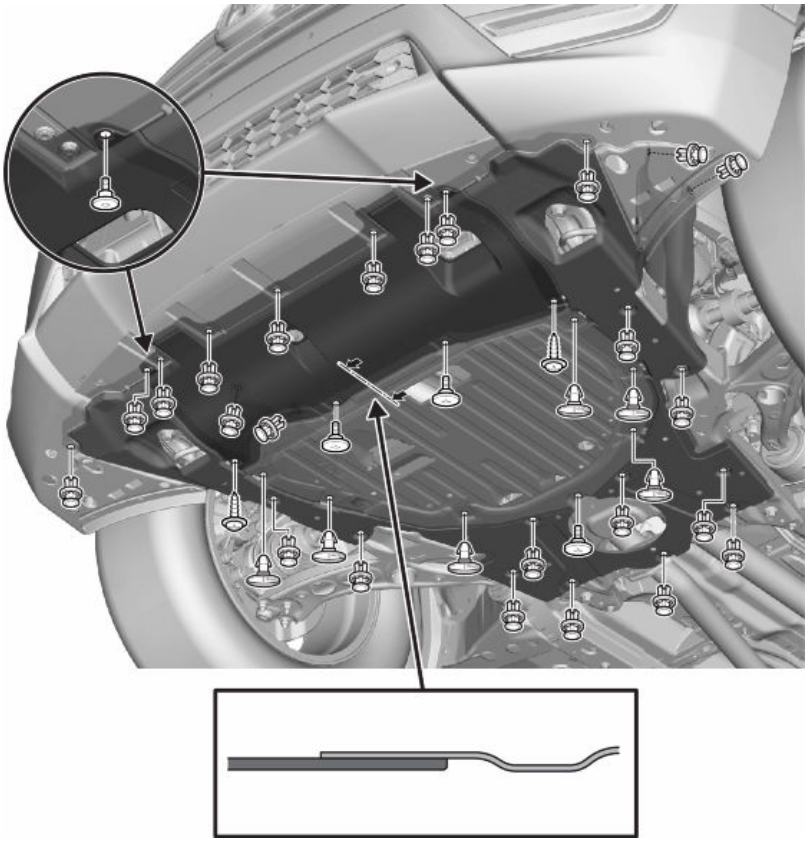
Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
2181DB	Replace the transmission (includes alignment).	6.8 hr	6VP00	MCP00	A22053A	20031-5RG-A20

REPAIR PROCEDURE

1. Put the vehicle on a lift.
   - Position the lift pads under the vehicle's front support points and rear support points.
   - Be sure the lift pads are properly placed to avoid damaging the vehicle.
   - Raise the lift a few inches, and rock the vehicle gently to be sure it is firmly supported.
   - Raise the lift to its full height, and inspect the vehicle support points for solid contact with the lift pads.

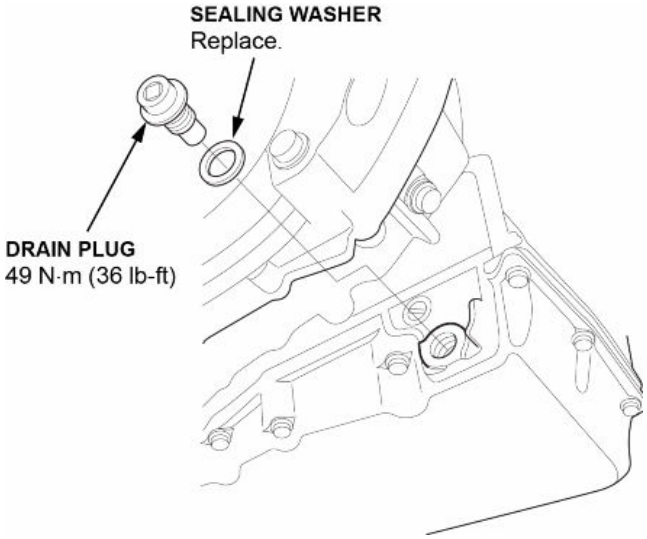


2. Remove the Engine Undercover.

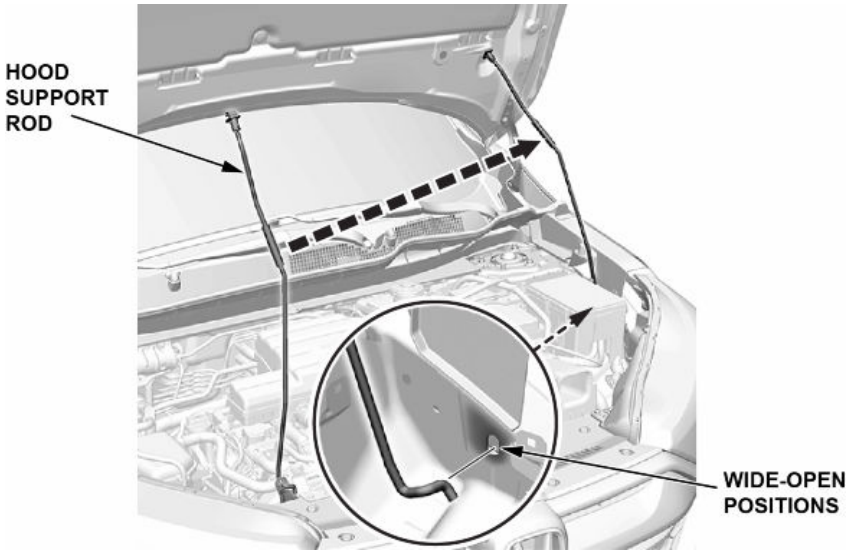


3. Drain the Transmission Fluid
   - Remove the drain plug with the sealing washer and drain the transmission fluid for at least **5 minutes.**

     NOTE:
     – Make sure not to burn yourself by nearby parts as they may be hot.
     – Remove metal particles from the magnetic surface of the drain plug.
   - Reinstall the drain plug with the same sealing washer.



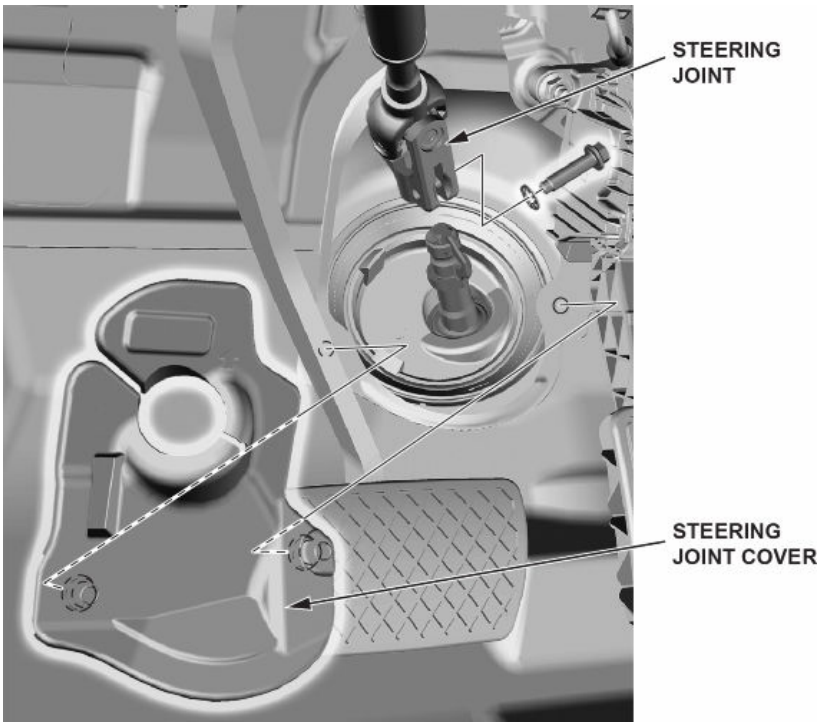
4. Lower the vehicle.
5. Open the hood.
   - Remove and relocate the hood support rod to wide-open positions and secure the hood.



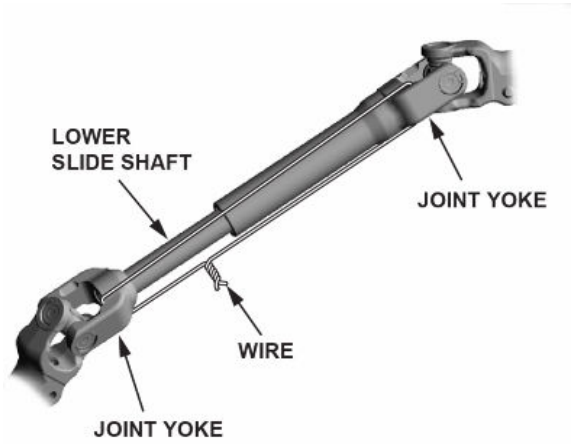
6. Disconnect the steering joint.

   NOTE: Hold the steering wheel with a steering wheel holder tool.

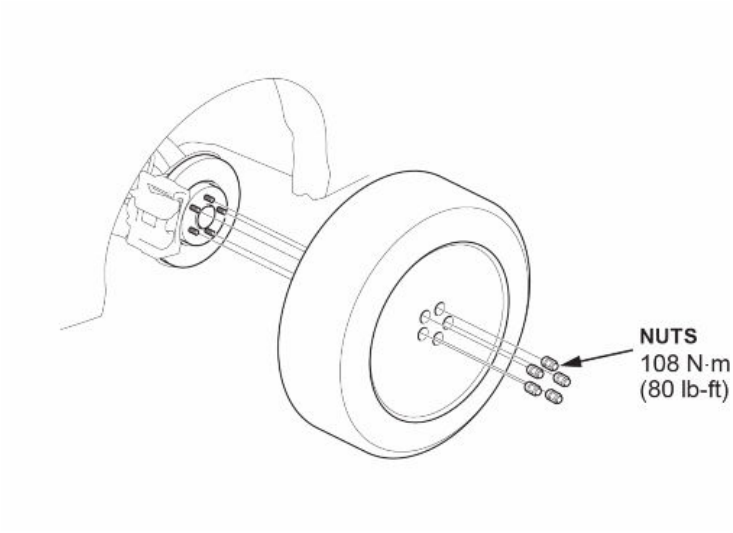
   - Remove the steering joint cover.
   - Disconnect the steering joint.



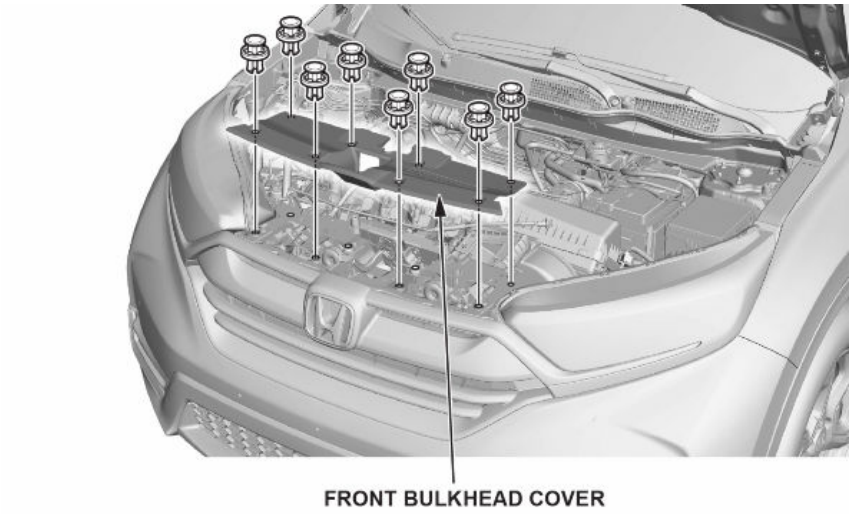
   - Hold the lower slide shaft on the column with a piece of wire between the joint yoke of the lower slide shaft and joint yoke of the upper slide shaft to prevent the lower slide shaft from pulling out.



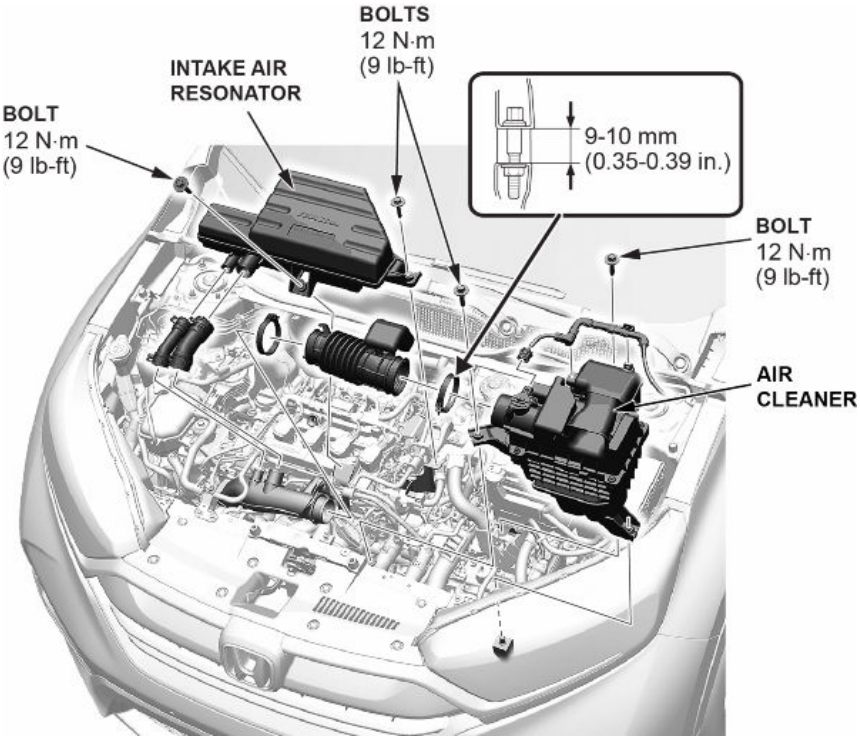
7. Remove the front wheels from both sides.



8. Remove the front bulkhead cover.

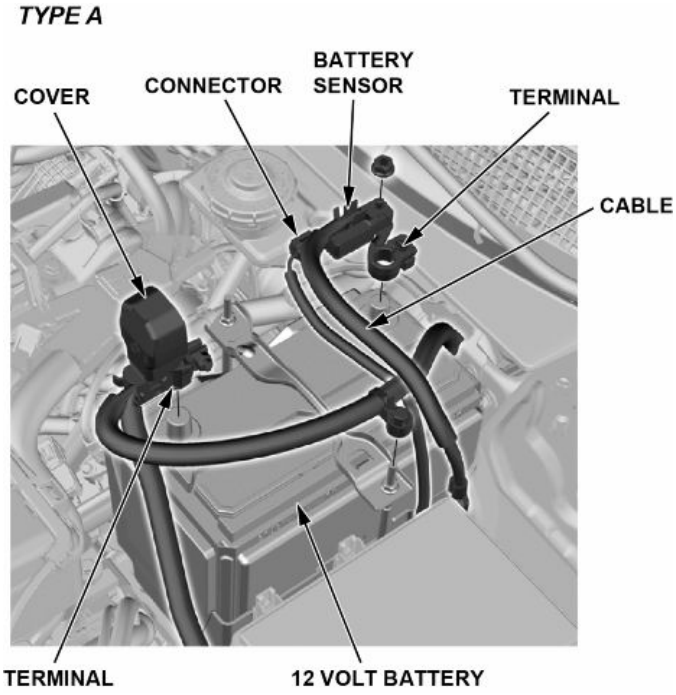


9. Remove the air cleaner.

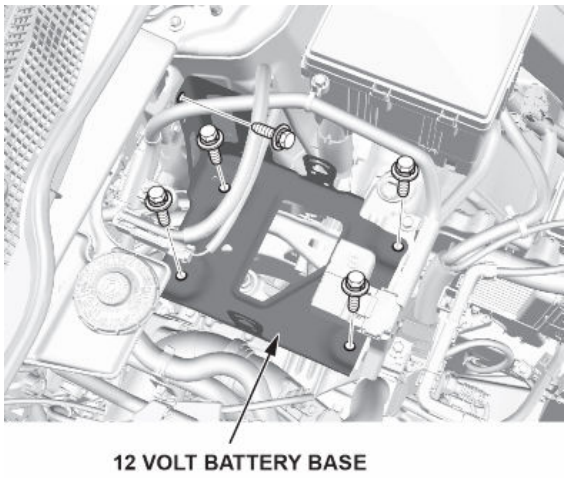


10. Remove the 12 volt battery.
    - Make sure the vehicle is turned to the OFF (LOCK) mode.
    - Disconnect and isolate the 12 volt battery sensor with the cable from the 12 volt battery.

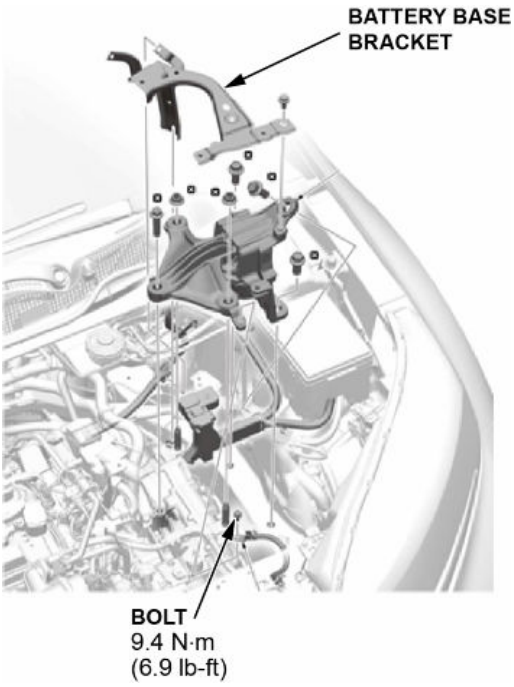
      NOTE:
      – Always disconnect the negative side first.
      – To protect the 12 volt battery sensor connector from damage, do not hold it when removing the terminal.
      – Do not disconnect the 12 volt battery sensor from the cable.
    - Open the cover.
    - Disconnect the terminal from the 12 volt battery.
    - Remove the battery.



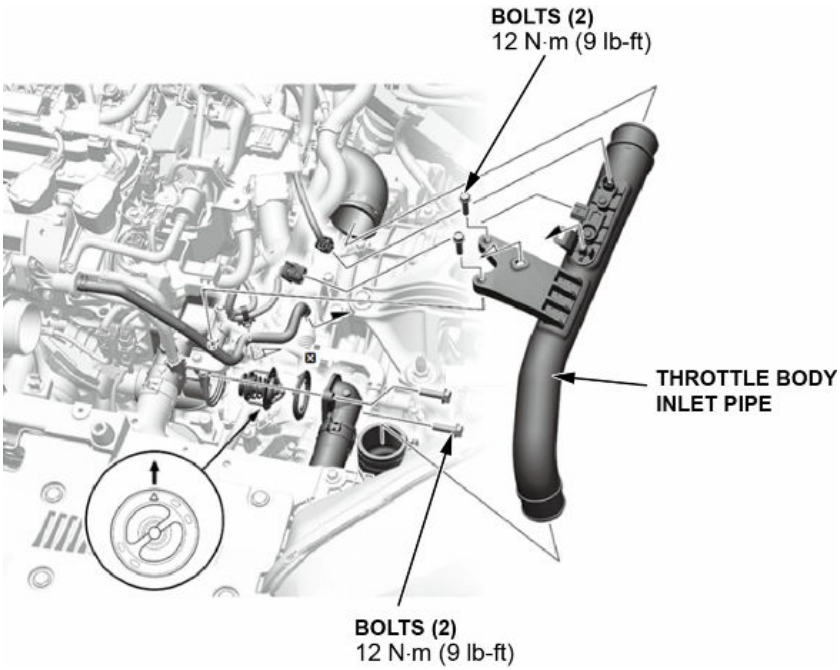
11. Remove the 12 volt battery base.



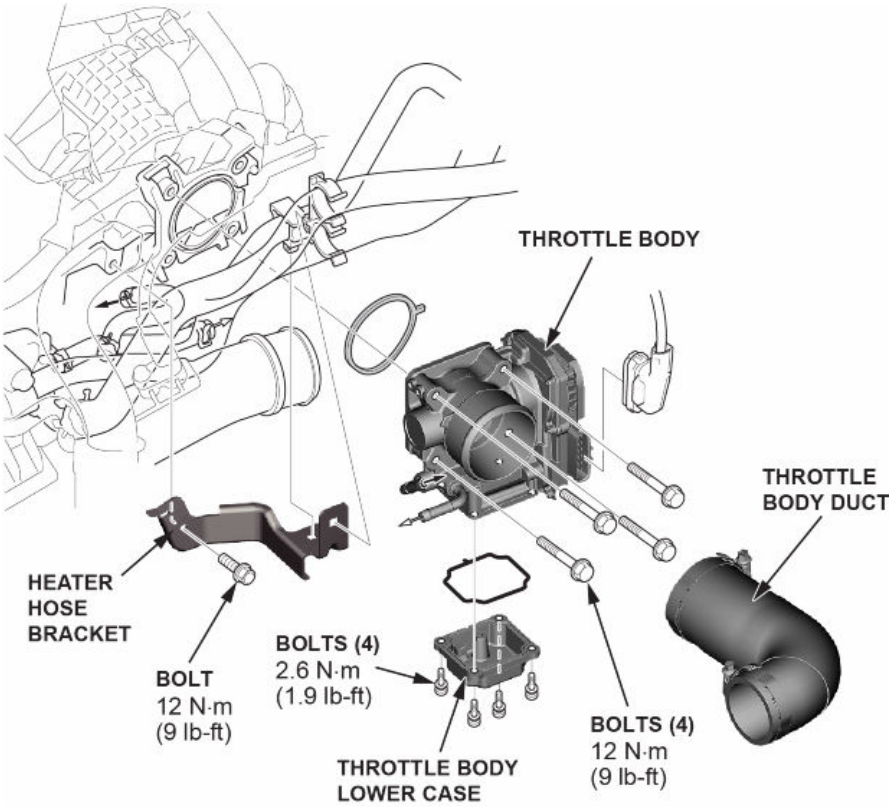
12. Remove the 12 volt battery base bracket.



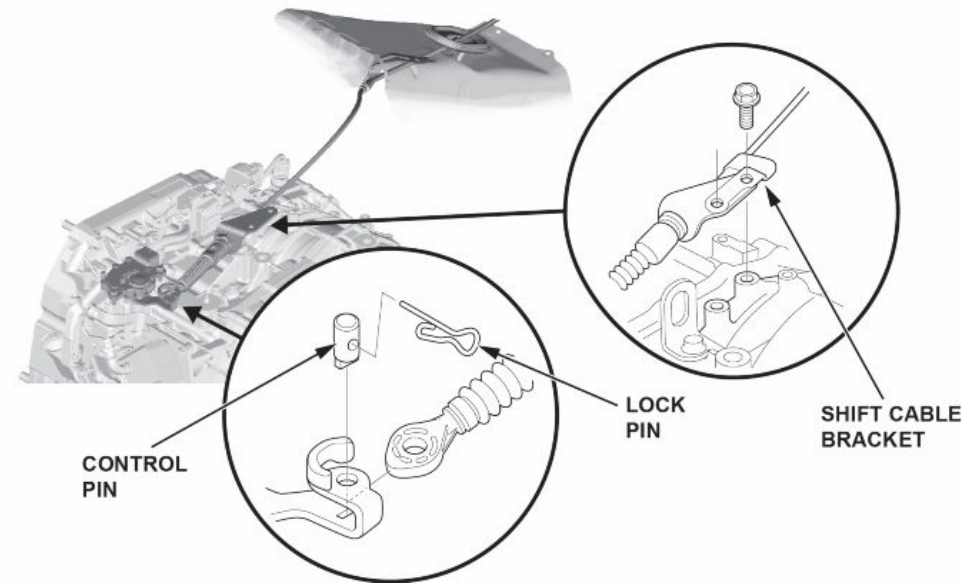
13. Remove the throttle body inlet pipe.



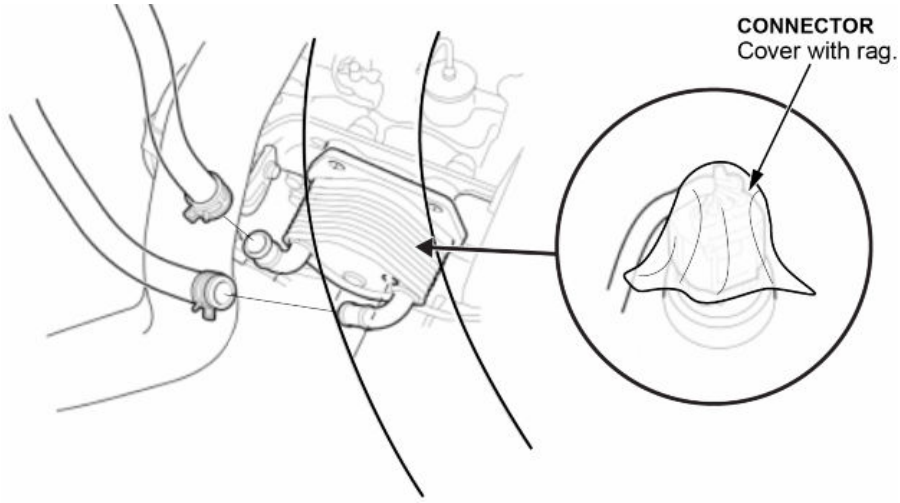
14. Remove the throttle body duct.



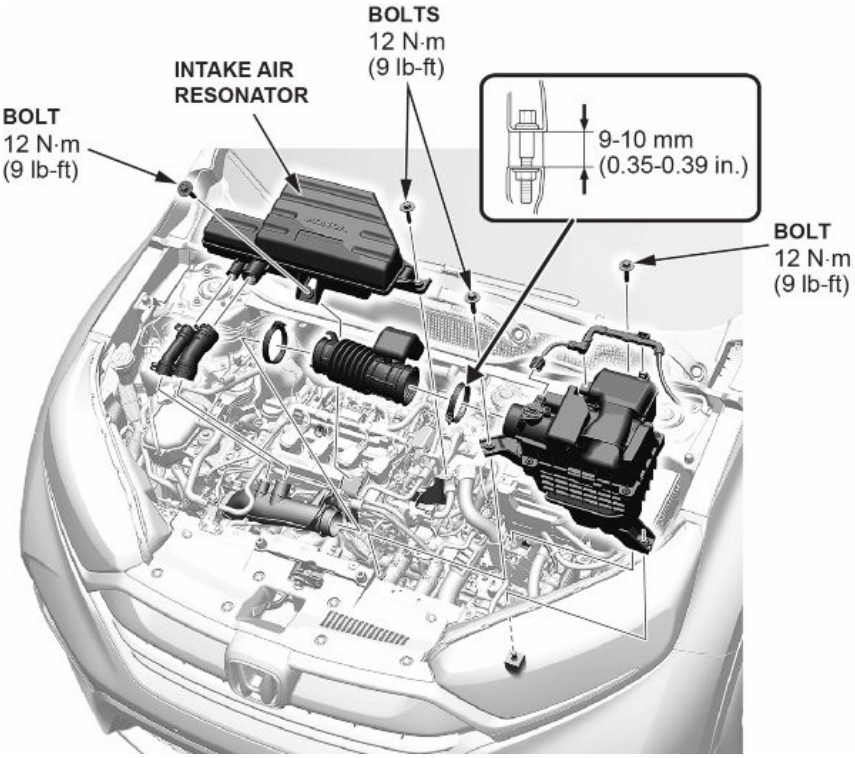
15. Remove the shift cable (transmission side).



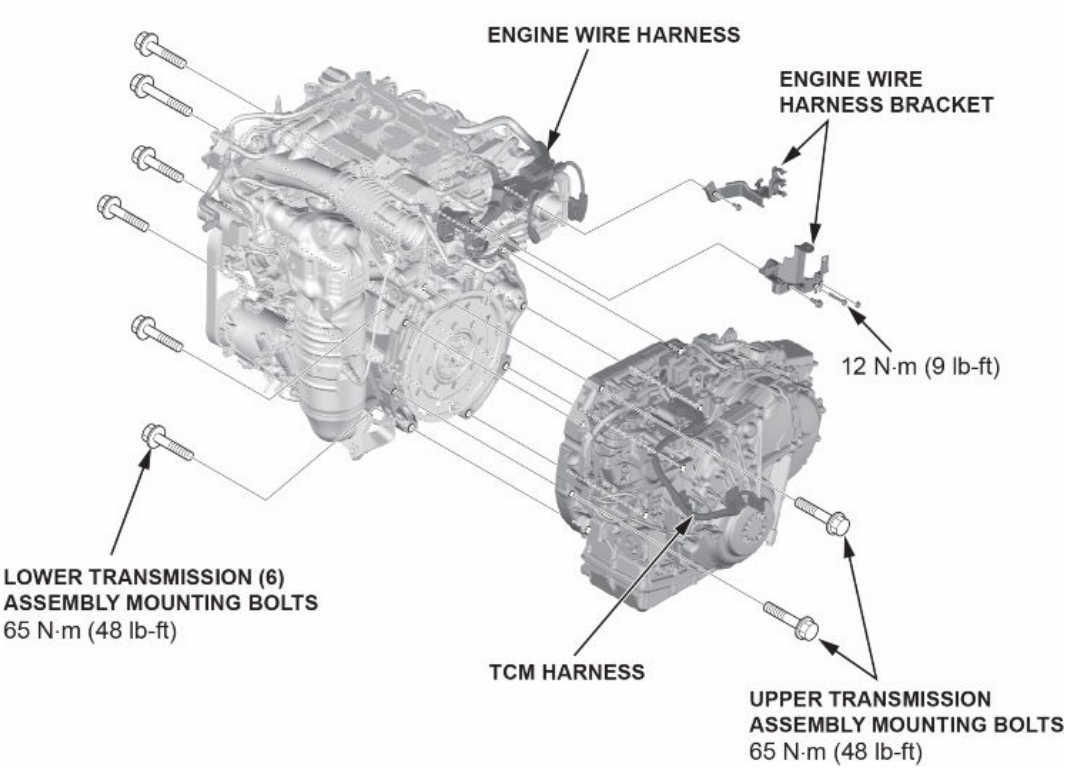
16. Remove the CVTF warmer hoses.
    - Pinch/Clamp CVTF warmer hoses and remove them from the CVTF warmer.



17. Remove the intake air resonator.

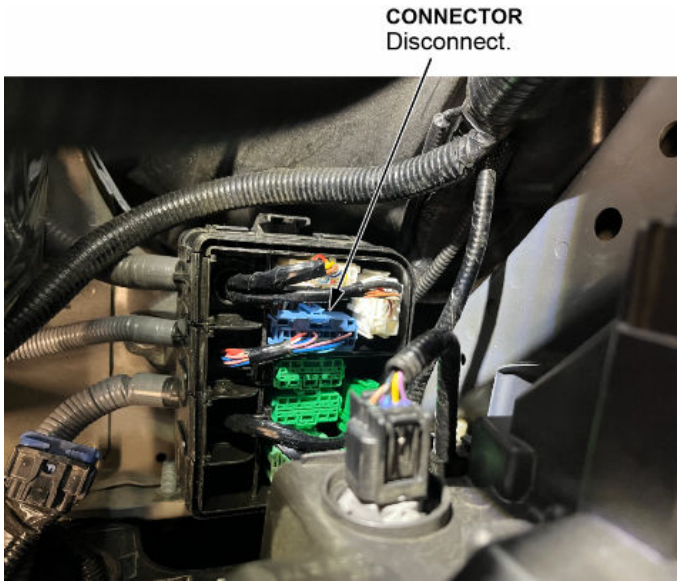


18. Remove the engine wire harness bracket.

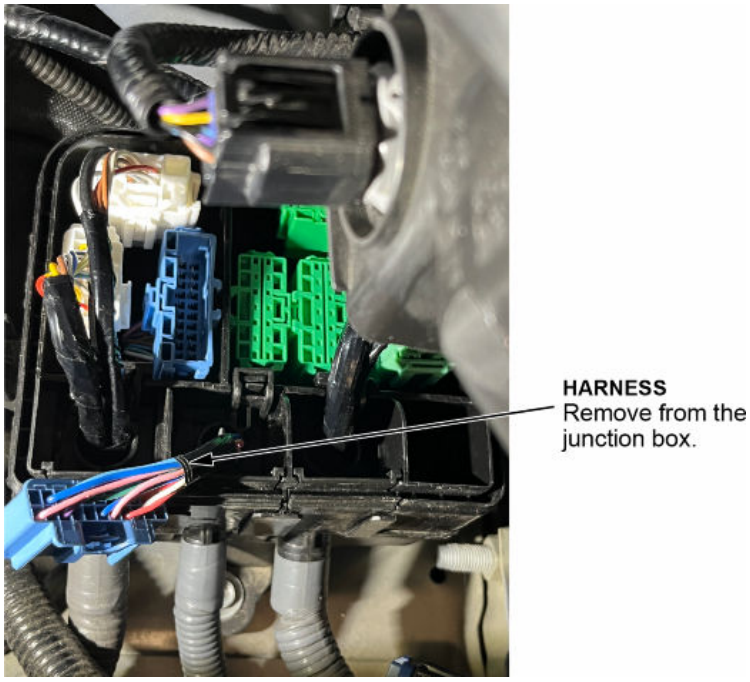


19. Remove the junction box cover.

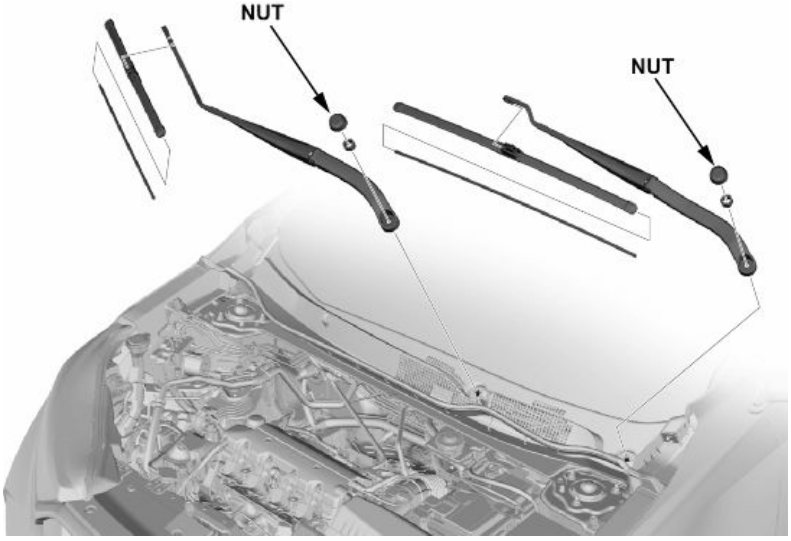
20. Disconnect the TCM harness connector.



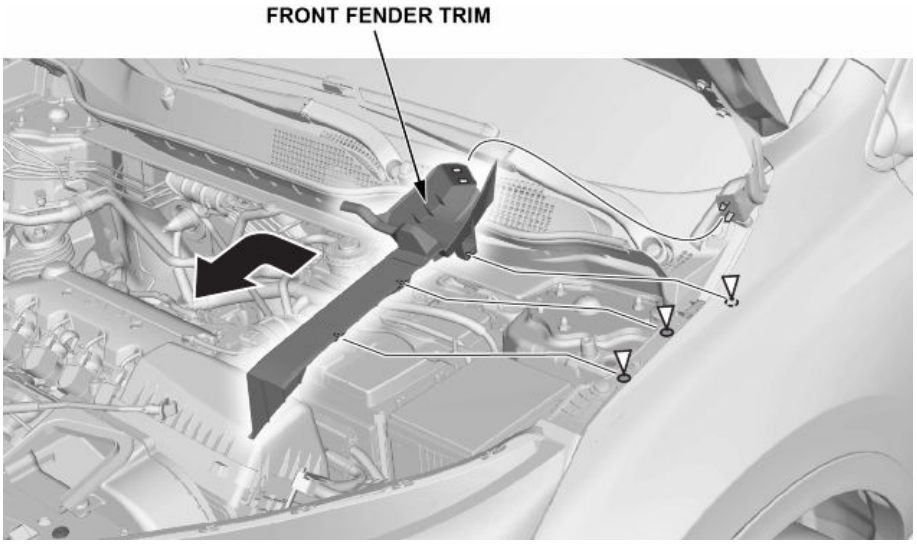
21. Pull the harness out of the junction box.



22. Remove the windshield wiper arm.

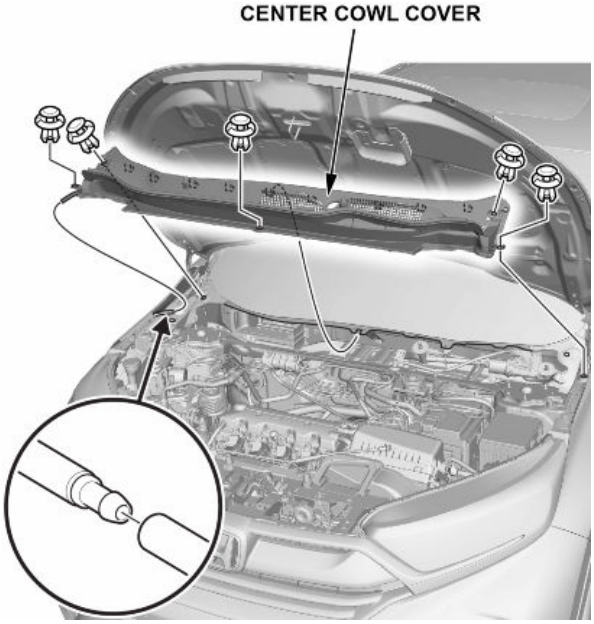


23. Remove both front fender trims.



24. Remove the both side cowl covers.

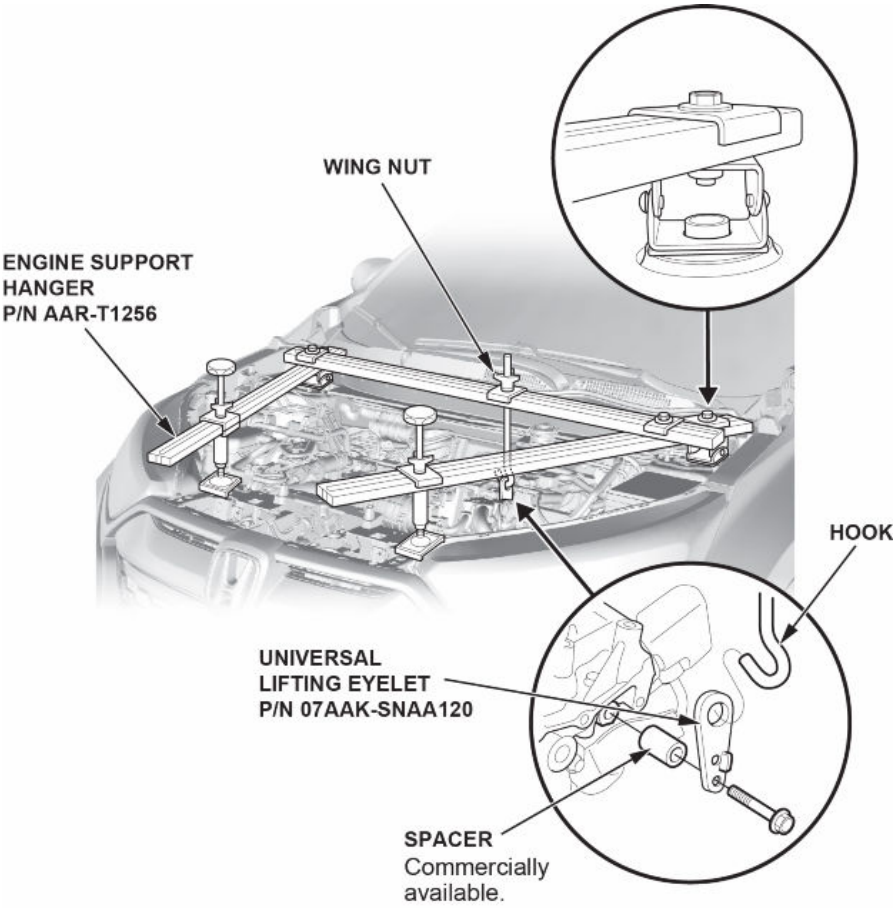
25. Remove the center cowl cover.
    - Disconnect the windshield washer tube.



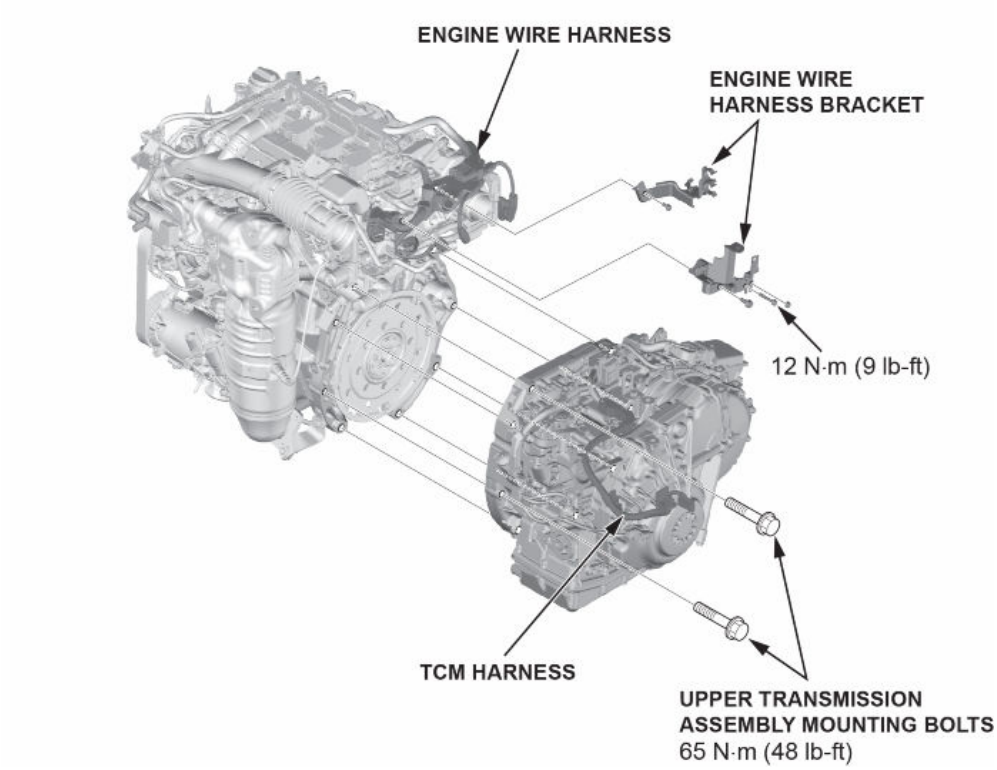
26. Install the engine support hanger.

    NOTE: Be careful when working around the windshield.

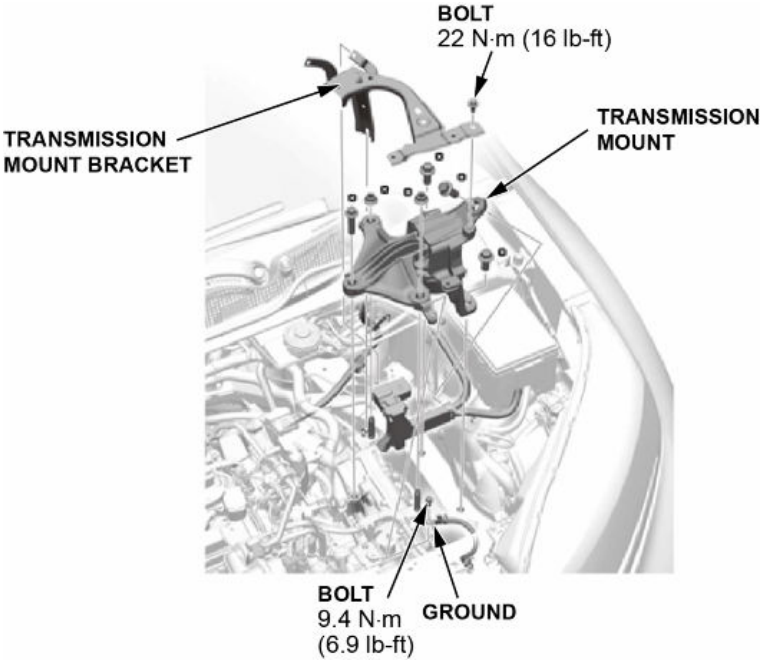
    - Remove the front damper caps.
    - Install the sub-hanger stay with an approximately **50 mm (2.00 in)** commercially available spacer.
    - Install the engine support hanger onto the vehicle as shown.
    - Attach the hook to the slotted hole in the sub hanger stay.
    - Tighten the wing nut by hand and lift and support the engine/transmission.



27. Remove the upper transmission assembly mounting bolts.

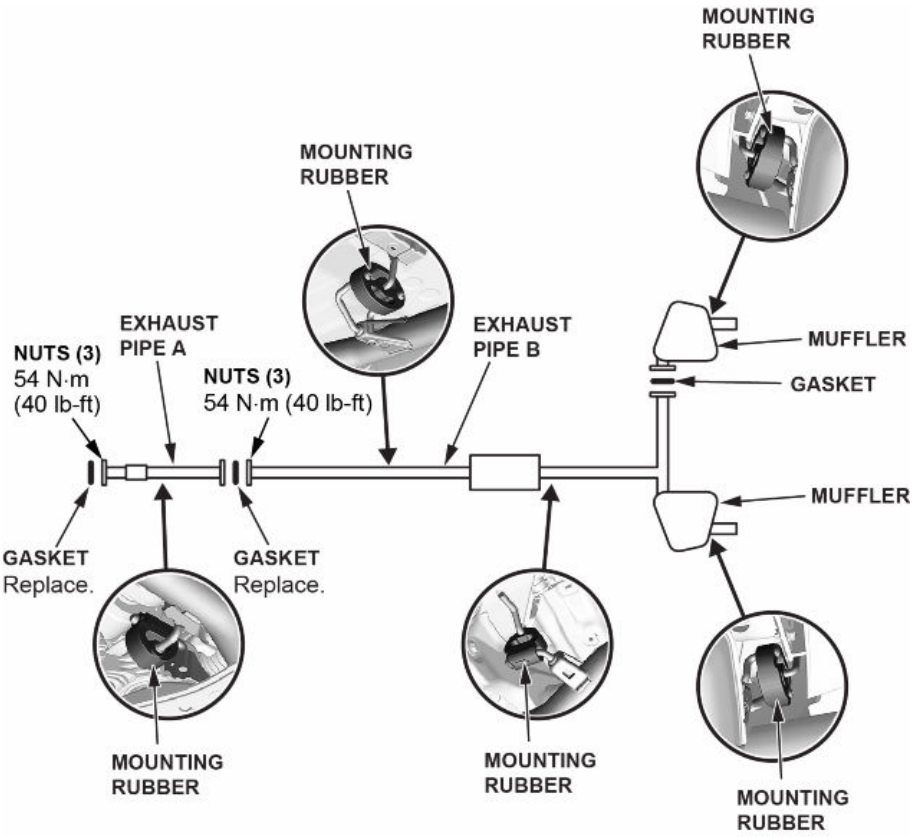


28. Remove the transmission mount.



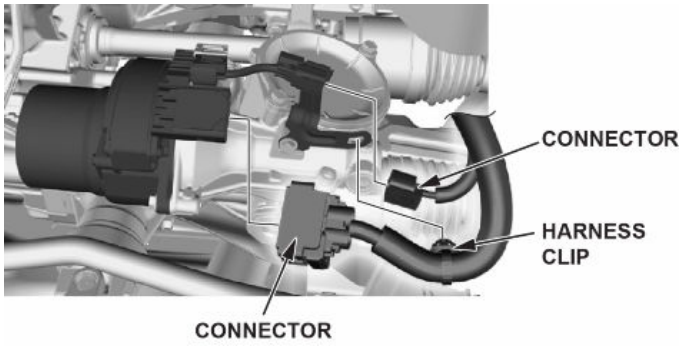
29. Lift the vehicle up.

30. Remove the exhaust pipe A.



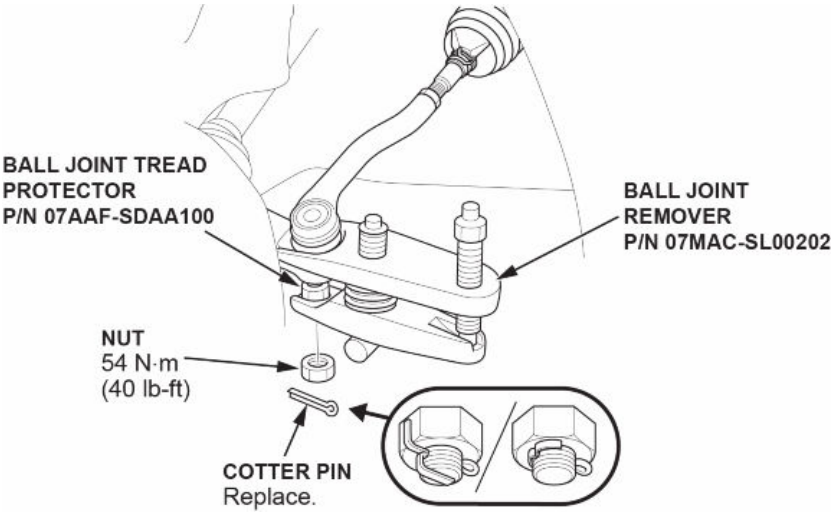
31. Disconnect the EPS sub-harness.
    - Disconnect the connectors.

      NOTE: Wrap the connectors with vinyl tape to avoid contamination from grease or water.
    - Remove the harness clip.



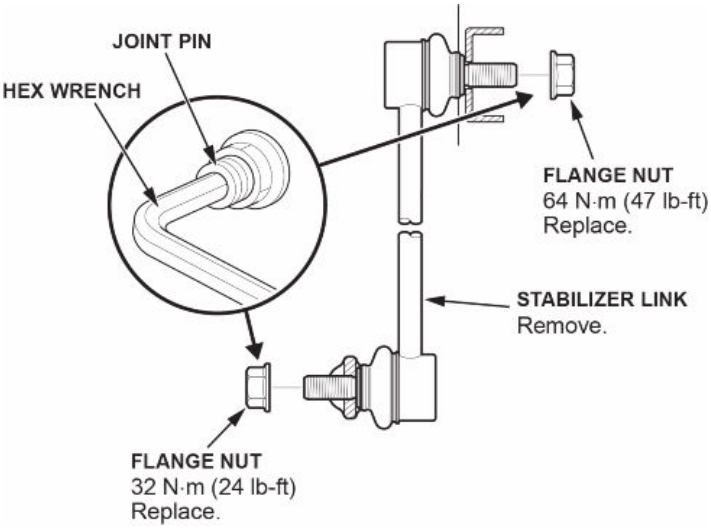
32. Disconnect the tie-rod end ball joint.
    - Remove the cotter pin.
    - Remove the nut.
    - Disconnect the tie-rod end ball joint from the knuckle using the ball joint thread protector and the ball joint remover.

      NOTE: Make sure not to damage the ball joint boot when installing the ball joint remover.
    - During installation, install the new cotter pin after tightening the nut, and bend its end as shown.

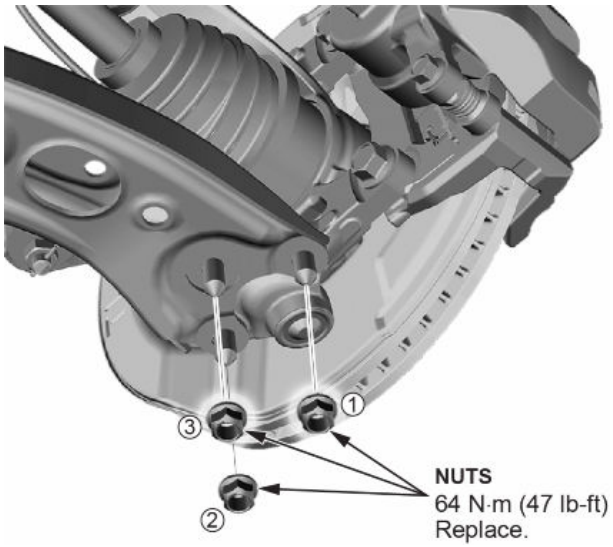


33. Disconnect the stabilizer link ball joint.
    - Remove the flange nuts while holding the respective joint pin with a hex wrench.

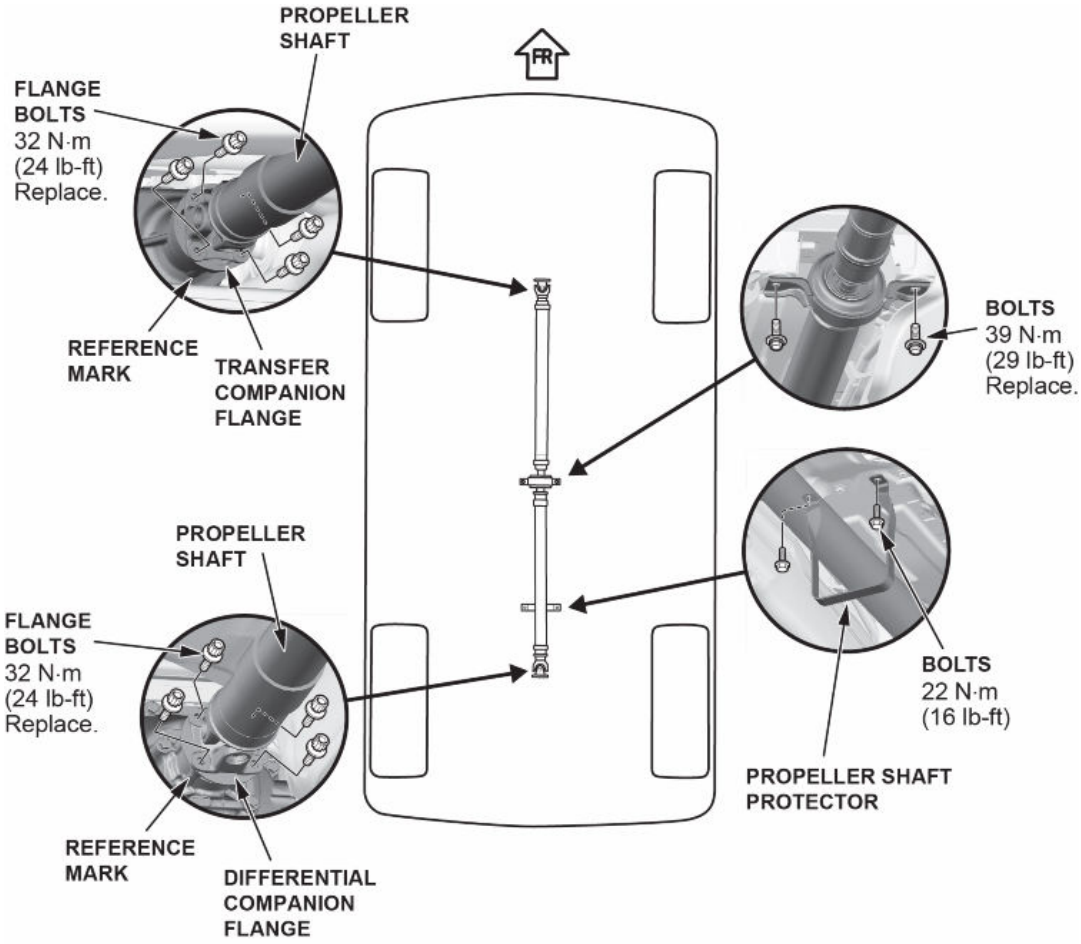
      NOTE: Use new flange nuts during reassembly.
    - Remove the stabilizer link.



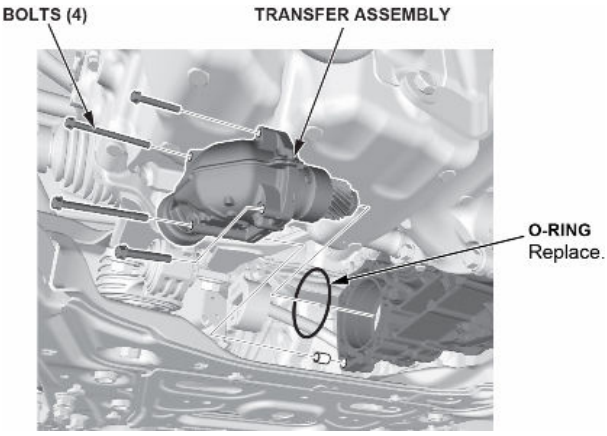
34. Disconnect the lower arm ball joints.



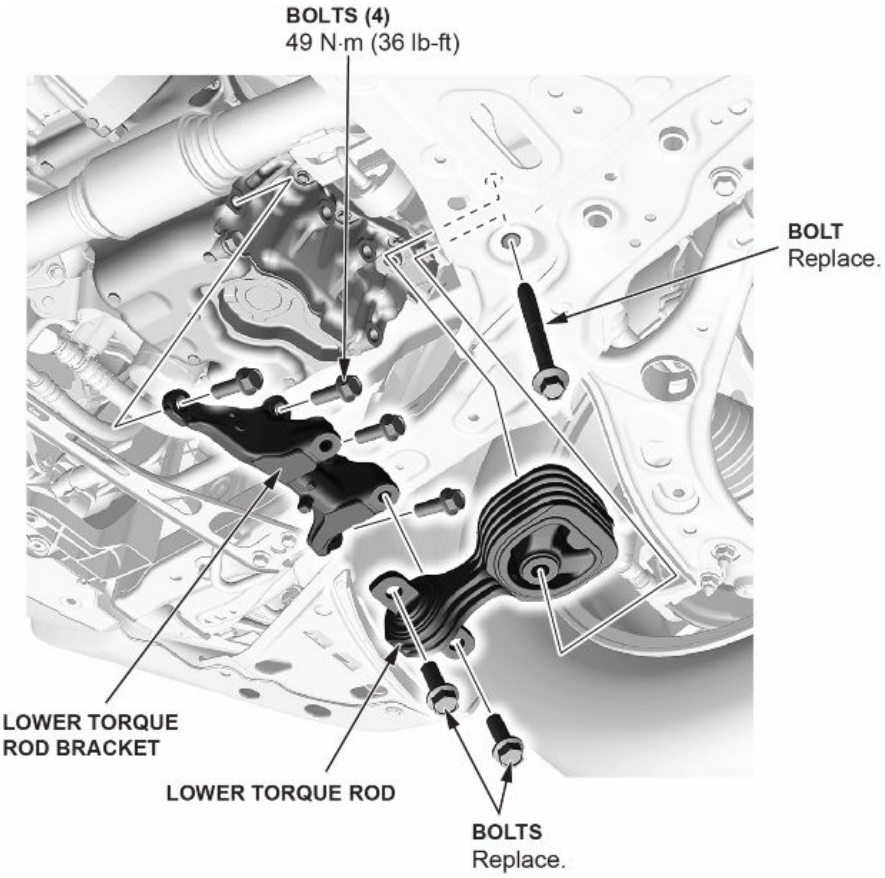
35. Remove the propeller shaft (AWD).



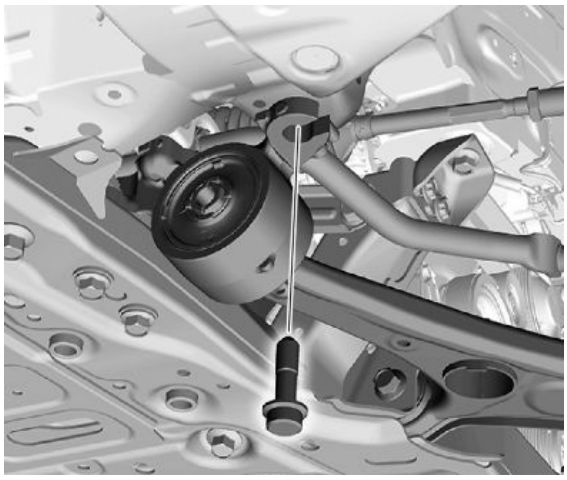
36. Remove the transfer assembly (AWD).



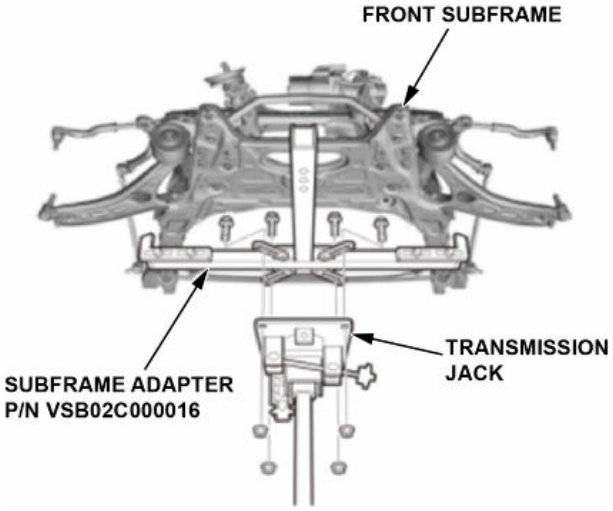
37. Remove the torque rod mounting bolts.



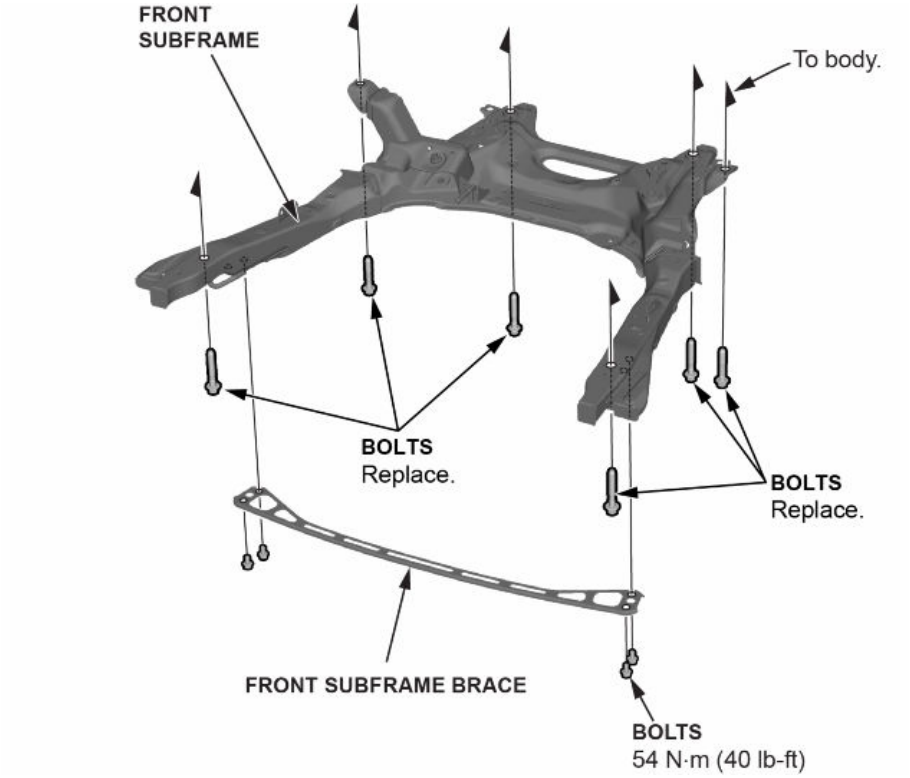
38. Remove both sides of the front lower arm mounting bolt from the body.



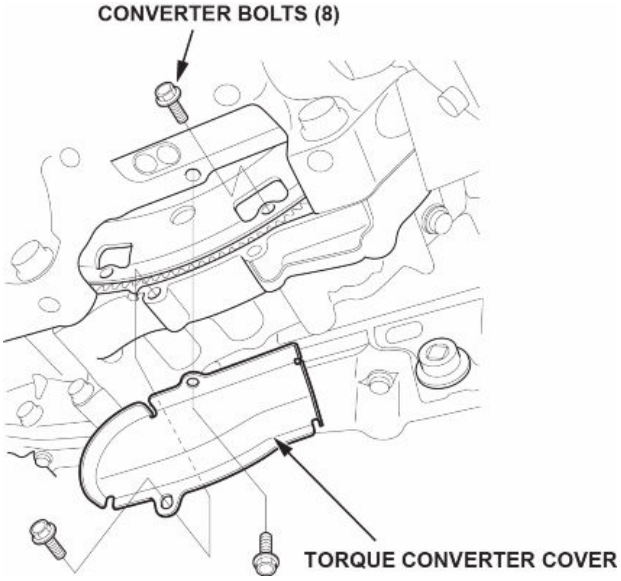
39. Support the front sub-frame.
    - Set the subframe adaper (VSB02C000016) on a transmission jack, line up the slots in the arms with the bolt holes on the corner of the jack base, and tighten bolts.
    - Attach the sub-frame adapter to the front sub-frame.



40. Remove the front sub-frame.

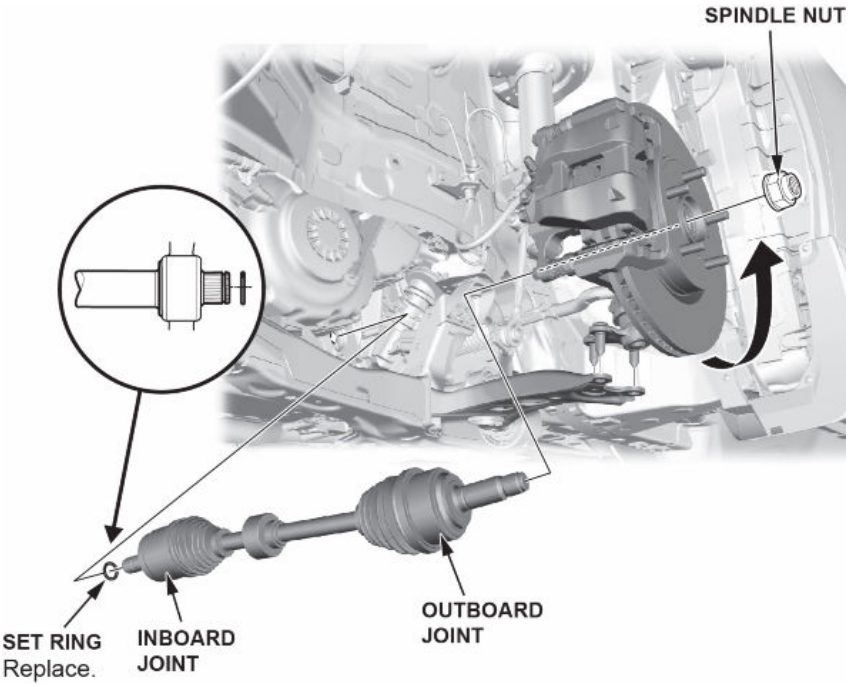


41. Support the transmission with the transmission jack.
42. Disconnect the drive plate.
    - Remove the torque converter cover.
    - Remove the eight torque converter bolts while rotating the crankshaft pulley.

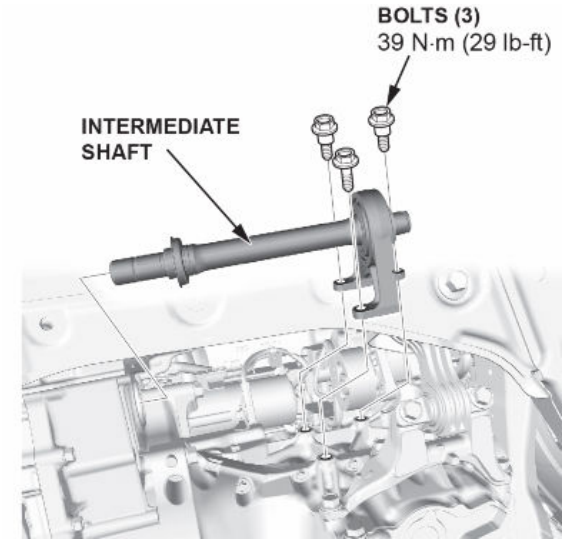


43. Disconnect the driver-shaft inboard joint.

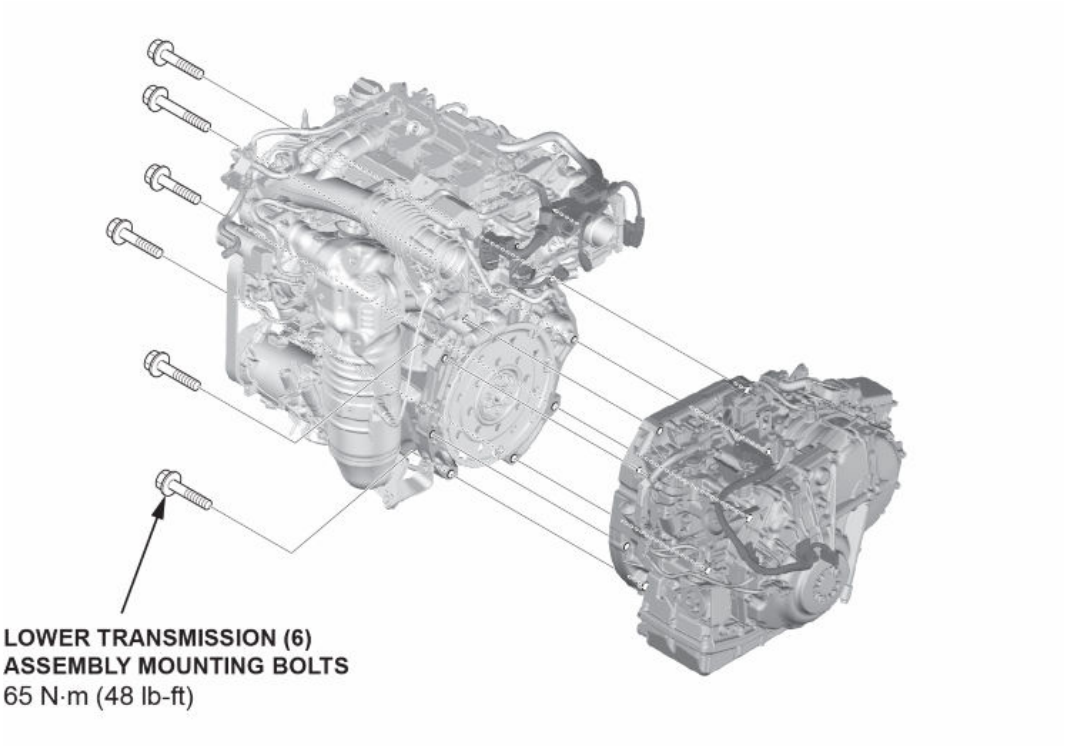
    NOTE: Secure the driver-shaft to the body with a nylon strap on both sides.



44. Remove the intermediate shaft.



45. Remove the lower transmission assembly mounting bolts.

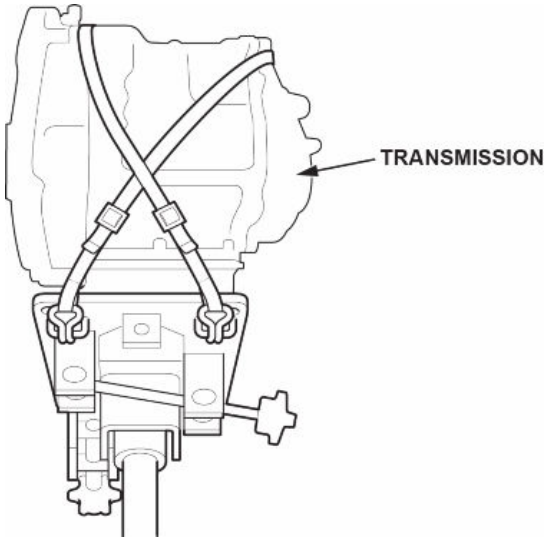


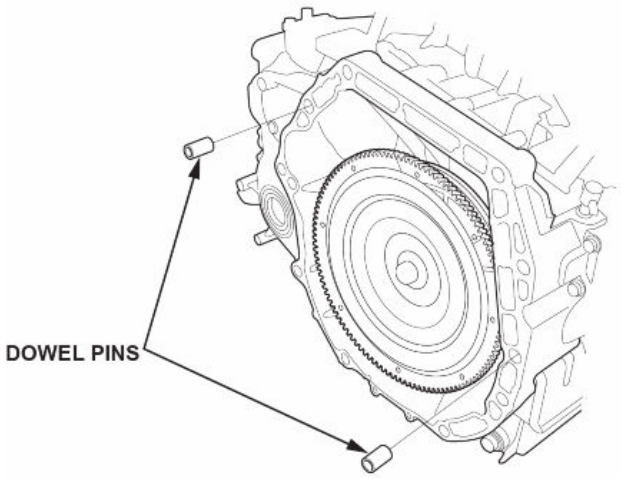
LOWER TRANSMISSION (6) ASSEMBLY MOUNTING BOLTS
65 N·m (48 lb-ft)

46. Remove the transmission.
    - Check once that the transmission is free of hoses and electrical wiring.
    - Secure the transmission on the transmission jack.
    - Lower the transmission by loosening the wing nut of the engine support hanger, and tilt the engine just enough for the transmission to clear its end from the frame.
    - Slide the transmission away from the engine, then remove it from the vehicle.

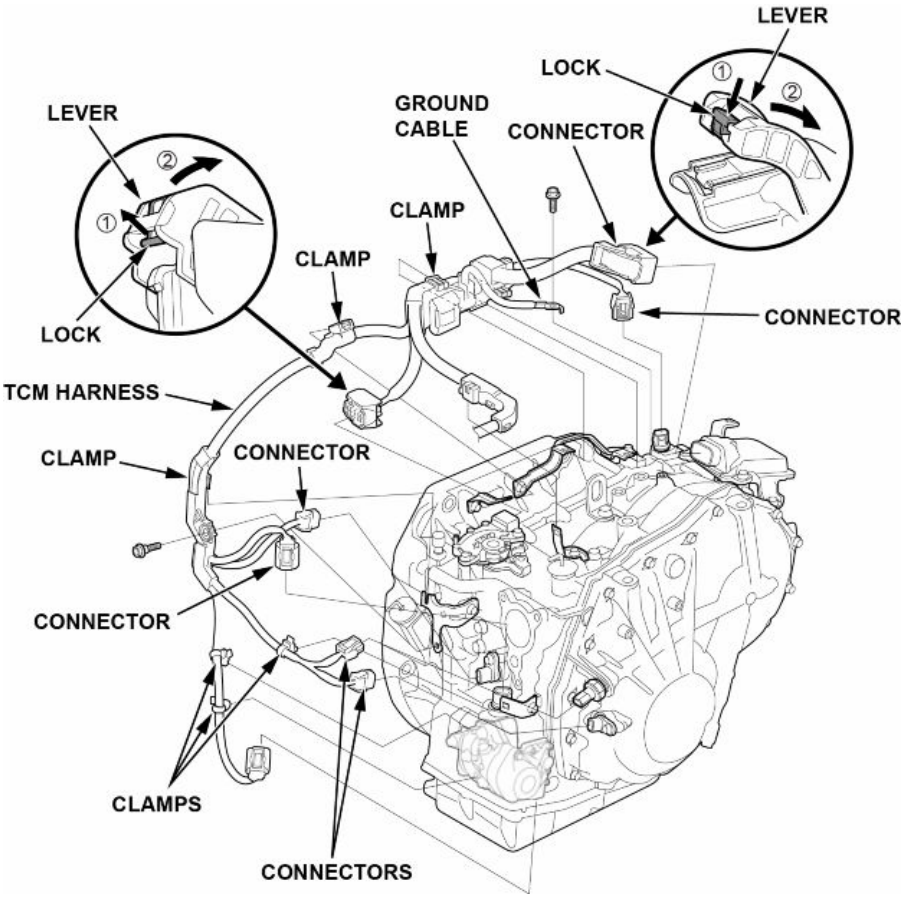
      NOTE:

      Be careful not to drop the torque converter.
    - Lower the transmission carefully.
    - Remove the dowel pins.

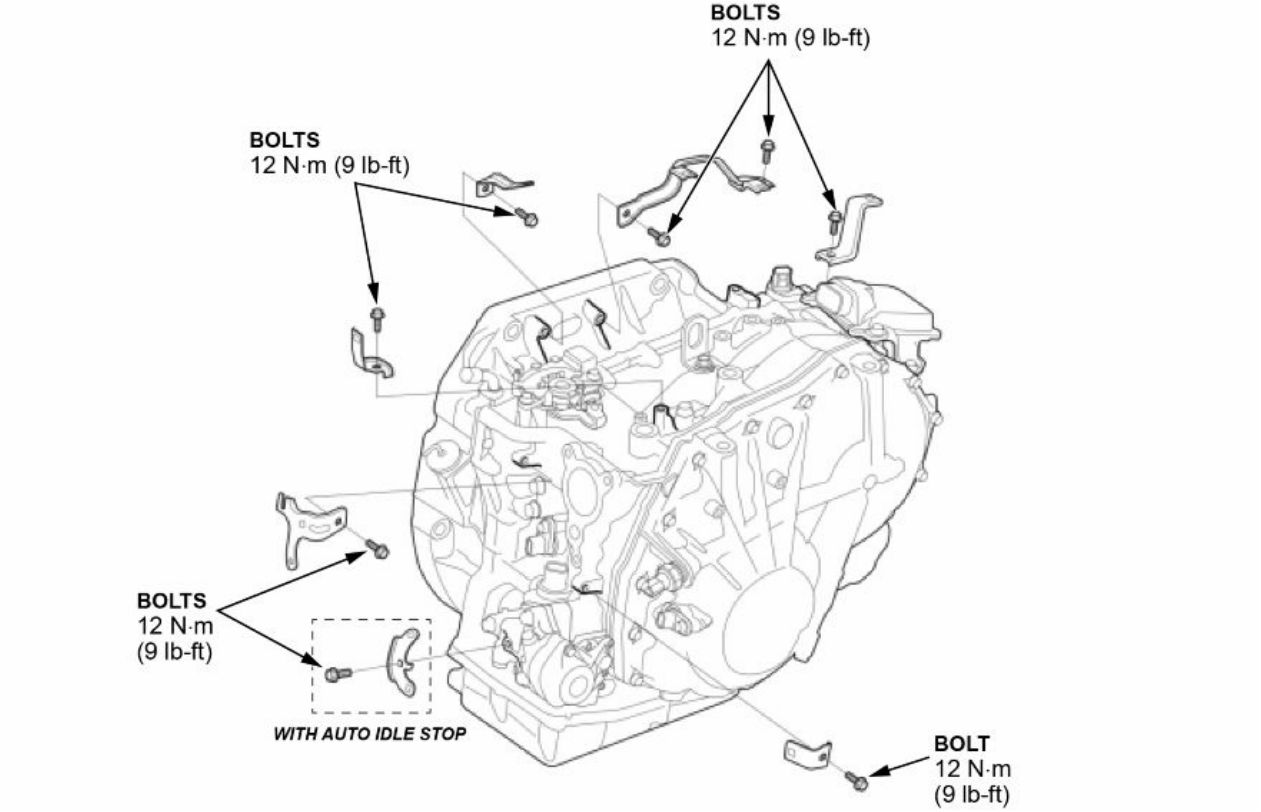




47. Remove the TCM harness.
    - Disconnect the connectors.
    - Disconnect the connector by pushing the lock and pulling the lever in the numbered sequence shown.
    - Disconnect the connector by pulling the lock and the lever in the numbered sequence shown.
    - Remove the ground cable.
    - Remove the harness covers and the harness clamp, then swing the TCM harness out of the way.

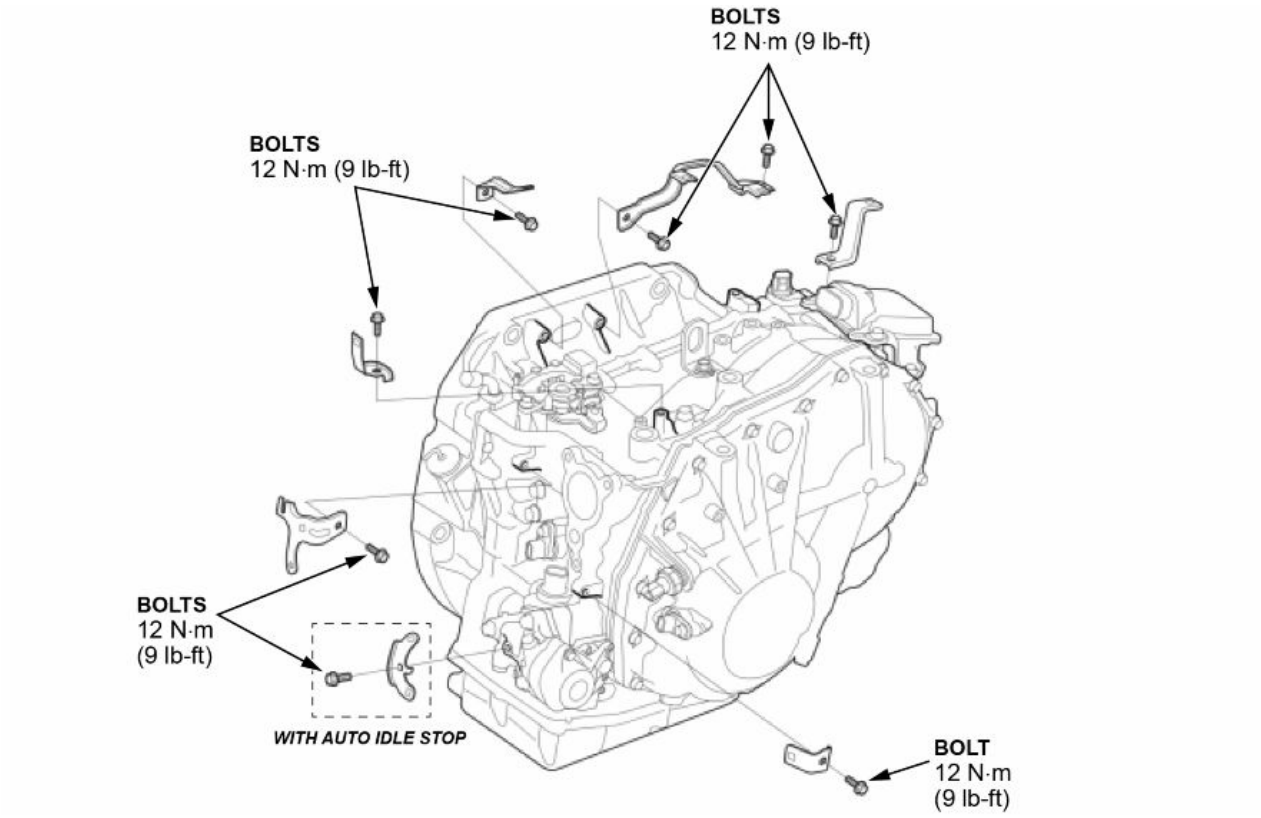


48. Remove the harness brackets.

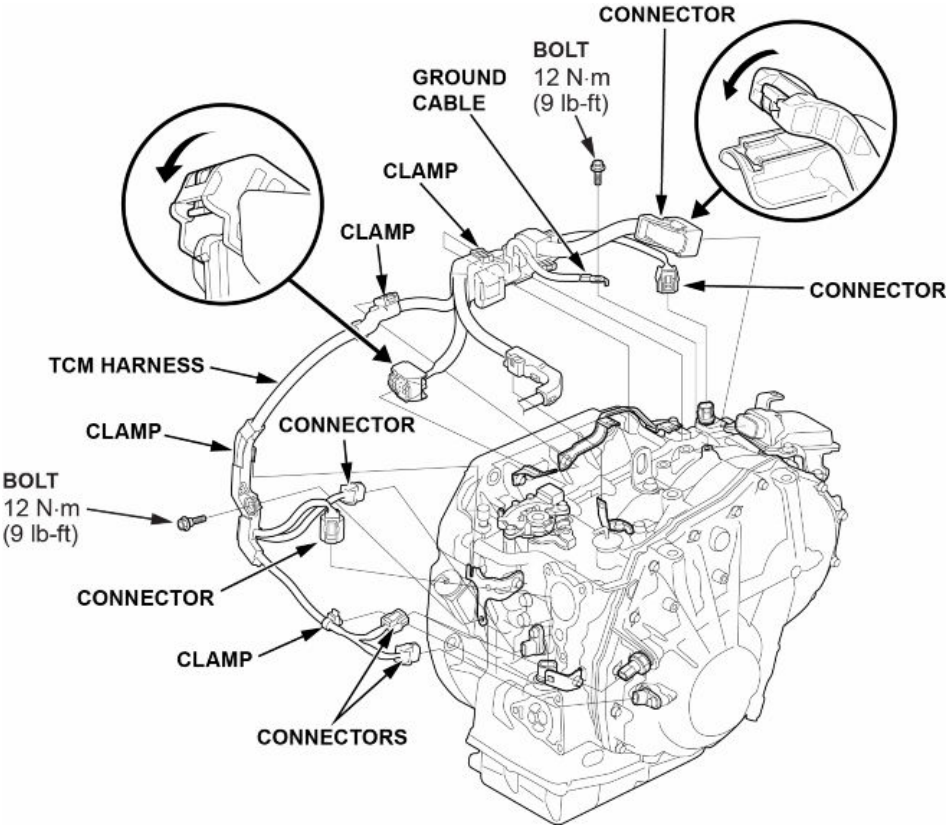


49. Inspect the drive plate and replace if it is damaged.
50. Remove the TCM.
51. Install the original TCM on the replacement transmission.

52. Install the harness brackets.

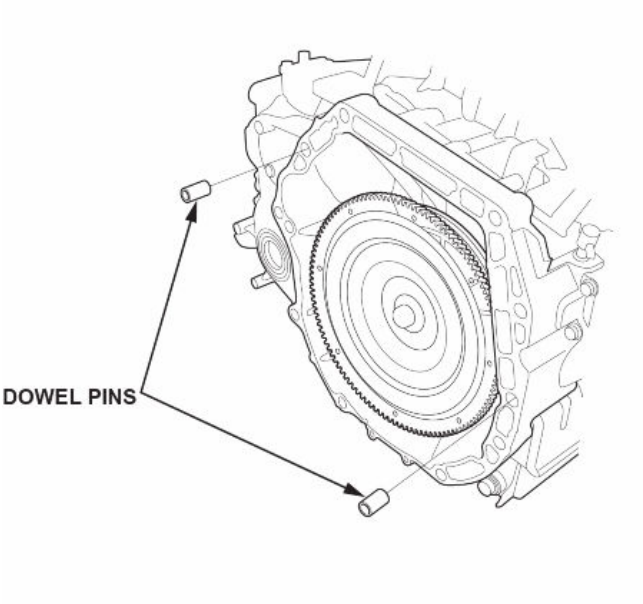


53. Install the TCM harness.
    - Install the harness covers and the harness clamp.
    - Install the ground cable.
    - Connect the connectors, and make sure they are fully seated.

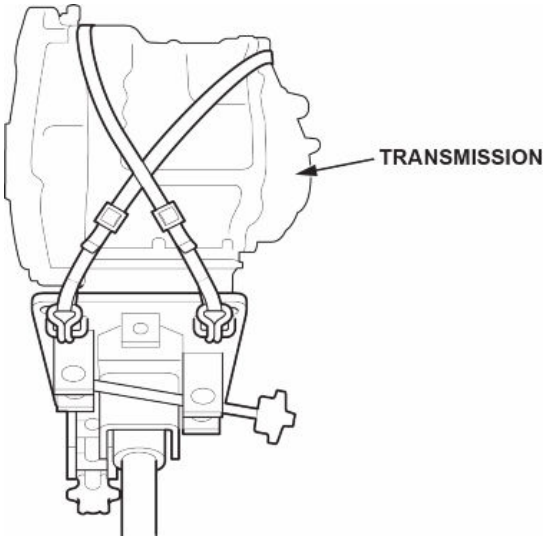


54. Install the dowel pins.

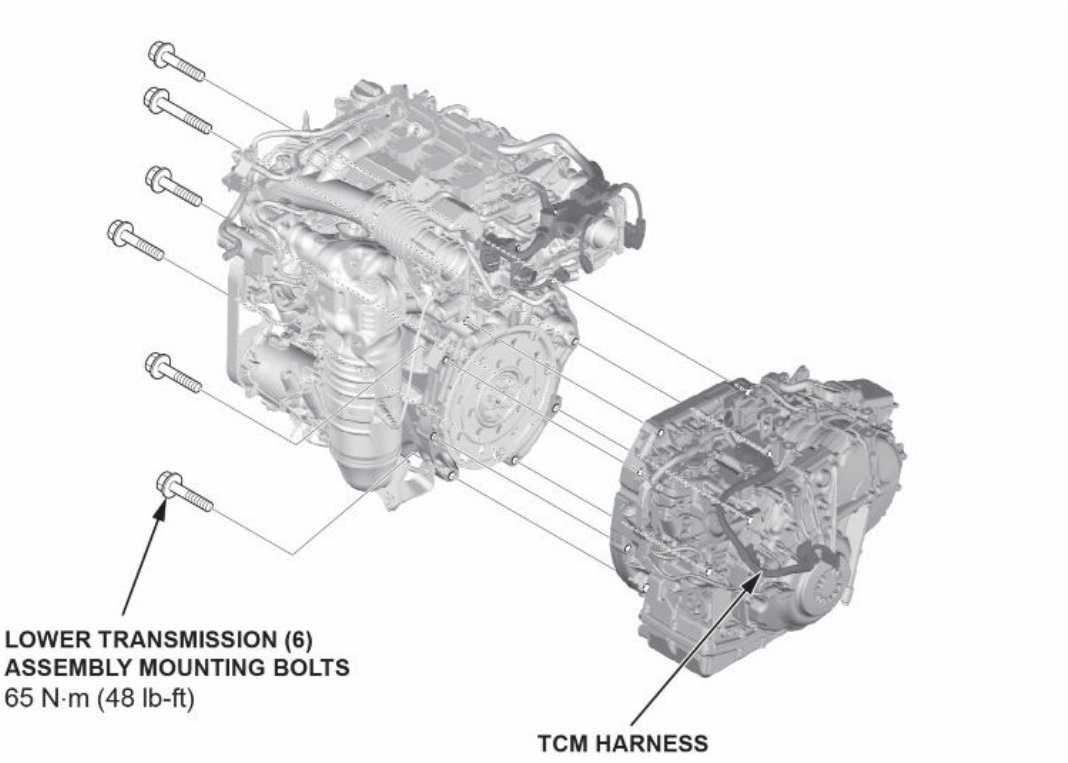
    NOTE: Make sure the torque converter is fully engaged on the input shaft, the stator shaft, and the transmission fluid pump driver sprocket. Failure to do so will result in severe transmission or engine damage.



55. Install the transmission.
    - Secure the transmission on a transmission jack and raise it to the engine level.
    - Make sure not to drop the torque converter.
    - Attach the transmission to the engine.

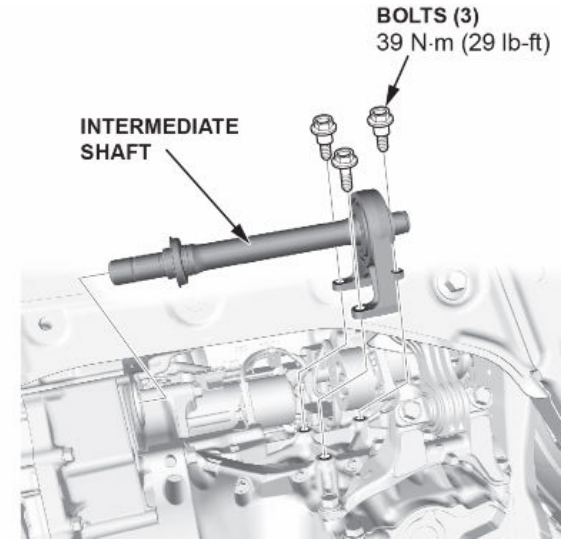


56. Install the lower transmission assembly mounting bolts.

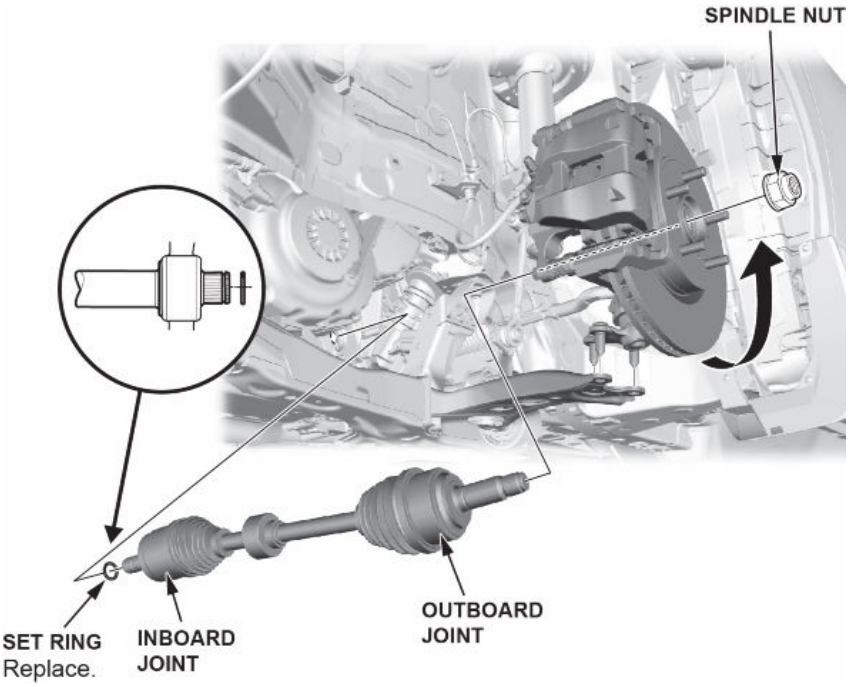


57. Install the intermediate shaft.

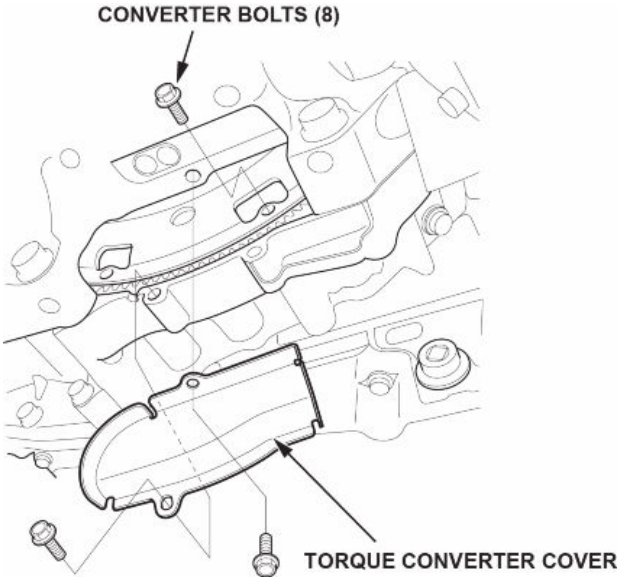
    NOTE: Hold the intermediate shaft horizontally until it is clear of the differential to prevent damaging the oil seal.



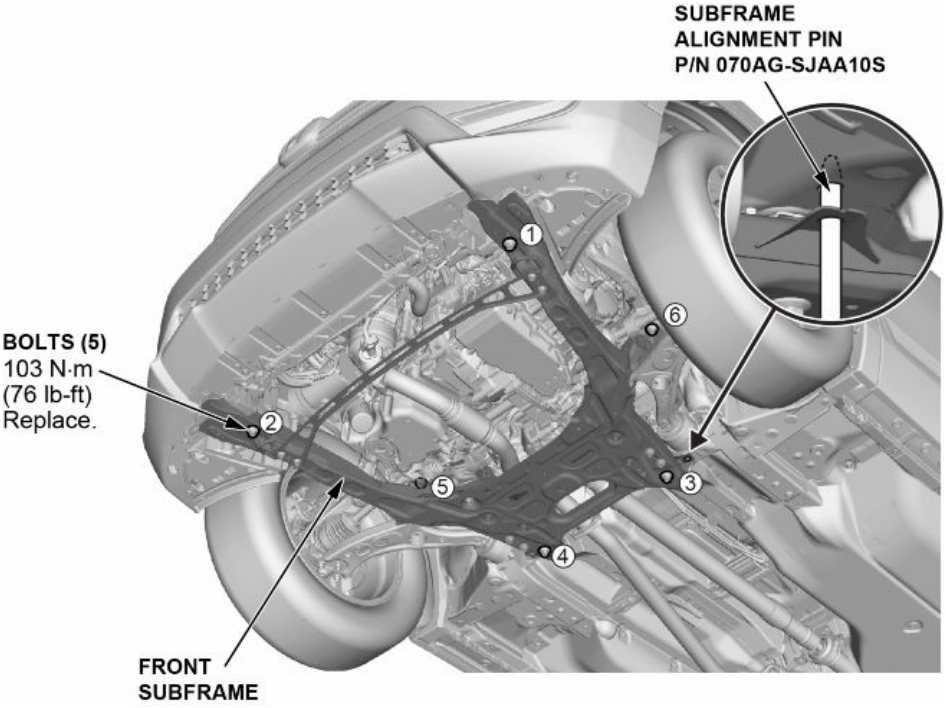
58. Connect the driveshaft inboard joint on both sides.



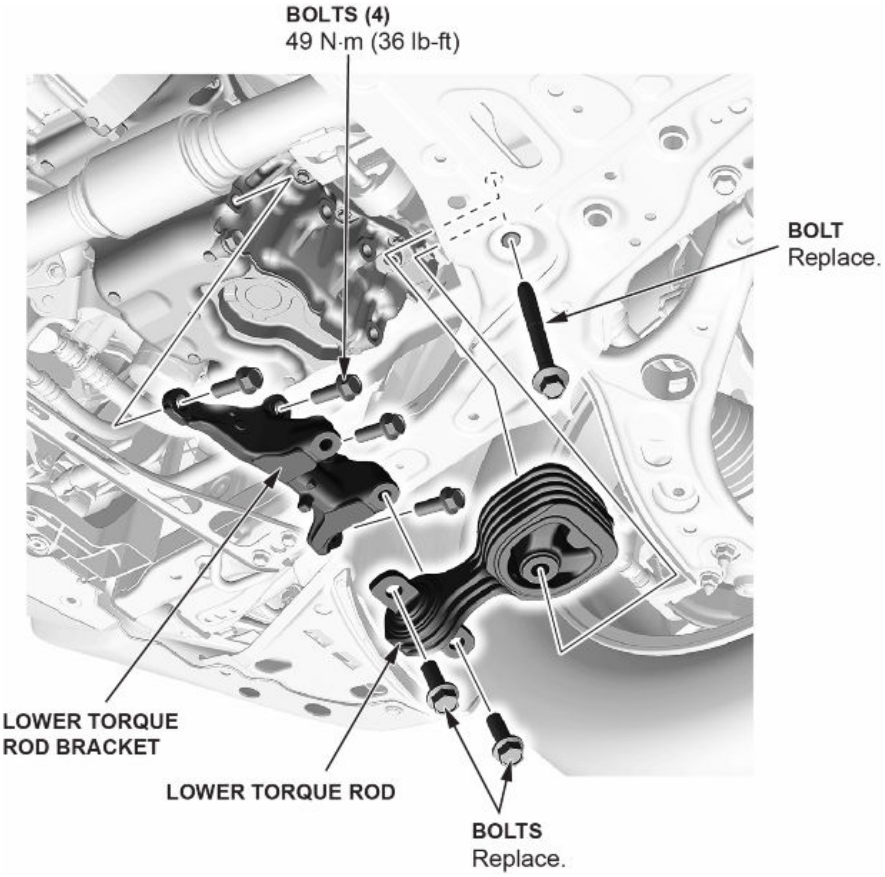
59. Connect the drive plate.
    - Attach the drive plate to the torque converter with eight torque converter bolts.
    - Rotate the crankshaft pulley as necessary to tight the bolt to half of the specified torque, then to the final torque in a crisscross pattern.
    - Check that the crankshaft rotates freely.
    - Install the torque converter cover.



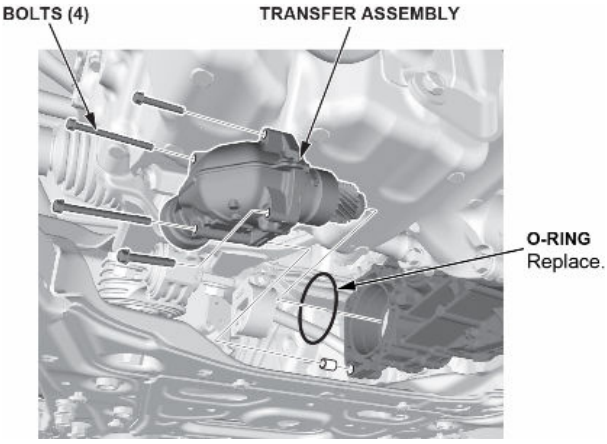
60. Install the front sub-frame in the following sequence:
    - Align the front sub-frame with the sub-frame alignment pin.
    - Lift the front sub-frame up to the body, and loosely install the new sub-frame mounting bolts .
    - Insert the sub-frame alignment pin through the positioning hole on the right rear sub-frame, and into the positioning hole on the body, then loosely tighten the sub-frame right rear mounting bolt.
    - Insert the sub-frame alignment pin through the positioning hold on the left rear sub-frame, and into the positioning hole on the body, then loosely tighten the sub-frame left rear mounting bolt.
    - Tighten the sub-frame mounting bolts to the specified torque in the sequence shown. Use the sub-frame alignment pin when tightening the rear side sub-frame mounting bolts.
    - Check all the sub-frame mounting bolts and re-tighten if necessary.



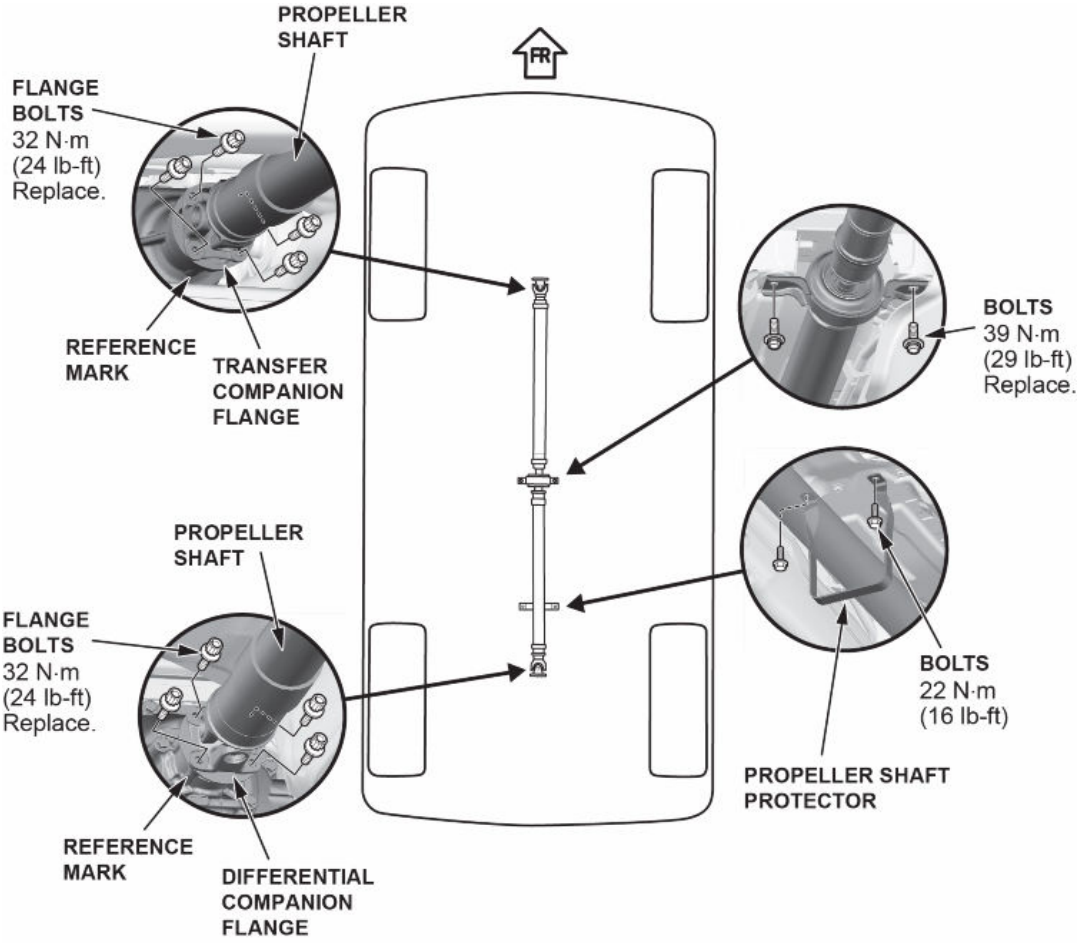
61. Loosely install the torque rode mounting bolt.



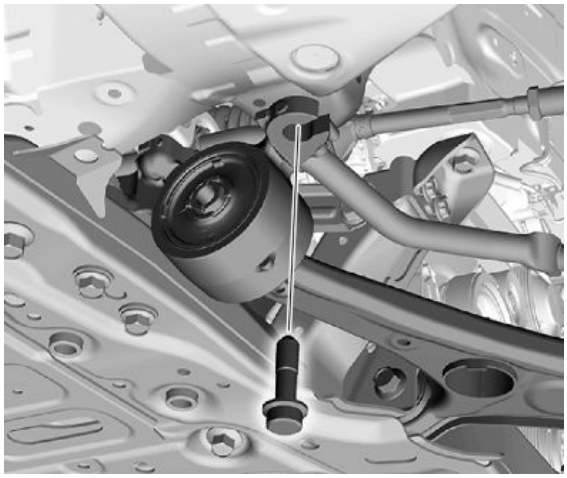
62. Install the transfer assembly (AWD).



63. Install the propeller shaft (AWD).

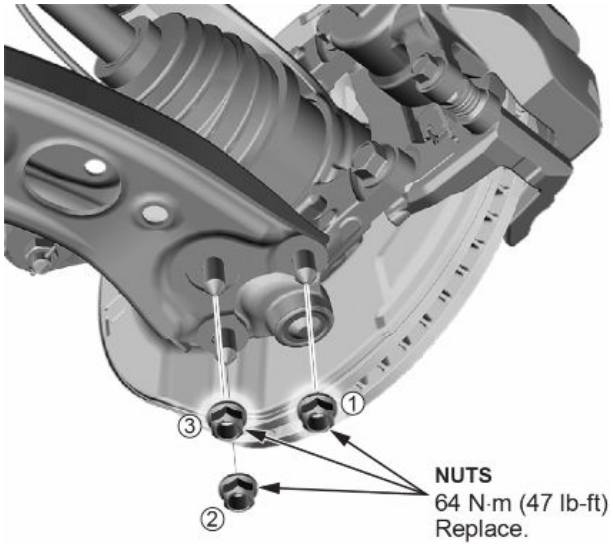


64. Install the front lower arm mounting bolt.

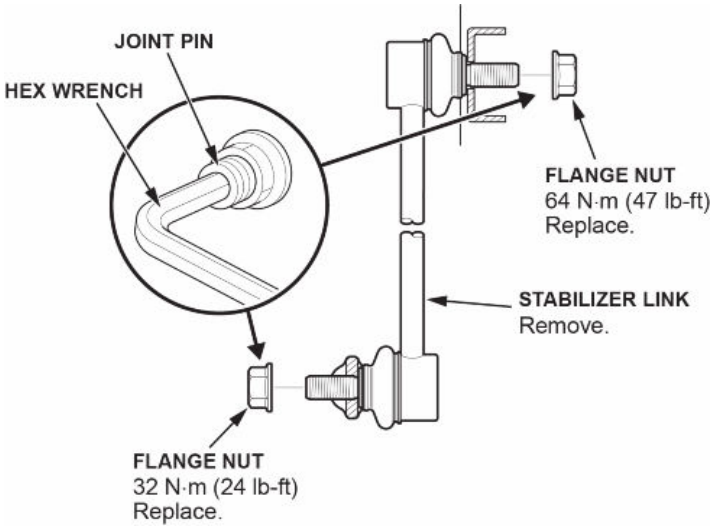


65. Connect both sides of the lower arm ball joint.

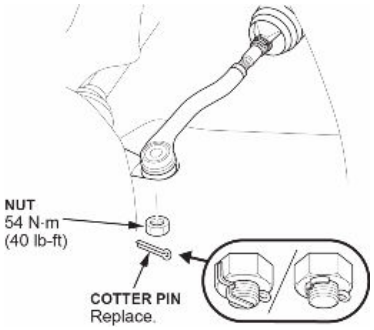
    NOTE: During reassembly, loosely install the new flange nuts, then tighten them to the specified torque in the numbered sequence shown.



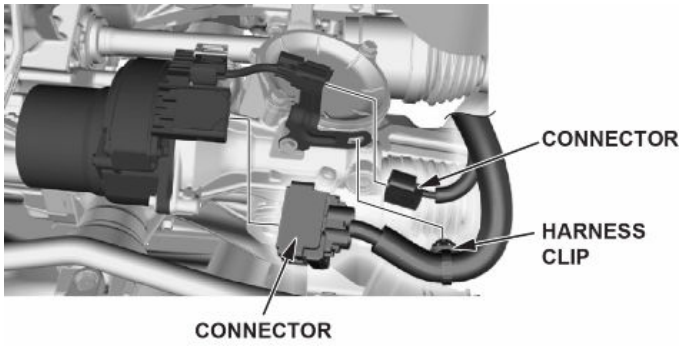
66. Connect both sides with the stabilizer link ball joint.
    - Remove the flange nuts while holding the respective joint pin with a hex wrench.
    - Use new flange nuts during reassembly.
    - Remove the stabilizer link.



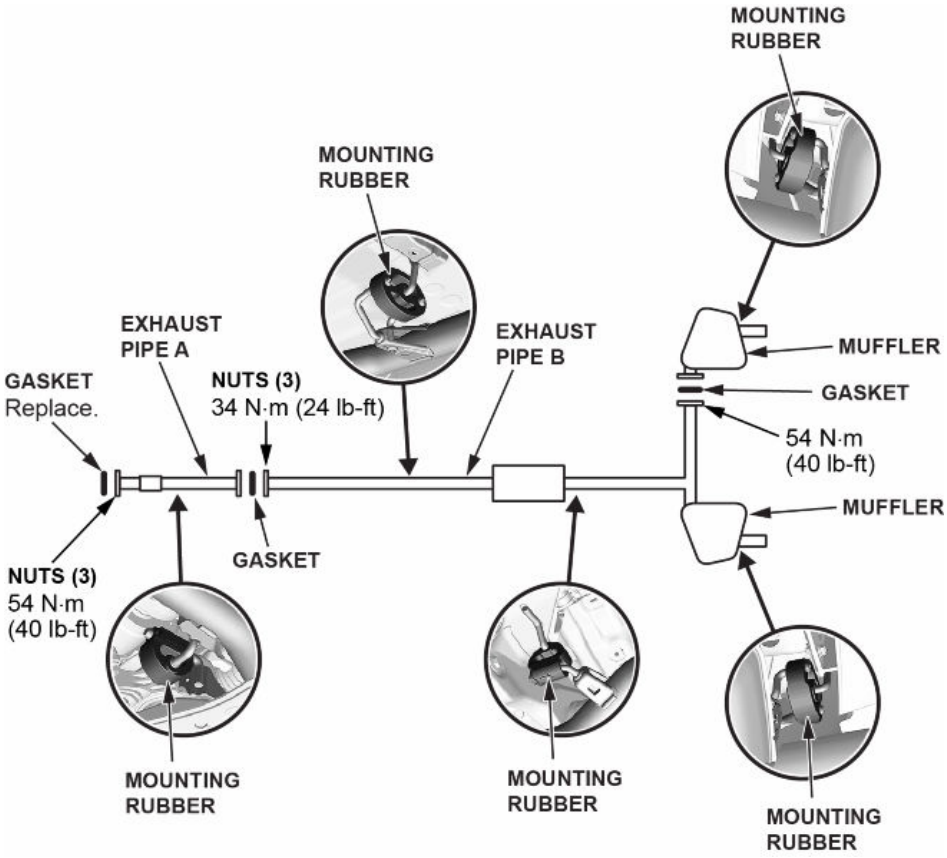
67. Connect both sides with the tie-rod end ball joint.



68. Connect the EPS subharness connector.
    - Install the harness clip.
    - Connect the connectors.

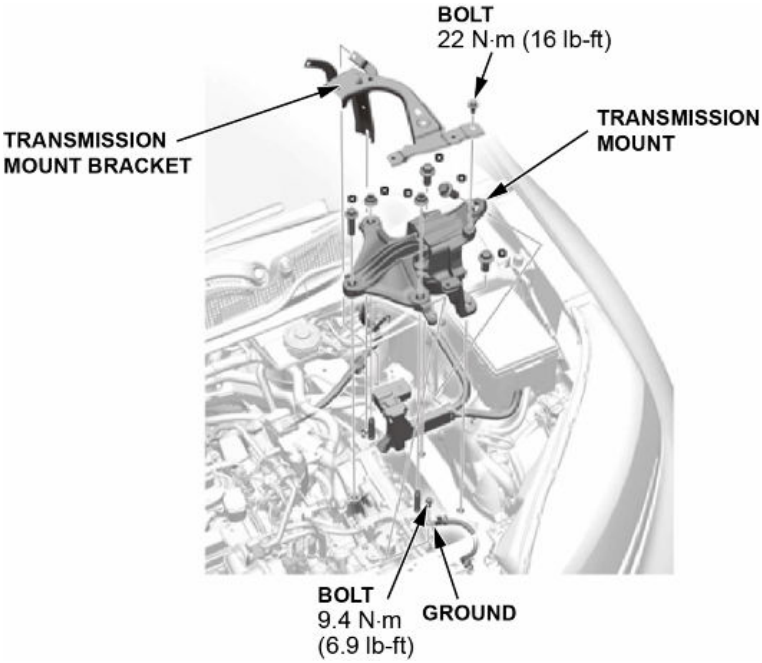


69. Install the exhaust pipe A.

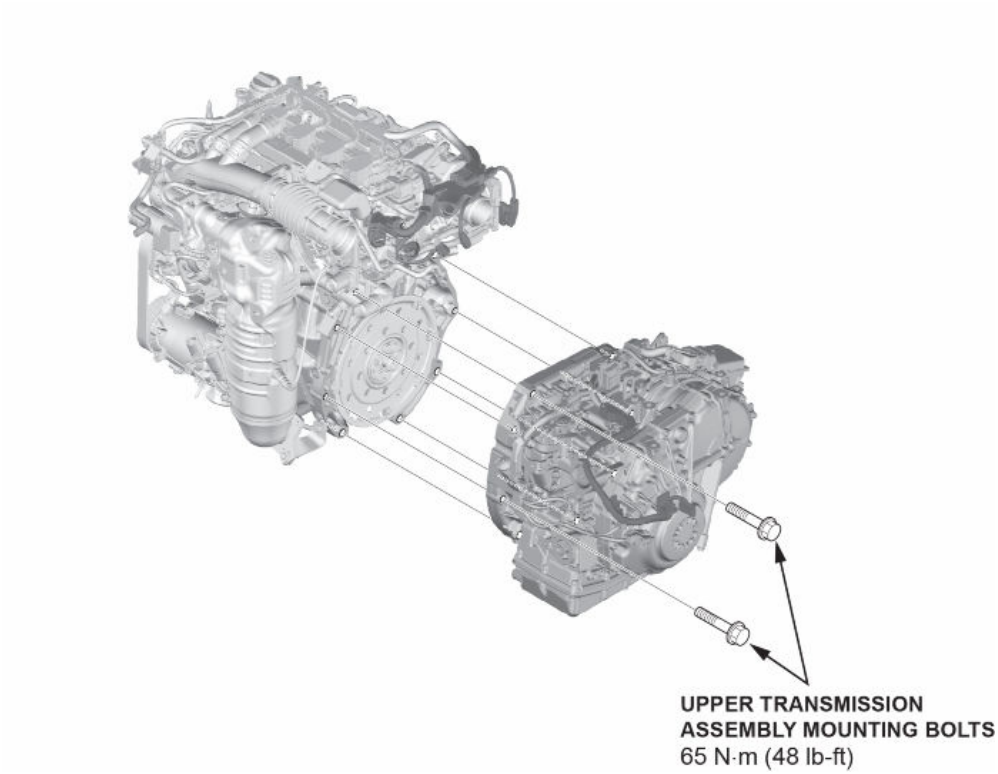


70. Lower the vehicle.

71. Loosely install the transmission mount.



72. Install the upper transmission assembly mounting bolts.

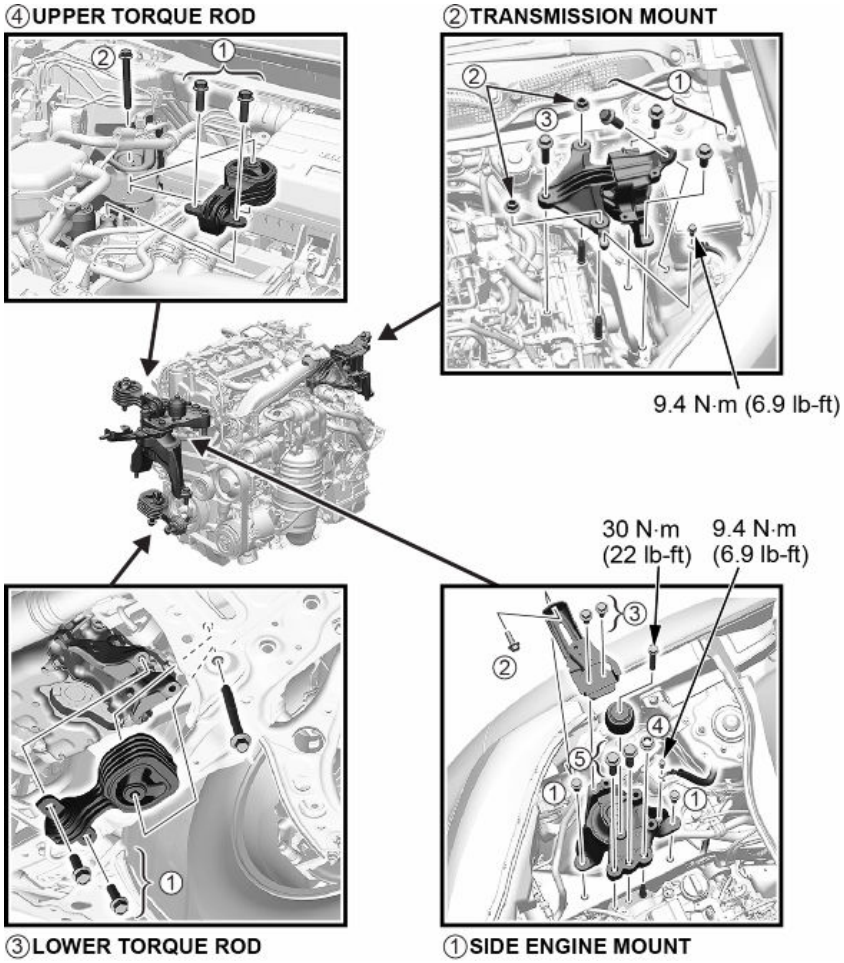


73. Remove engine support hanger.
    - Remove the engine support hanger and the sub-hanger stay.
    - Install the front damper caps.

74. Tightening procedure for the engine/transmission mount and torque rod mounting bolt.

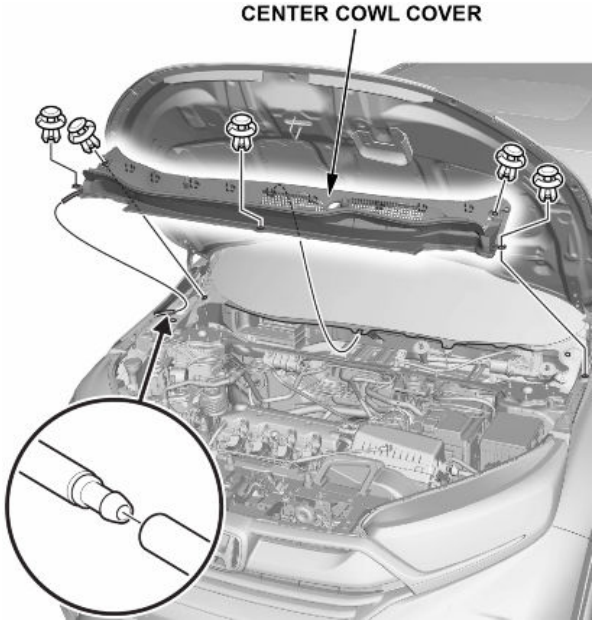
Mount Removed	Mount Tightening Sequence
Transmission Mount	②, ③, and ④
Lower Torque Rod	③, and ④

Mount No.	Mount Name	Mount Bolt/Nut Tightening Sequence		
		①	②	③
②	Transmission Mount	75 N·m (55 lb-ft) Replace.	50 N·m (37 lb-ft) Replace.	50 N·m (37 lb-ft) Replace.
③	Lower Torque Rod	45 N·m (33 lb-ft) Replace.	75 N·m (55 lb-ft) Replace.	

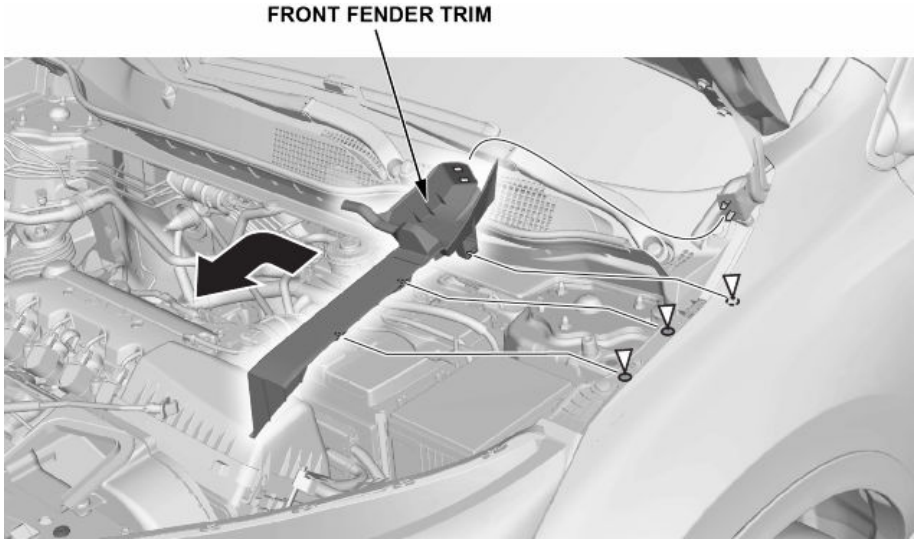


75. Connect the TCM harness.

76. Install the center cowl cover.
    - Reconnect the windshield washer tube.
    - Install the center cowl cover.

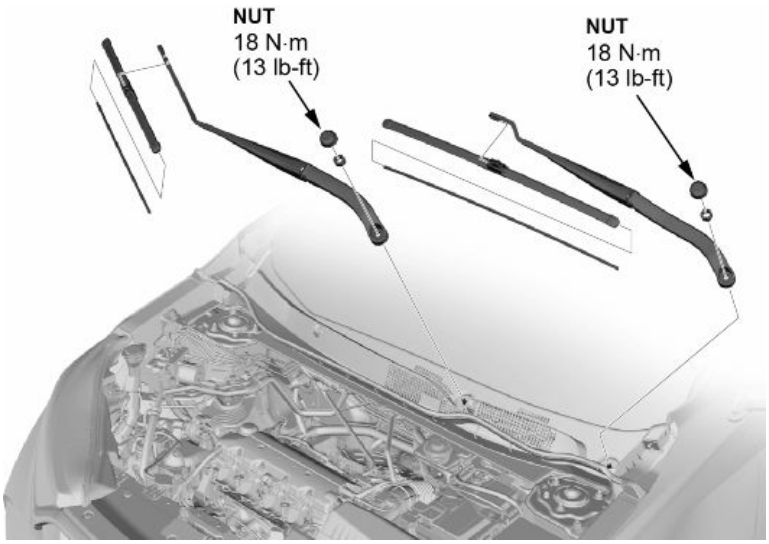


77. Install the front fender trims.



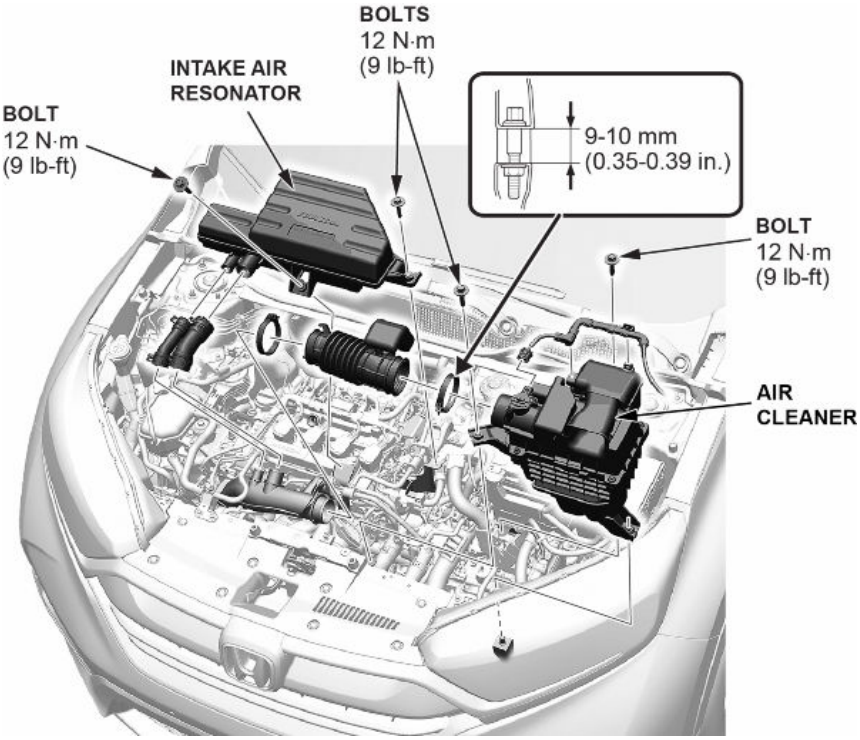
78. Install both the side cowl covers.

79. Install the windshield wiper arms.



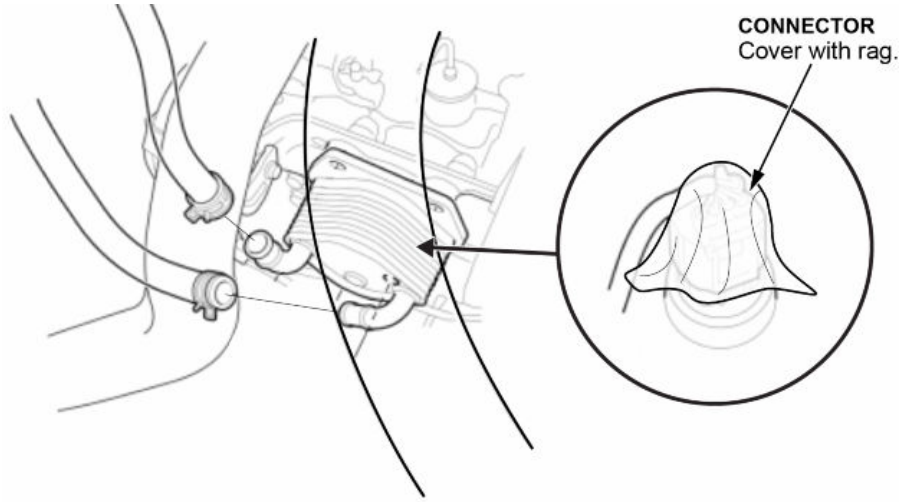
80. Secure the engine wire harness onto the harness brackets.

81. Install the intake air resonator.



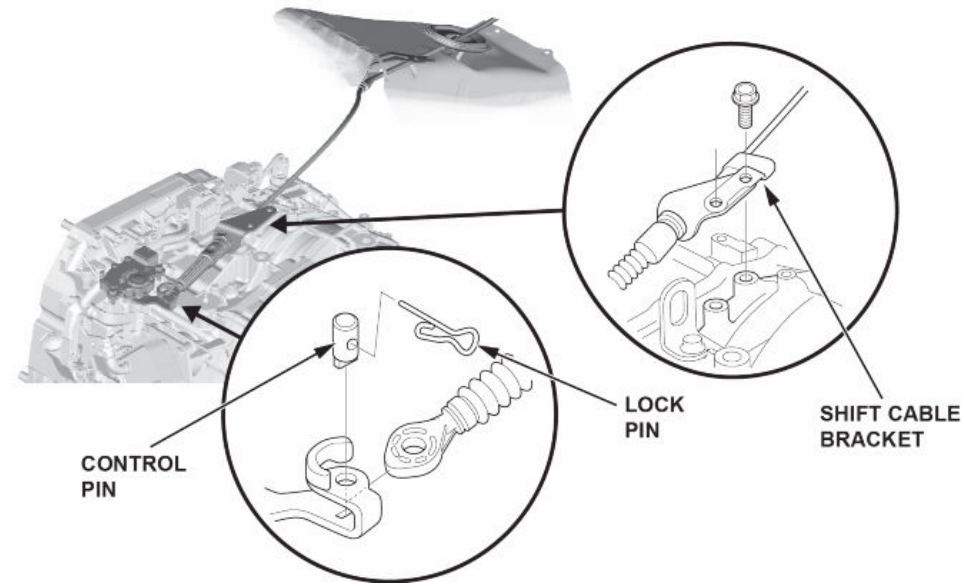
82. Install the CVTF warmer hoses.

NOTE: Remove the rag after installing the hoses.

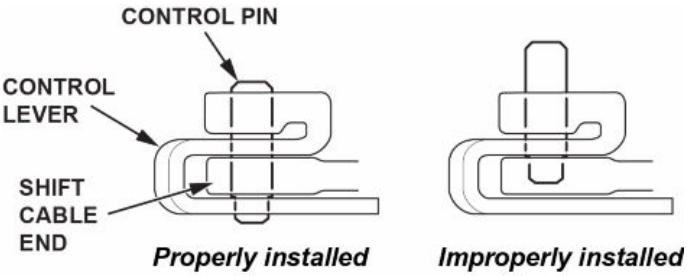


83. Install the shift cable on the transmission side.

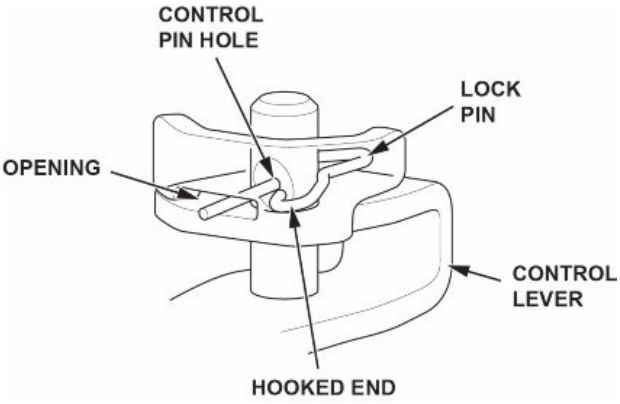
NOTE: Be sure to adjust the shift cable after installing the shift cable.



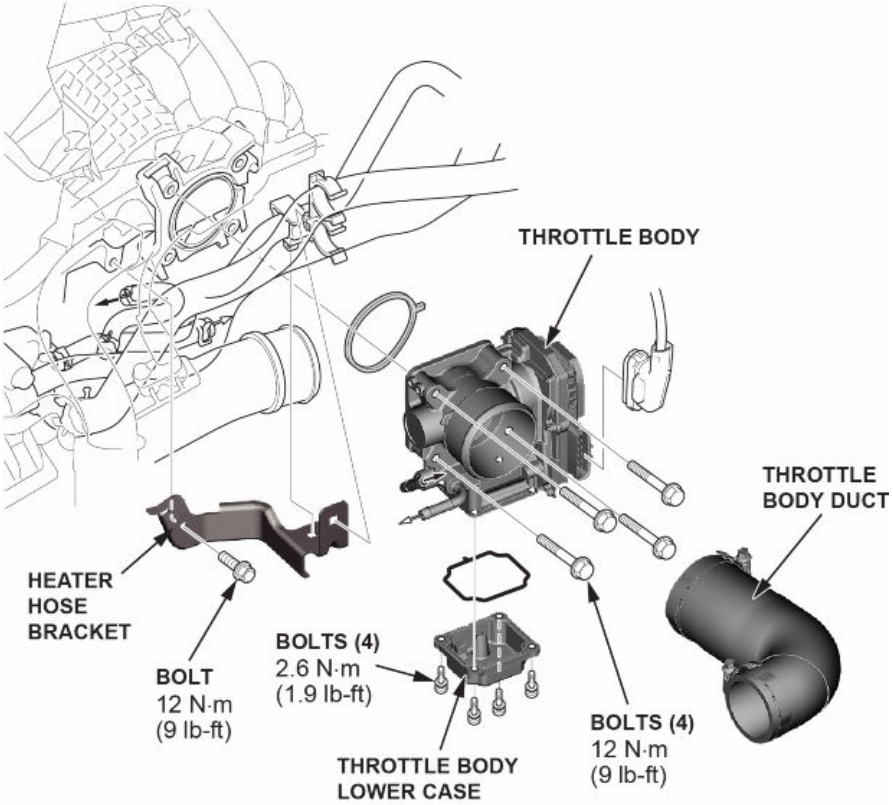
NOTE: Make sure the control pin is inserted through the shift cable end and fully seated on the control lever.



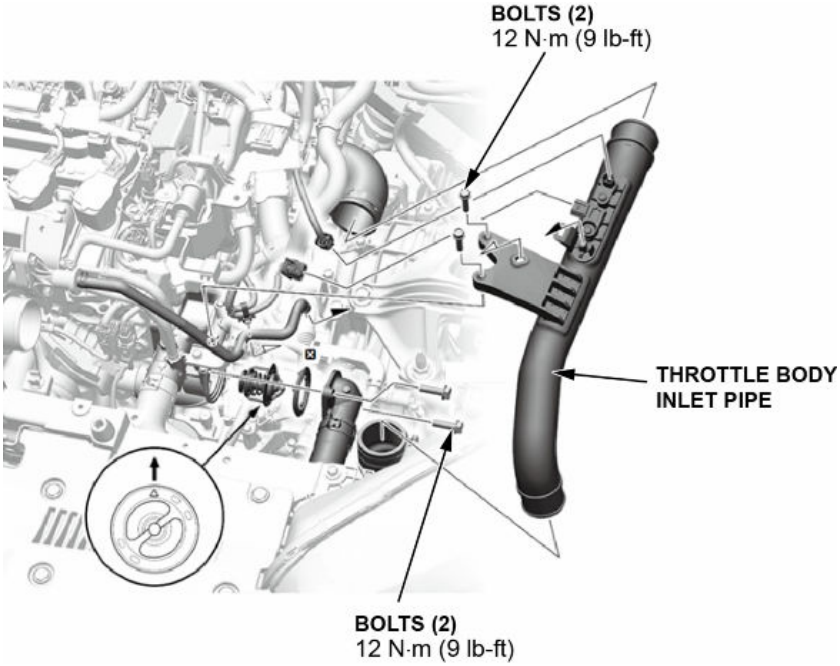
NOTE: Make sure the lock pin is inserted through the control pin hole to the opening of the control lever so that the hooked end of the lock pin locks into the control pin hole.



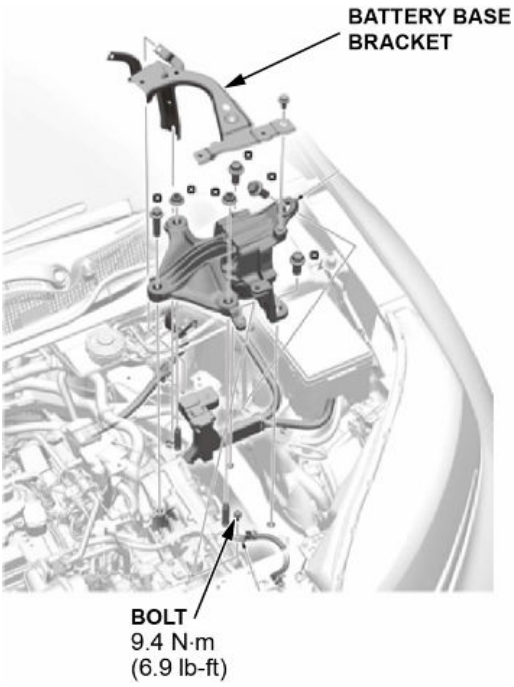
84. Install the throttle body duct



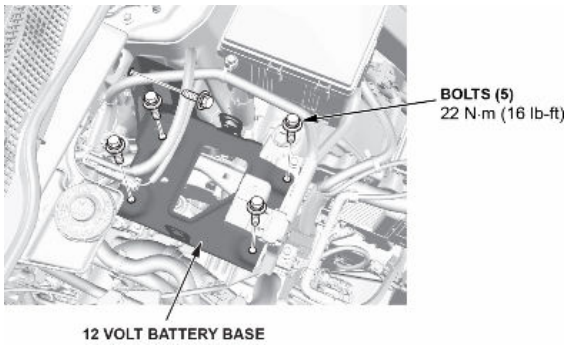
85. Install the throttle body inlet pipe.



86. Install the 12 volt battery base bracket.



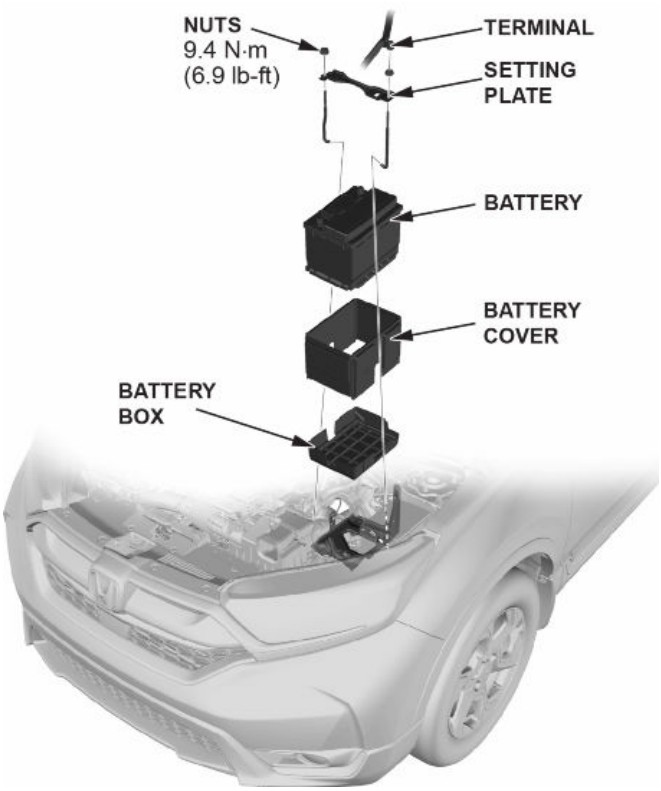
87. Install the 12 volt battery base.

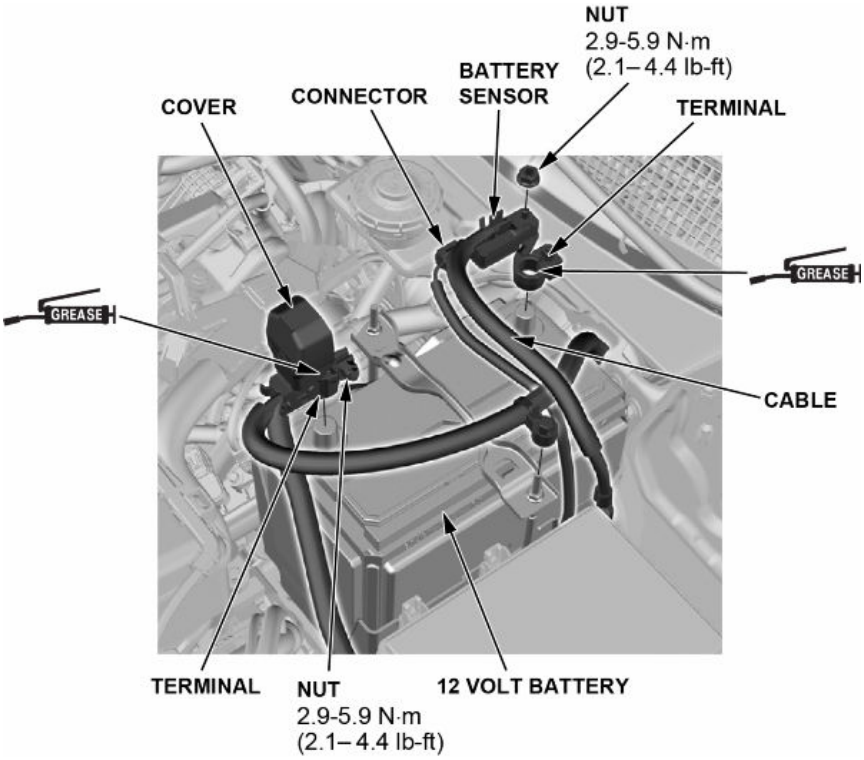


88. Install the 12 volt battery.
    - Install the battery box.
    - Place the 12 volt battery in the box.
    - Clean the 12 volt battery terminals.
    - Install the battery cover.
    - Install the battery setting plate.

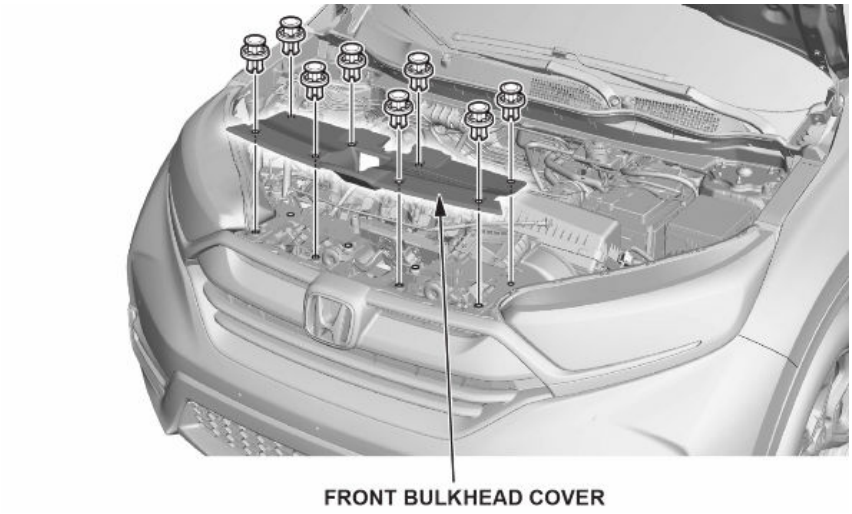
      NOTE: Do not deform the 12 volt battery setting plate by over-tightening the nuts.
    - Connect the terminal to the 12 volt battery.
    - Connect the positive sider first.
    - Connect the 12 volt battery sensor with the cable to the 12 volt battery.

      NOTE: To protect the 12 volt battery sensor connector from damage, do not hold it when installing the terminal.
    - Apply multipurpose grease to the terminals to prevent corrosion.
    - Close the cover.

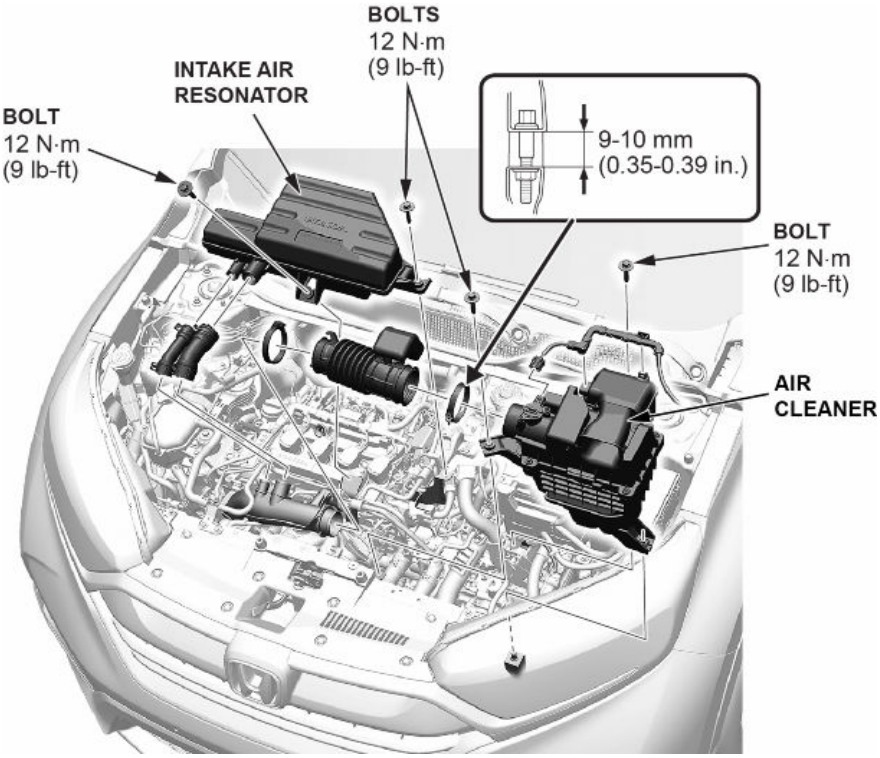




89. Install the front bulkhead cover.

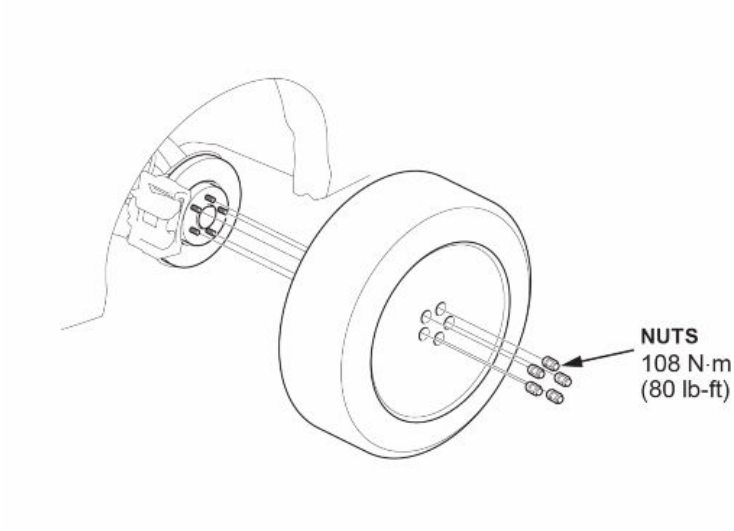


90. Install the air cleaner.



91. Install the front wheels on both sides.

    NOTE: Before installing the wheel, clean the mating surfaces between the brake disc and the inside of the wheel.

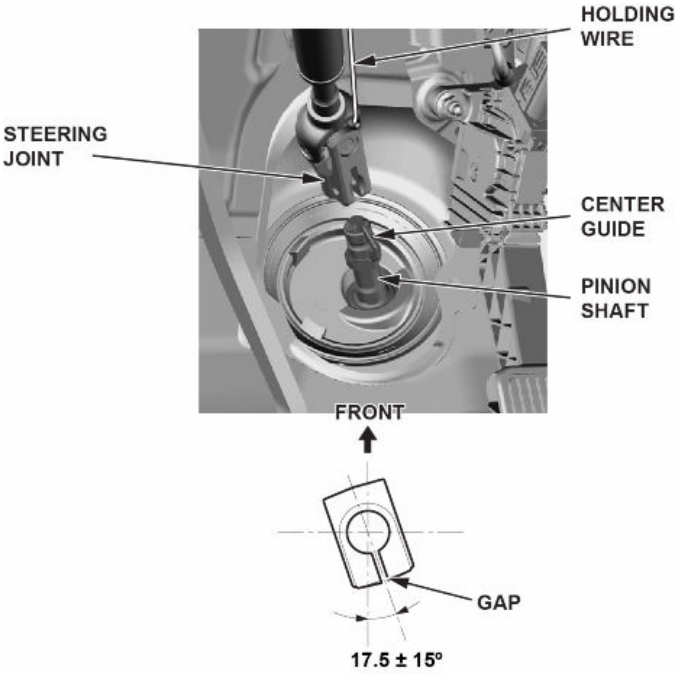


92. Connect the steering joint.
    - Cut the lower slide shaft holding wire.
    - Slip the lower end of the steering joint onto the pinion shaft.

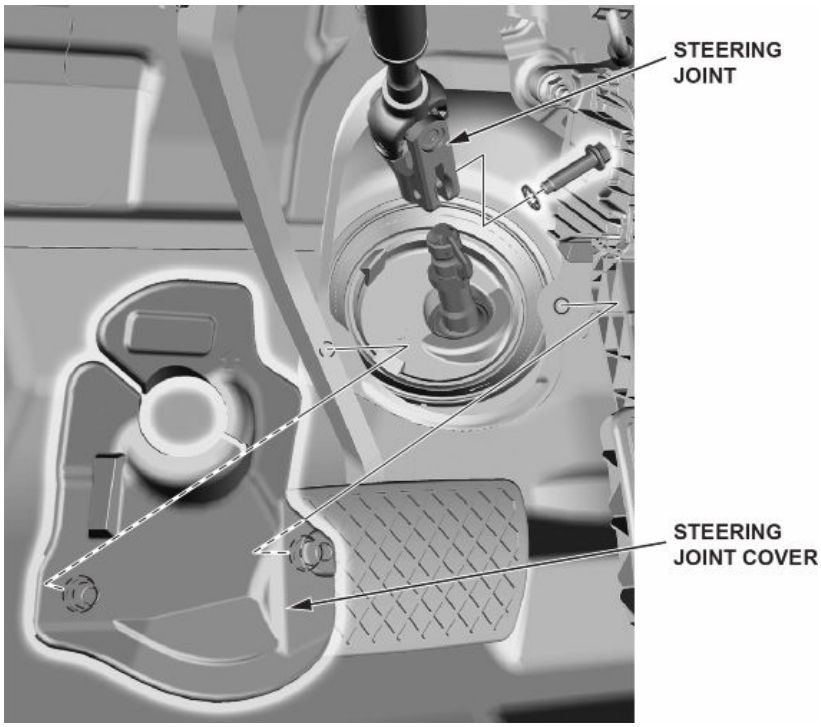
      NOTE:

      Pinion shaft with center guide: install the steering joint by aligning the center guide.

      Pinion shaft without center guide: positioning the steering column by aligning the gap within the angle.



93. Install the steering joint bolt and cover.



94. Refill the transmission fluid.
    - Remove the filler cap.

      NOTE: The position of the filler cap is different depending on the trim.
    - Refill the transmission with the recommended fluid into the filler hole. Always use Honda HCF-2 continuously variable transmission fluid.

      NOTE: Using the wrong type of fluid will damage the transmission. **Transmission fluid (HCF-2) Capacity: AWD, 8.4 L (8.9 US qt).**
95. Install the filler cap with the lever toward the front of the vehicle.

96. Check the transmission fluid level.

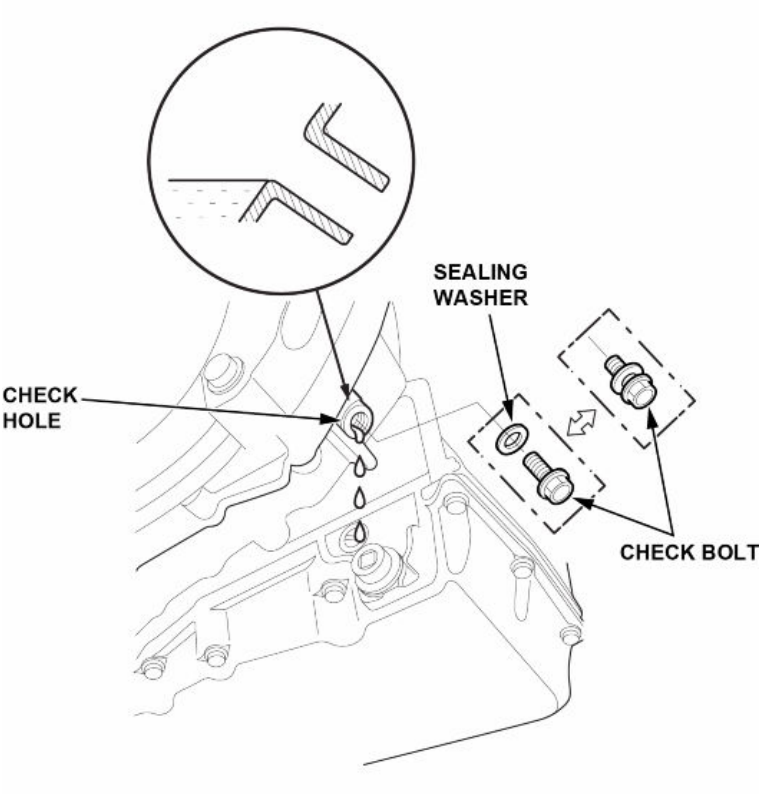
    NOTE: Do the transmission fluid level check immediately after the shift lever operation.
    - Start the engine.
    - While pressing the brake pedal firmly, shift in turn to: P→R→N→D→S→L→S→D→N→R→P position/mode (without paddle shifter). Wait for at least **3 seconds** to each position/mode.
    - With paddle shifter, press the brake pedal firmly and shift in turn to: P→R→N→D→SPORT MODE SWITCH (ON/OFF)→D→N→R→P. Wait for at least **3 seconds** to each position/mode
    - Turn the engine off.
    - Intergrated washer type: remove the check bolt.
    - Separated washer type: remove the check bolt with the sealing washer.
    - Check the transmission fluid level at the check hole.

      NOTE:
      – The transmission fluid is at the proper level if the transmission fluid is dripping from the check hole gradually.

– If the transmission fluid is drip-less from the, check the transmission fluid leaks at the transmission, the transmission fluid pan, the transmission fluid hoses, and the transmission fluid lines. If a problem is found, fix it before filling the transmission with transmission fluid, then recheck the fluid level. If no problem is found, add the needed amount of transmission fluid.

– If the transmission fluid is flowing out of the check hole, wait until the transmission fluid is at the proper lever.

– The transmission fluid is at the proper level if the transmission fluid is dripping from the check hole gradually.



97. Air bleed the auxiliary transmission fluid pump.

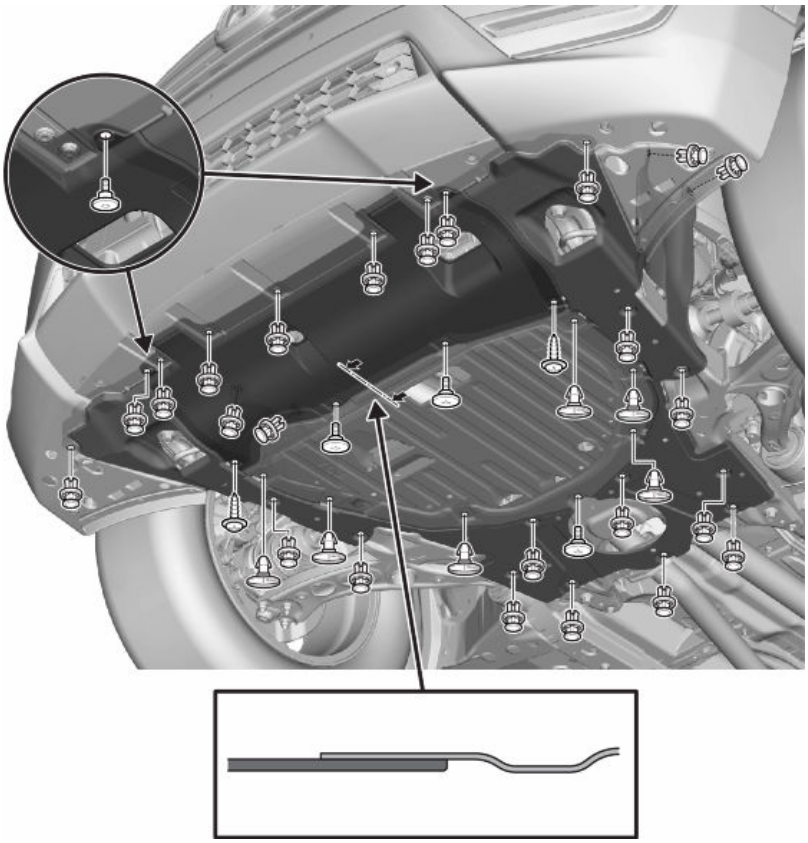
- – Start the engine, and warm up the engine by raising the engine speed around 3,000 rpm until the cooling fan comes on.
- – Turn off the engine.
- – Select the function test in A/T system, and drive the auxiliary transmission fluid pump for at least **15 seconds** with the HDS.

  NOTE: Do not drive the auxiliary transmission fluid pump for more than **160 seconds** at a time

98. After installation check of the transmission.

- Make sure all four wheels to rotate freely.
- Turn the vehicle to the ON mode.
- Move the shift lever to each position, and check that the shift position indicator follows the shift lever operation.
- Start the engine in the P or N position/mode and does not start in any other.
- Check the shift lever operation.
- Make sure the vehicle is turned to the OFF (LOCK) mode with the shift lever in the P position/mode. If it is not, adjust the shift cable again.

99. Install the engine undercover.



100. Check the front wheel alignment.

101. Memorize the VSA sensor neutral position.

- Do not press the brake pedal during this procedure.
- Set the steering wheel in the straight-ahead position.
- Select the ADJUSTMENT from the ABS/TCS/VSA menu with the HDS, then select ALL SENSOR, and follow the screen prompts.

102. Road test the vehicle.

- Park the vehicle on level ground.
- Apply the parking brake, and block all four wheels.
- Shift the transmission to D position/mode while pressing the brake pedal. Press the accelerator pedal, and release it suddenly. The engine should not stall; repeat in all positions/modes.
- Prepare the HDS and the MVCI to take a SNAPSHOT:
  - Set the trigger type to parameter.
  - Adjust the parameter setting to APP sensor A(V) above 1.1V.
  - Set the record time to **60 seconds**.
  - Set the trigger point to negative - **30 seconds**.
- Find a suitable level road.
- Press OK on the HDS and begin the test.
- Accelerate quickly until APP Sensor A (V) reads 1.2 V. Maintain a steady throttle at 1.2 V until the vehicle reaches a reasonable speed, then slow the vehicle, and come to a stop.

- Save the snapshot if the entire event was recorded, or increase the recording time setting as necessary, and repeat step the previous bullet point.
- Adjust the parameter setting to 2.2 V.
- Test-drive the vehicle again. Accelerate quickly until APP sensor A (V) reads 2.3 V. Maintain a steady throttle at 2.3 V until the vehicle reaches a reasonable speed, then slow the vehicle, and come to a stop.
- Save the snapshot if the entire event was recorded, or increase the recording time setting as necessary, and repeat the previous bullet.
- Accelerate quickly until the accelerator pedal is to the floor. Maintain a steady pedal until the vehicle reaches reasonable speed, then slow to a stop, and save the snapshot.

103. Review each snapshot individually, and compare the APP sensor A (V), the vehicle speed, and the engine speed to the following tables:

D Position/Mode

APP Sensor A (V)	Vehicle Speed	Engine Speed
1.2 V	25 mph (40 km/h)	1,050–1,650 rpm
	37 mph (60 km/h)	1,120–1,720 rpm
	62 mph (100 km/h)	1,431–2,031 rpm
2.3 V	25 mph (40 km/h)	1,840–2,440 rpm
	37 mph (60 km/h)	1,960–2,560 rpm
	62 mph (100 km/h)	2,140–2,740 rpm
4.5 V	25 mph (40 km/h)	3,800–4,400 rpm
	37 mph (60 km/h)	5,100–5,700 rpm
	62 mph (100 km/h)	5,700–6,300 rpm

S Position/Mode

APP Sensor A (V)	Vehicle Speed	Engine Speed
1.2 V	25 mph (40 km/h)	1,740–2,340 rpm
	37 mph (60 km/h)	2,030–2,630 rpm
	62 mph (100 km/h)	2,660–3,260 rpm
2.3 V	25 mph (40 km/h)	2,030–2,630 rpm
	37 mph (60 km/h)	2,220–2,820 rpm
	62 mph (100 km/h)	2,660–3,260 rpm
4.5 V	25 mph (40 km/h)	3,800–4,400 rpm
	37 mph (60 km/h)	5,100–5,700 rpm
	62 mph (100 km/h)	5,700–6,300 rpm

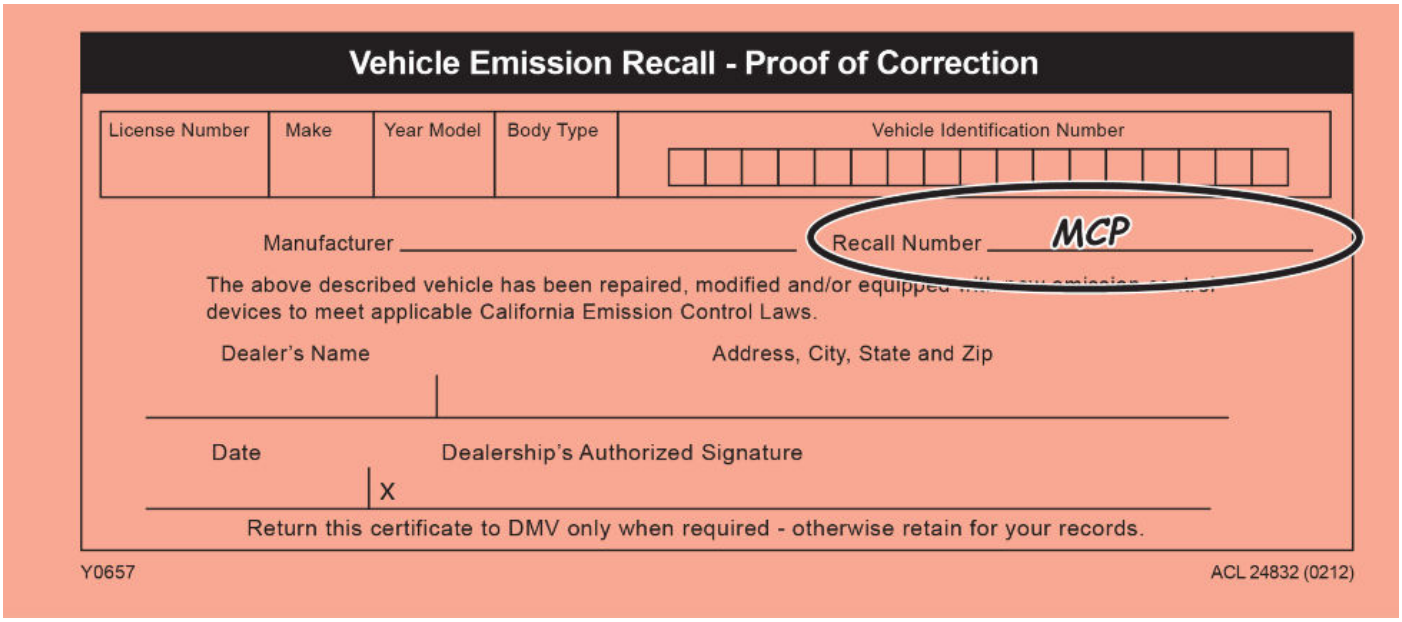
L Position/Mode

APP Sensor A (V)	Vehicle Speed	Engine Speed
1.2 V	25 mph (40 km/h)	2,717–3,317 rpm
	37 mph (60 km/h)	3,380–3,980 rpm
	62 mph (100 km/h)	4,140–4,740 rpm
2.3 V	25 mph (40 km/h)	2,717–3,317 rpm
	37 mph (60 km/h)	3,380–3,980 rpm
	62 mph (100 km/h)	4,140–4,740 rpm
4.5 V	25 mph (40 km/h)	3,800–4,400 rpm
	37 mph (60 km/h)	4,700–5,300 rpm
	62 mph (100 km/h)	5,300–5,900 rpm

104. Park the vehicle on an upward slope (about 16 degrees), apply the parking brake, and shift the transmission to P position/mode. Release the brake; the vehicle should not move.

NOTE: Always use the parking brake to hold the vehicle when stopped on an incline. Depending on the grade of the incline, the vehicle could roll if the brake is released.

105. California residents only: Fill out a Vehicle Emissions Recall – Proof of Correction certificate, and use MCP as the recall number. Have the service advisor give the certificate to your customer, and advise him or her to keep it as proof that the recall was completed. Your customer will need to submit this certificate to the DMV only if the DMV requests it. If you need more certificates, use reorder number Y0657.



Vehicle Emission Recall - Proof of Correction

License Number	Make	Year Model	Body Type	Vehicle Identification Number

Manufacturer _____ Recall Number MCP

The above described vehicle has been repaired, modified and/or equipped with new emission control devices to meet applicable California Emission Control Laws.

Dealer's Name | Address, City, State and Zip

Date | Dealership's Authorized Signature

X

Return this certificate to DMV only when required - otherwise retain for your records.

Y0657 ACL 24832 (0212)

END