



Revised October 2019

Dealer Service Instructions for:

Safety Recall V99 / NHTSA 19V-637

Steering Gear

NOTE: Page 65 revised Step 10.

Remedy Available

2019-2020 (KL) Jeep® Cherokee

NOTE: Some vehicles above may have been identified as not involved in this recall and therefore have been excluded from this recall.

IMPORTANT: Some of the involved vehicles may be in dealer new vehicle inventory. Federal law requires you to complete this recall service on these vehicles before retail delivery. Dealers should also consider this requirement to apply to used vehicle inventory and should perform this recall on vehicles in for service. Involved vehicles can be determined by using the VIP inquiry process.

Subject

The steering gear on about 5,290 of the above vehicles may have been built with a servo pinion hardness below specification. This could potentially result in a fracture and allow a metal shard to become lodged within the teeth of the steering rack. If this occurs, it can result in a loss of steering control which can cause a vehicle crash without prior warning.

Repair

Replace the steering gear.

Alternate Transportation

Dealers should attempt to minimize customer inconvenience by placing the owner in a loaner vehicle if the vehicle must be held overnight.

Parts Information

All Vehicles

<u>Part Number</u>	<u>Quantity</u>	<u>Description</u>
68284077AH	1	Steering Gear
06512252AA	2	Bolt, Steering Gear
06104719AA	2	Nut, Steering Gear
06511905AA	2	Nut, Tie Rod End Outer
06507676AA	2	Nut, Ball Joint Lower
06510520AA	4	Rivet, Front Wheelhouse to Fascia
06510740AA	1	Bolt, Steering Column Intermediate

All Wheel Drive (AWD) / Four Wheel Drive (4WD) vehicles ONLY

<u>Part Number</u>	<u>Quantity</u>	<u>Description</u>
68224126AA	1	Snap Ring, Propeller Shaft
68242709AA	3	Bolts and Retainer, Propeller Shaft

Parts Information [Continued]

2.0L Engine sales code EC1 (4-cylinder gas)

<u>Part Number</u>	<u>Quantity</u>	<u>Description</u>
68239839AA	1	Gasket, Exhaust
06104709AA	2	Nut, Exhaust

2.4L Engine sales code EDD/EDE (4-cylinder gas)

<u>Part Number</u>	<u>Quantity</u>	<u>Description</u>
68081823AD	1	Gasket, Exhaust
06104709AA	2	Nut, Exhaust

3.2L Engine sales code EHK (6-cylinder gas)

<u>Part Number</u>	<u>Quantity</u>	<u>Description</u>
52022294AA	1	Gasket, Exhaust
04880235AC	1	Gasket, Exhaust
68110431AB	1	Gasket, Exhaust
06104709AA	7	Nut, Exhaust

Parts Return

Return the steering gear to the Mopar Core Return Center for core credit.

Special Tools

The following special tools are required to perform this repair:

- NPN wiTECH micro pod II
- NPN Laptop Computer
- NPN wiTECH Software
- NPN Steering Wheel Holder
- NPN Wheel Alignment Equipment
- C-4150A Ball Joint Press
- C-3894-A Tie Rod Puller

Service Procedure

A. Steering Gear Removal

1. Position the vehicle on a suitable lift.
2. Place the ignition in the OFF position.
3. Using a steering wheel holder, lock the steering wheel at the 12 o'clock center position to keep it from rotating. This keeps the clockspring in the proper orientation (Figure 1).



Figure 1 – Steering Wheel Holder

4. Open the hood.
5. Disconnect the Intelligent Battery Sensor (IBS) wire harness connector (Figure 2).
6. Remove the ground terminal M8 hex nut. Position and secure the ground cable eyelet away from the battery terminal (Figure 2).

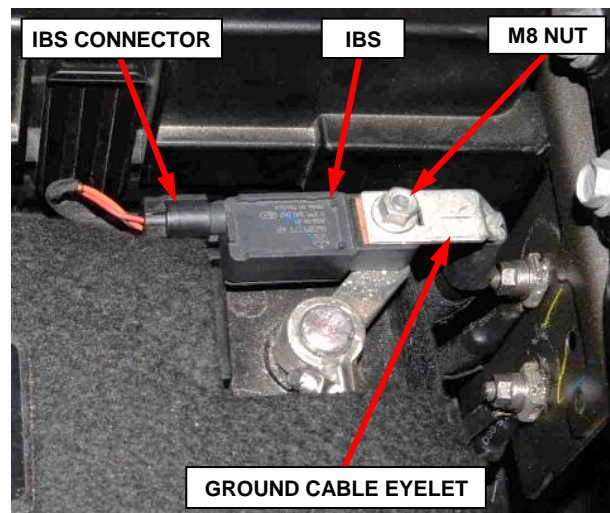


Figure 2 – Battery Negative Terminal

Service Procedure [Continued]

7. Remove intermediate shaft pinch bolt and separate the intermediate shaft from the steering gear pinion shaft. **DISCARD** the pinch bolt, it is not to be reused (Figure 3).

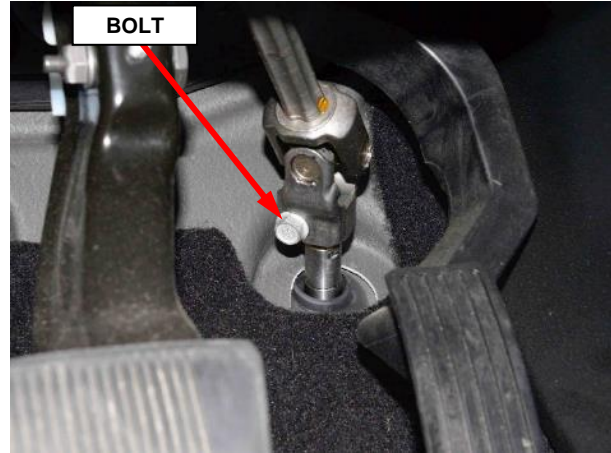


Figure 3 – Intermediate Shaft Bolt

8. **Front Wheel Drive (FWD) vehicles**, proceed to **Step 9**.

All Wheel Drive (AWD) / Four Wheel Drive (4WD) vehicles, place the transmission in NEUTRAL following steps (a-c):

- a. Using a trim stick or similar tool, carefully separate the shifter bezel and boot assembly from the center console (Figure 4).



Figure 4 – Shifter Bezel

Service Procedure [Continued]

- b. Insert a small screwdriver or similar tool down into the shift lever override access hole (at the right front corner of the shift lever assembly), and push and hold the override release lever down (Figure 5).

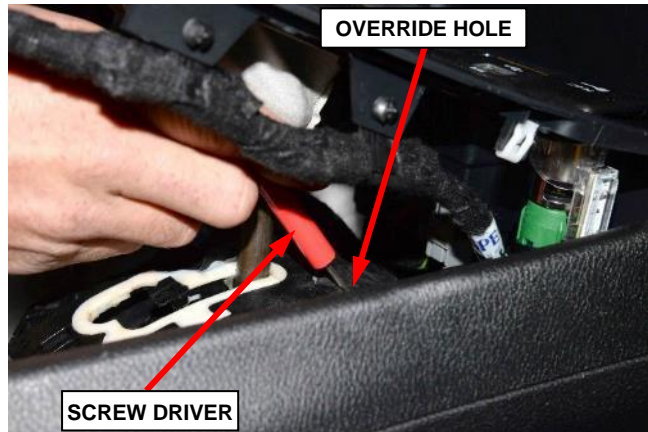


Figure 5 – Shift Lever Override

- c. Move the shift lever to the NEUTRAL position.

- 9. Raise and support the vehicle.

- 10. Both front wheels; remove the five wheel mounting (lug) bolts then remove the tire and wheel assembly from the hub.

- 11. Remove the fasteners (2) securing the front engine belly pan or front skid plate (1) to the underside of the vehicle, then remove the engine belly pan or skid plate (Figure 6).

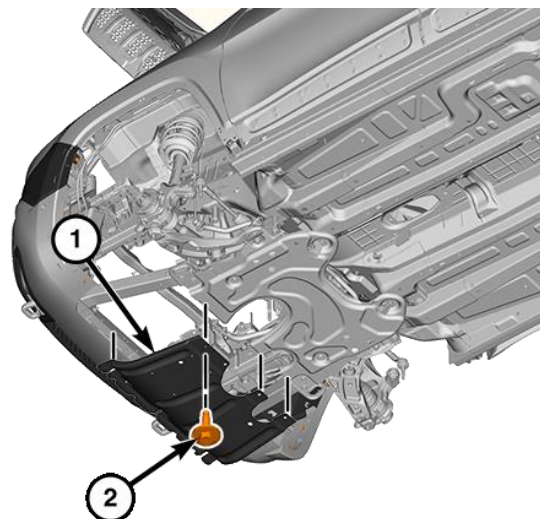


Figure 6 – Belly Pan / Skid Plate

Service Procedure [Continued]

- 12. **Latitude / Altitude / Limited / Overland:** Remove the **two outer rivets** securing the wheelhouse splash shield to the front fascia on both sides of the vehicle (Figure 7).

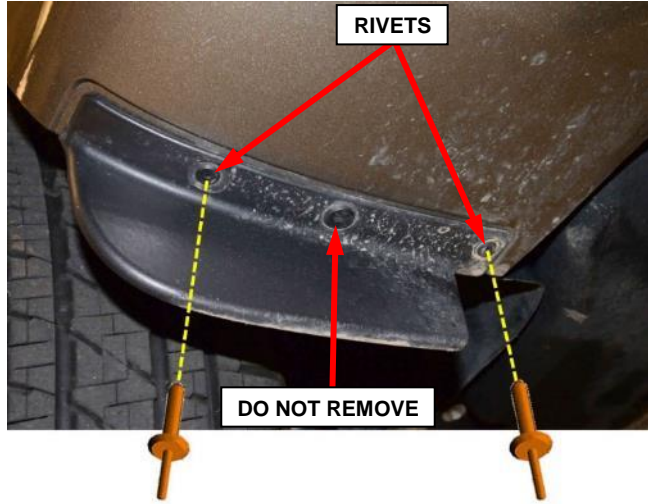


Figure 7 – Front Wheelhouse Rivets

- 13. **Upland / Trailhawk:** Remove the **single rivet** securing the wheelhouse splash shield to the front fascia on both sides of the vehicle (Figure 8).

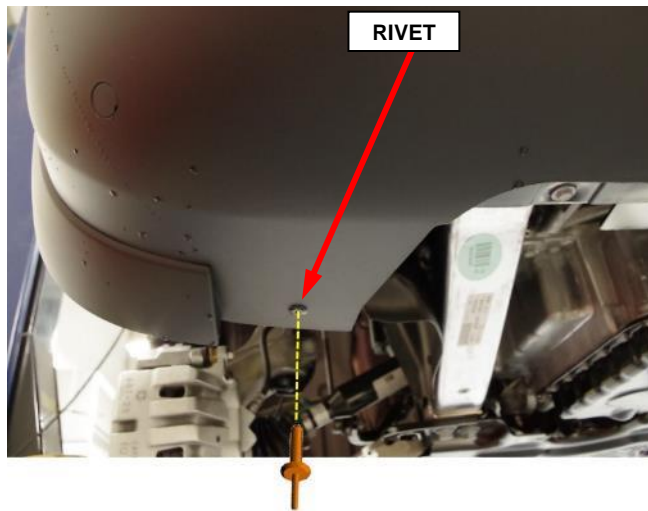


Figure 8 – Front Wheelhouse Rivet

Service Procedure [Continued]

14. If applicable, remove the fasteners securing the front fascia lower edge to the vehicle (Figure 9).

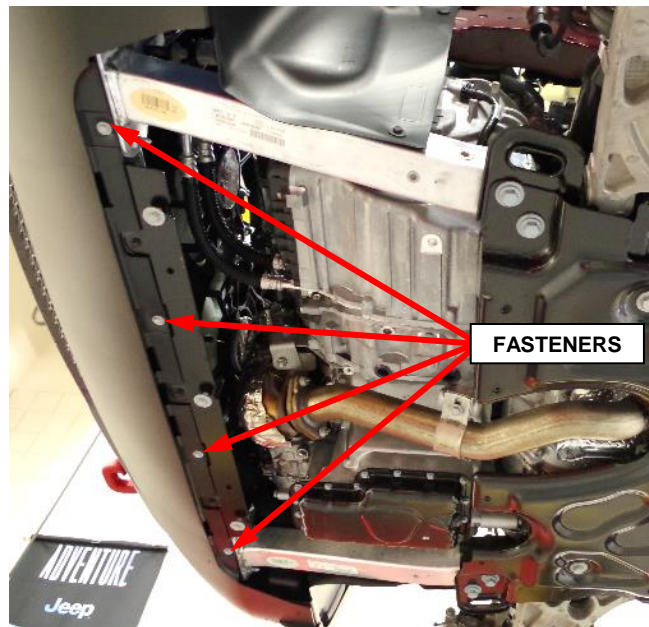


Figure 9 – Lower Fascia Fasteners

15. Remove both front wheelhouse splash shields following steps (a-d):

- a. Remove the screw securing the wheelhouse splash shield to the sill trim (Figure 10).



Figure 10 – Sill Trim Screw

Service Procedure [Continued]

- b. Remove the fasteners securing the wheelhouse splash shield to the vehicle (Figure 11).

NOTE: Fastener location and quantity will vary depending on vehicle trim level, (Figure 11) is only an example.

- c. Release the outboard edge of the wheelhouse splash shield from the fender flange (Figure 11).
- d. Remove the wheelhouse splash shield from the vehicle (Figure 11).

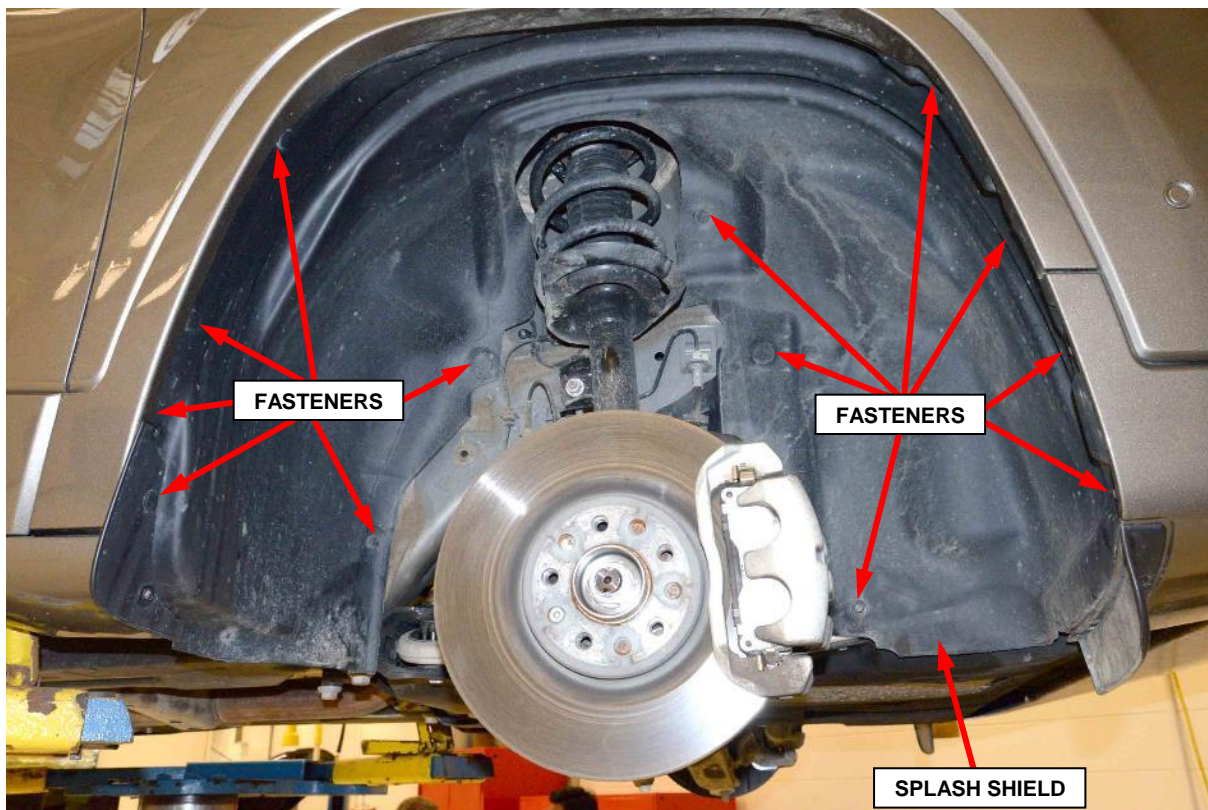


Figure 11 – Wheelhouse Splash Shield

Service Procedure [Continued]

16. **Latitude / Altitude / Limited / Overland:** From inside the wheel well, release the clips and remove the one-piece wheel flare molding from both sides of the vehicle (Figure 12).



**Figure 12 – Wheel Flare Molding
Latitude / Altitude / Limited / Overland**

17. **Upland / Trailhawk:** Do NOT remove the two-piece front flare moldings (Figure 13).



**Figure 13 – Wheel Flare Molding
Upland / Trailhawk**

Service Procedure [Continued]

18. Remove the fastener on the inside of the wheel opening that attaches the side of the front fascia to the fender on both sides of the vehicle (Figure 14).

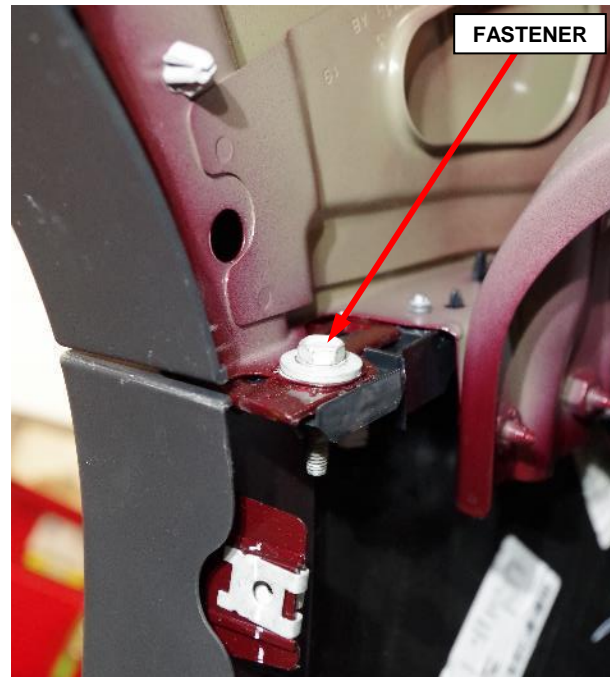


Figure 14 – Fascia to Fender Fastener

19. Disconnect the front fascia electrical wire harness slide lock connector on the left side of the vehicle (Figure 15).



Figure 15 – Front Fascia Electrical Wire Harness Slide Lock Connector

Service Procedure [Continued]

20. Remove the push pin fasteners then remove the radiator closeout panel (Figure 16).

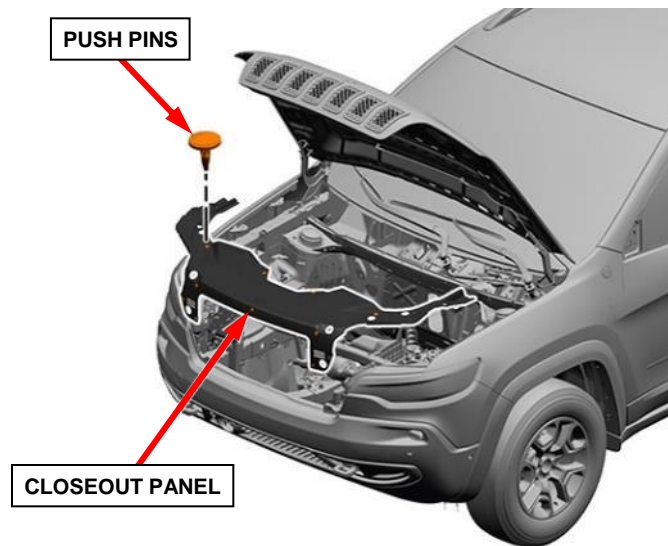


Figure 16 – Radiator Closeout Panel

21. **If applicable** based on trim level, remove the two screws securing the front fascia to the radiator core support (Figure 17).

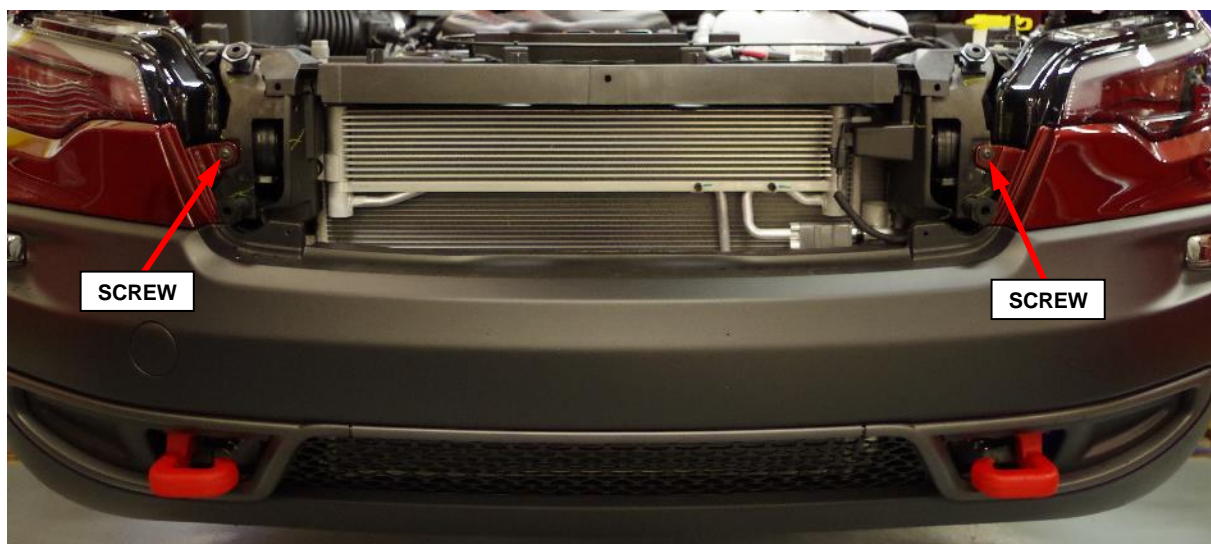
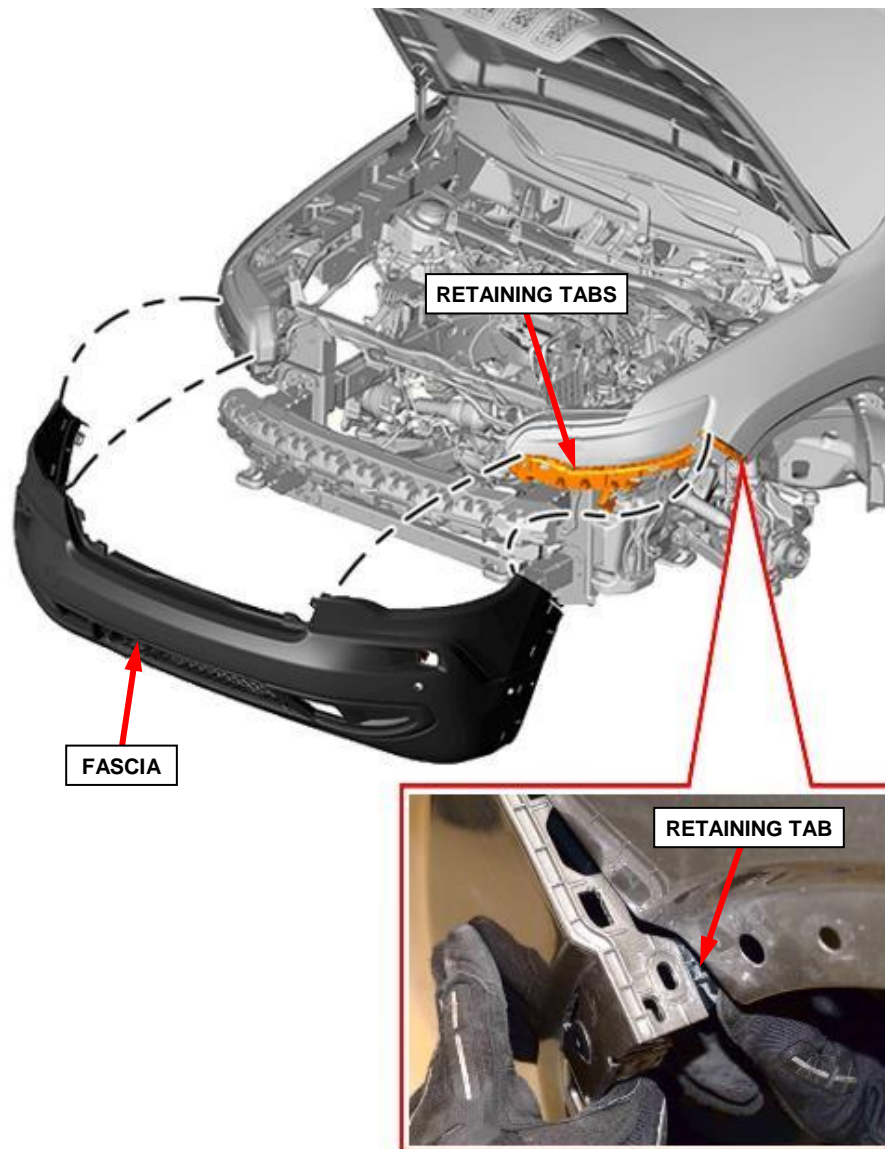


Figure 17 – Front Fascia to Core Support Attachment Screws

Service Procedure [Continued]

22. Carefully pull out on the upper and lower fascia sides to release the fascia retaining tabs at the fender and below the headlight. Repeat on the opposite side (Figure 18).
23. Remove the fascia from the vehicle (Figure 18).

**Figure 18 – Front Fascia**

Service Procedure [Continued]

24. **If equipped,** Disconnect the vehicle height sensor actuator rod (1) from the lower control arm (Figure 19).

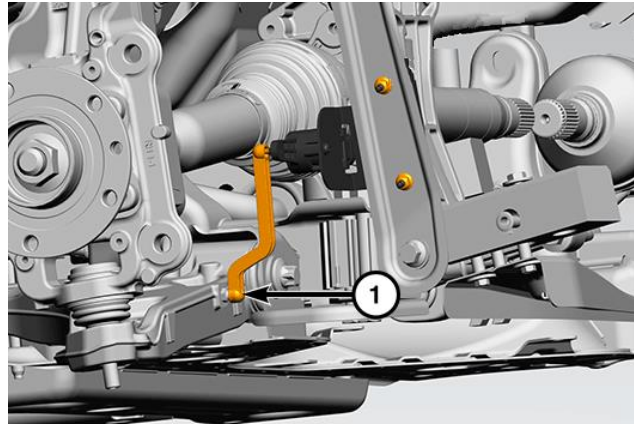


Figure 19 – Height Sensor Actuator Rod

25. **If equipped,** Disconnect the wire harness connector (1) from the vehicle height sensor (Figure 20).

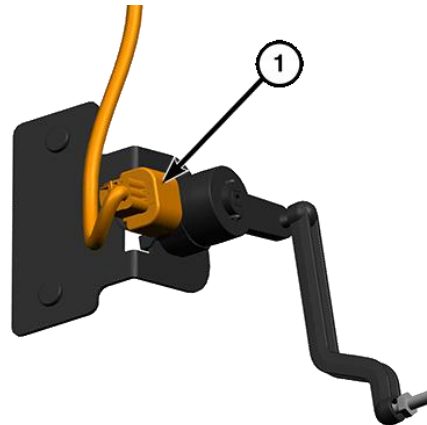


Figure 20 – Electrical Connector

26. **If equipped,** Remove the bolts (2) then remove the vertical bracket (1) from both sides of the vehicle (Figure 21).

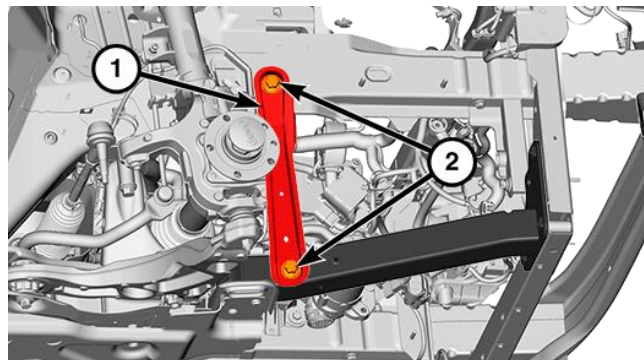


Figure 21 – Vertical Bracket

Service Procedure [Continued]

27. Where the stabilizer bar link attaches to the suspension strut, remove the nut while holding the stabilizer bar link stud stationary, then position the link aside (Figure 22).

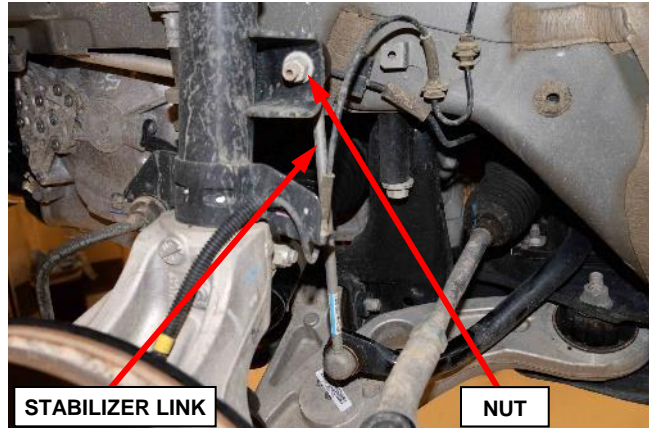


Figure 22 – Stabilizer Bar Link

28. Remove and **DISCARD** the lower ball joint nut (Figure 23).

NOTE: Discard the ball joint retaining nut. Use a NEW nut when installing the ball joint.

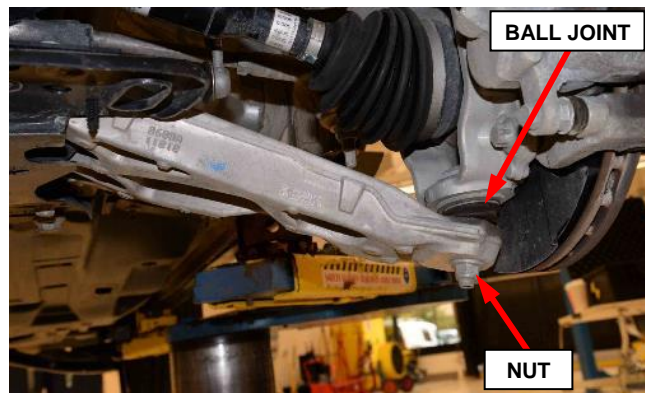


Figure 23 – Ball Joint

29. Using ball joint press 4150A, separate the lower ball joint stud from the lower control arm (Figure 24).

NOTE: Make sure the ball joint boot does not get cut when separating the ball joint stud from the control arm.

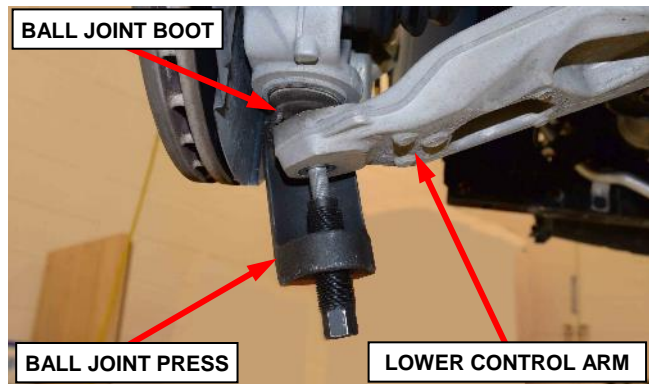


Figure 24 – Ball Joint Press 4150A

Service Procedure [Continued]

30. Remove and **DISCARD** the outer tie rod end nut (Figure 25).

NOTE: Discard the tie rod retaining nut. Use a NEW nut when installing the tie rod.

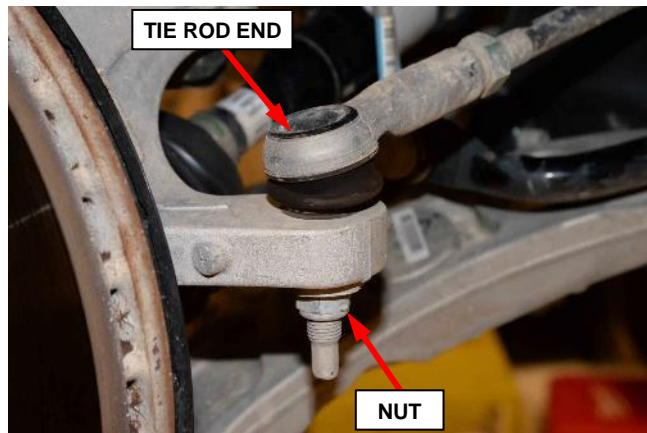


Figure 25 – Outer Tie Rod End

31. Using tie rod puller C-3894-A, separate the outer tie rod end from the steering knuckle (Figure 26).

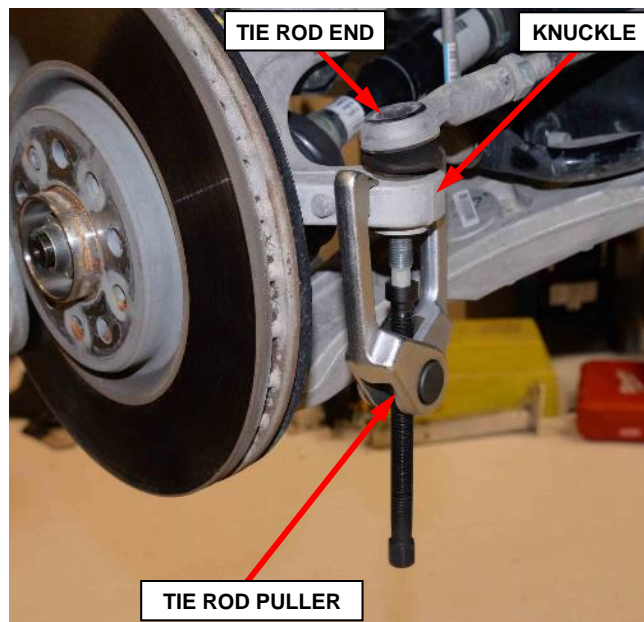


Figure 26 – Tie Rod Puller C-3894-A

Service Procedure [Continued]

- 32. **If applicable:** Remove the nut securing the air intake resonator to the vehicle and position out of way (Figure 27).

- 33. **If equipped,** remove the tow hook bolts (2) and remove the nut (5) then Remove the tow hook (1) (Figure 28).

- 34. **If equipped,** remove the tow hook bracket bolts (3) and (4) then remove the tow hook bracket (6) (Figure 28).

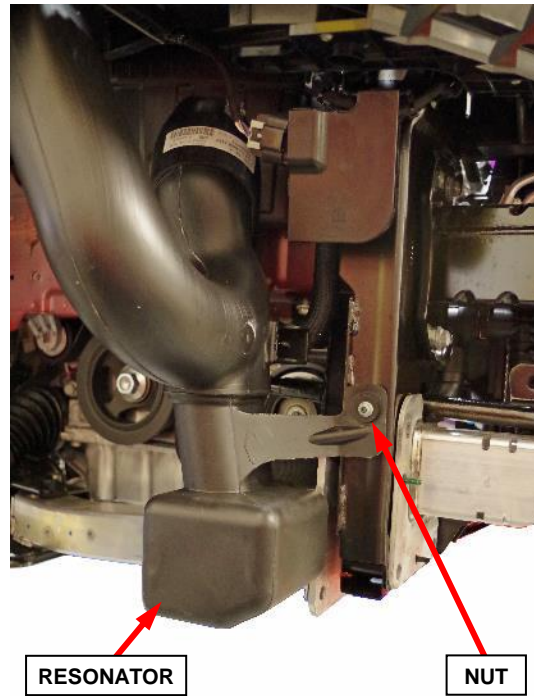


Figure 27 – Air Intake Resonator

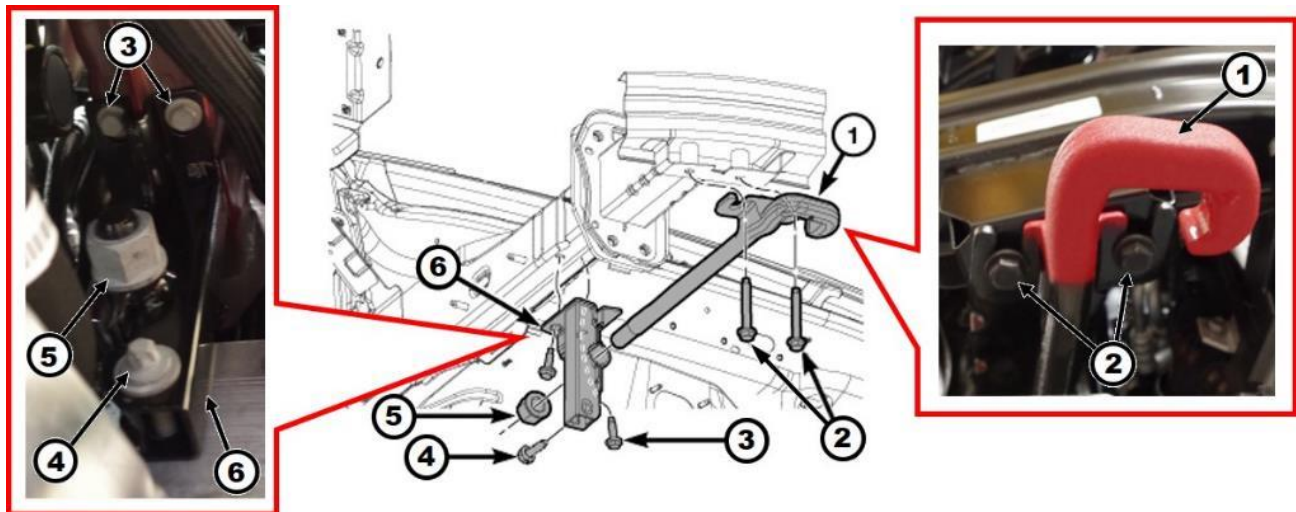


Figure 28 – Tow Hook

Service Procedure [Continued]

- 35. Remove the three bolts securing the lower load beam extensions to the radiator support (1). If the load beam extension is retained by clips, it is not necessary to remove the load beam extension from the vehicle (Figure 29).
- 36. Remove the two bolts securing the lower load beam (2) to the cradle (3) (Figure 29).
- 37. Remove the lower load beams (2) (Figure 29).

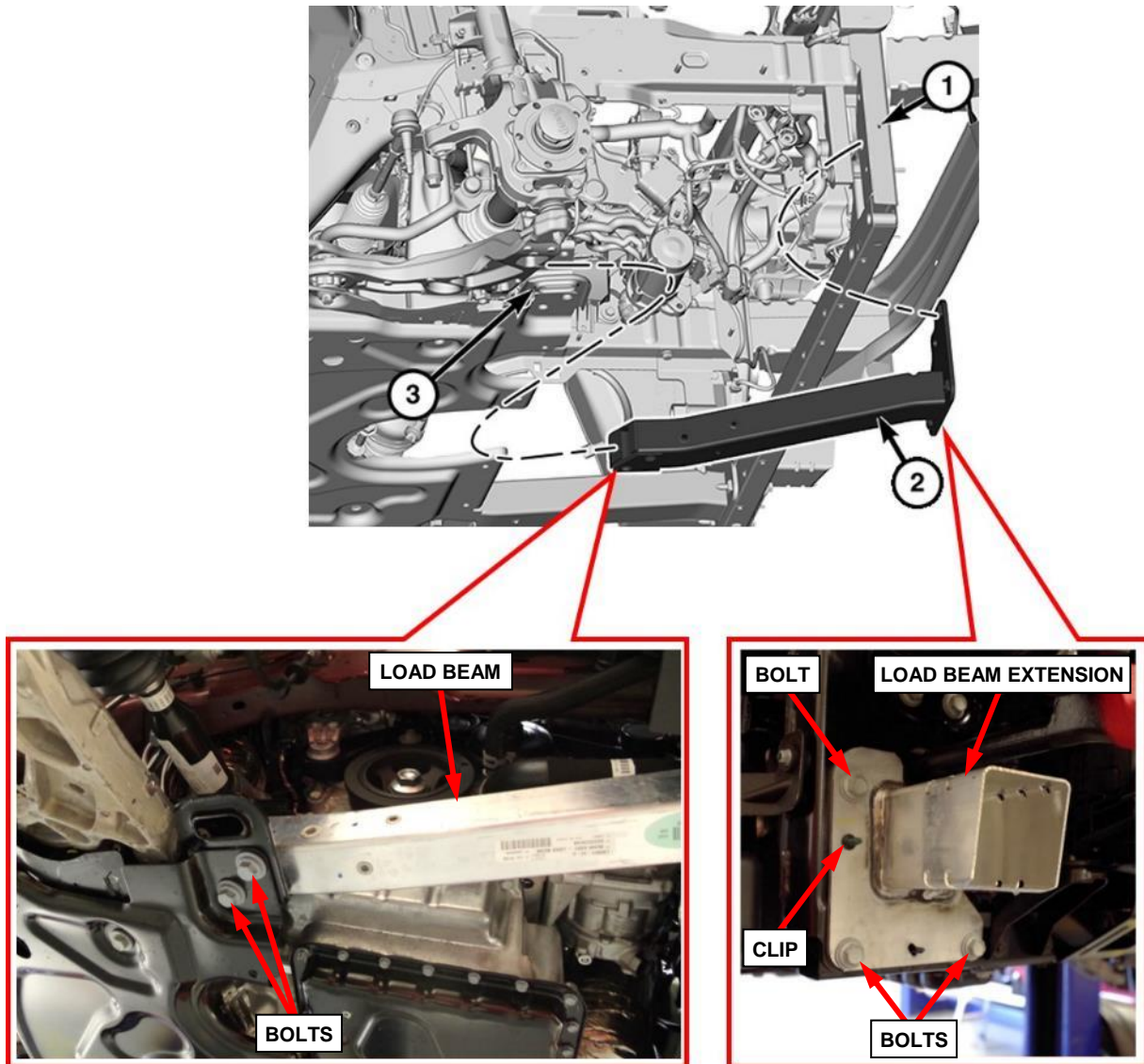


Figure 29 – Load Beam

Service Procedure [Continued]

38. **Front Wheel Drive (FWD) vehicles**, proceed to **Page 23**.

All Wheel Drive (AWD) / Four Wheel Drive (4WD) vehicles, remove the propeller shaft following steps (a-f):

- a. Apply alignment index marks on the rear differential pinion flange and the rear propeller shaft flange for alignment during reassembly (Figure 30).

NOTE: Support the propeller shaft

- b. Remove and **DISCARD** the six propeller shaft bolts at the rear pinion flange (Figure 30).

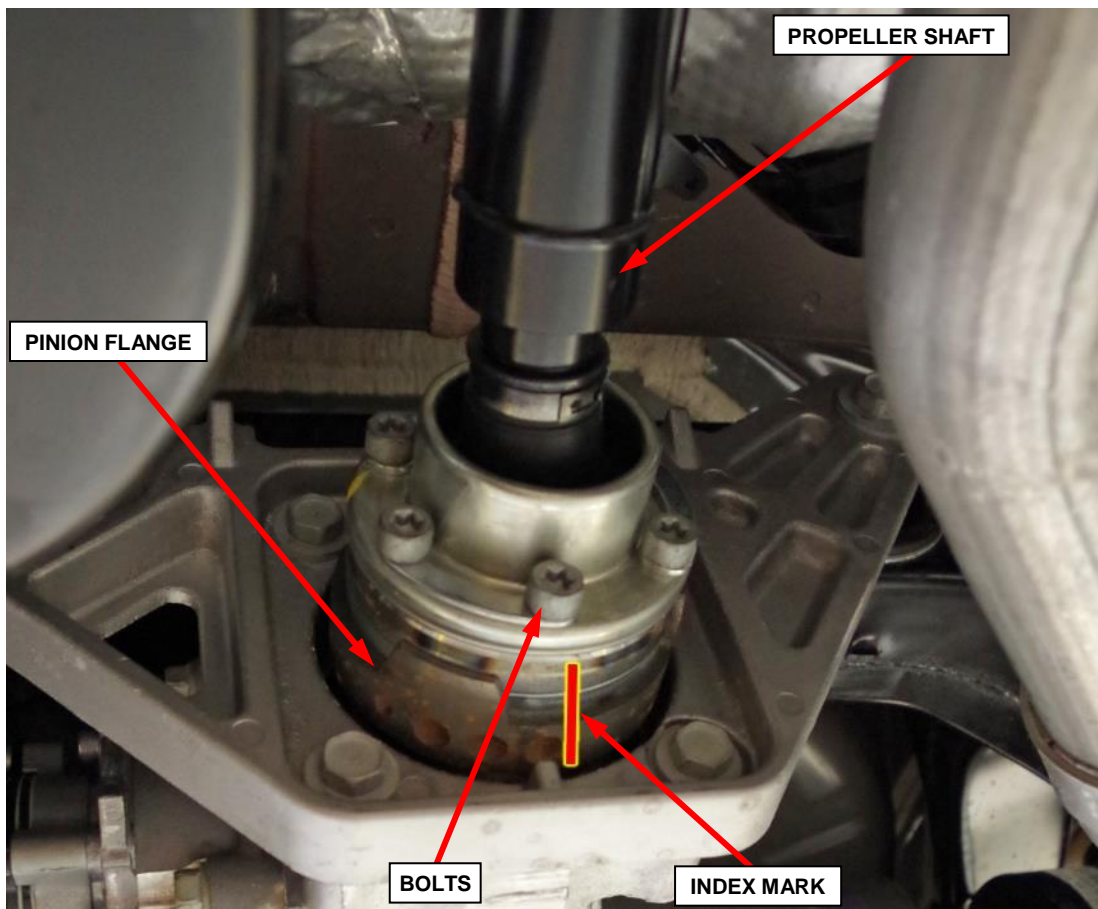


Figure 30 – Rear Propeller Shaft Flange

Service Procedure [Continued]

CAUTION: Propeller shaft removal is a two-person operation. Never allow propeller shaft to hang from the center bearing, or while only connected to Power Transfer Unit (PTU) or rear driveline module flanges. A helper is required. If a propeller shaft section is hung unsupported, damage may occur to the joint, boot, and center bearing from over-angulation. This may result in driveline vibrations.

- c. Remove the front center bearing bolts (Figure 31).
- d. Remove the rear center bearing bolts (Figure 31).

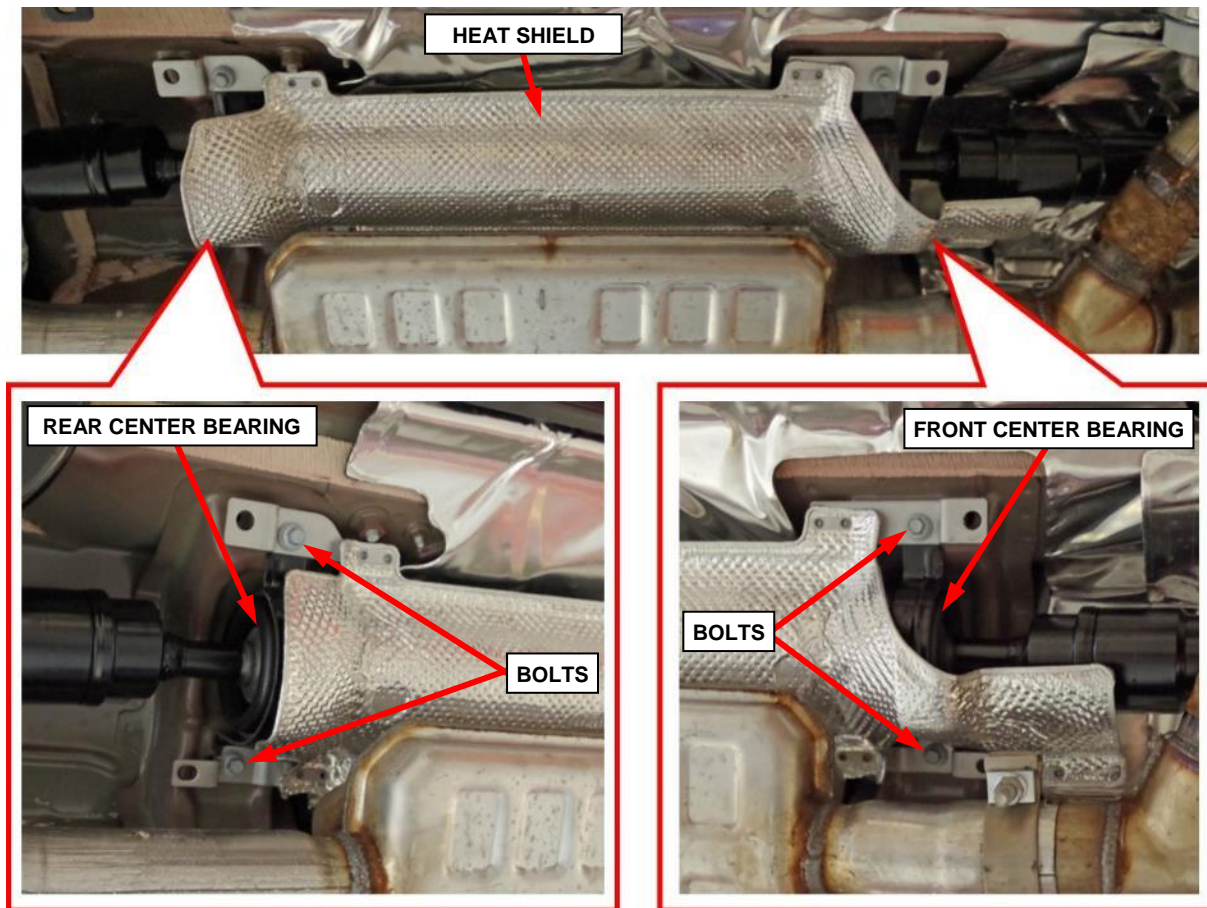


Figure 31 – Rear Center Bearing

Service Procedure [Continued]

- e. **Propeller shaft removal is a two-person operation.** Remove the propeller shaft from the rear pinion flange then slide the propeller shaft off the Power Transfer Unit (PTU). Remove the propeller shaft from the vehicle. (Figure 32).

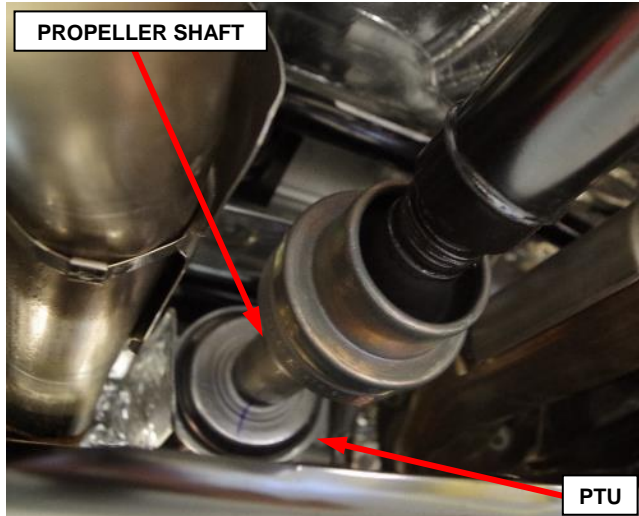


Figure 32 – Propeller Shaft at PTU

- f. Replace the PTU output shaft snap ring with a **NEW** snap ring before the propeller shaft is reinstalled (Figure 33).

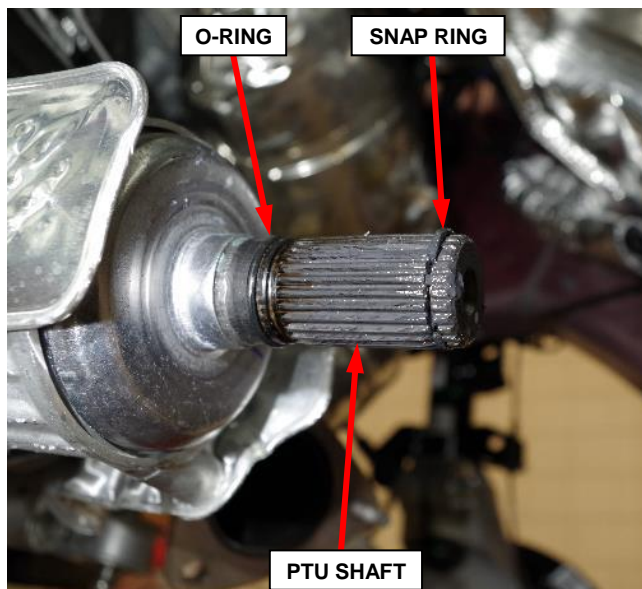


Figure 33 – PTU Shaft Snap Ring

Service Procedure [Continued]**Exhaust System Crossunder Pipe:**

- Follow the appropriate crossunder pipe removal procedure for engine size: 2.0L (Page 23), 2.2L (Page 26), 2.4L (Page 30), or 3.2L (Page 33).
 - If any exhaust studs break during disassembly, remove the broken stud then use bolt part number 06512082AA to substitute for the broken stud and use the exhaust system nuts specified in the parts section of this recall campaign. Submit a consequential damage claim for stud replacement.
39. **2.0L Engine:** Remove the exhaust crossunder pipe following steps (a-h) (Figure 34).

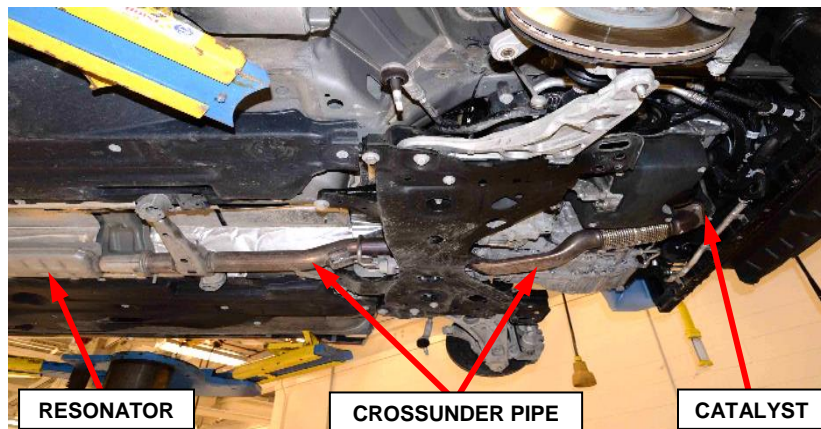


Figure 34 – Exhaust Crossunder Pipe

- a. Remove and **DISCARD** the flange nuts (1) securing the crossunder pipe (2) to the catalyst (Figure 35).

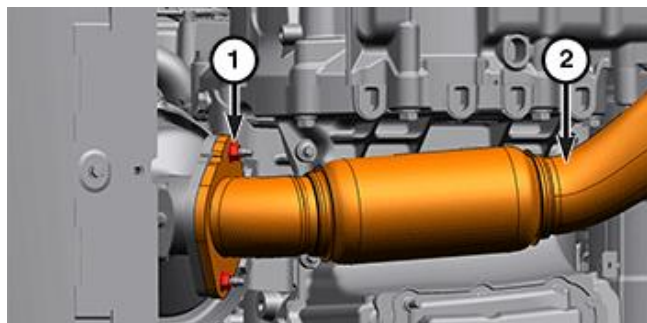


Figure 35 – Catalyst Flange Fasteners

Service Procedure [Continued]

2.0L Engine: Remove the exhaust crossunder pipe (Continued).

- b. Loosen the exhaust clamp nut (1) securing the resonator (2) to the crossunder pipe (Figure 36).

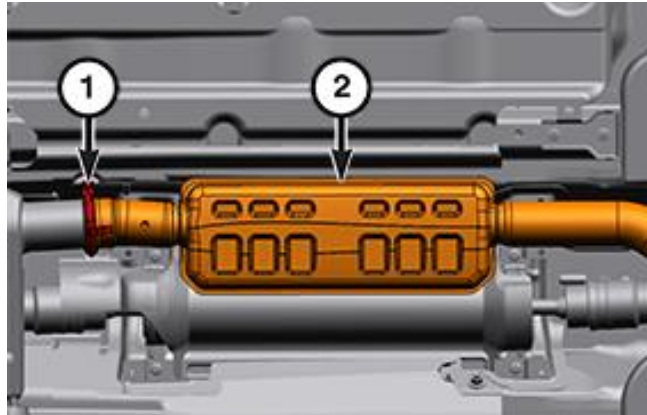


Figure 36 – Resonator

- c. Remove the bolts (1) securing the crossunder pipe rear isolators to the vehicle body (Figure 37).

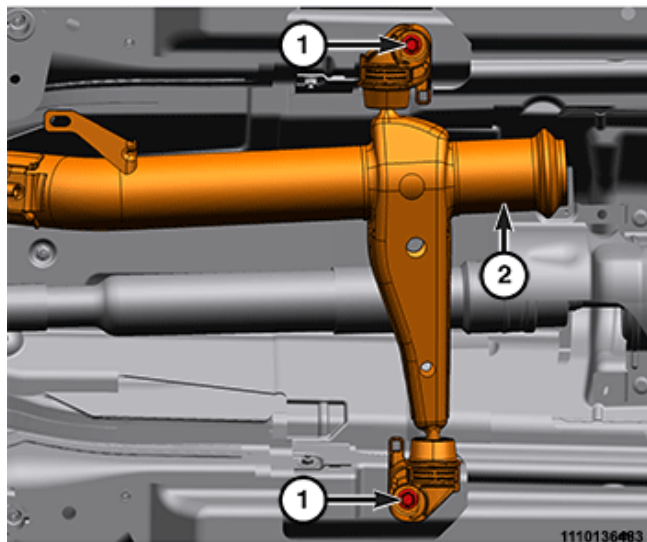


Figure 37 – Crossunder Pipe Isolators

- d. Separate the crossunder pipe from the catalyst and the resonator.

Service Procedure [Continued]

2.0L Engine: Remove the exhaust crossunder pipe (Continued).

e. Support the exhaust system resonator (Figure 38).

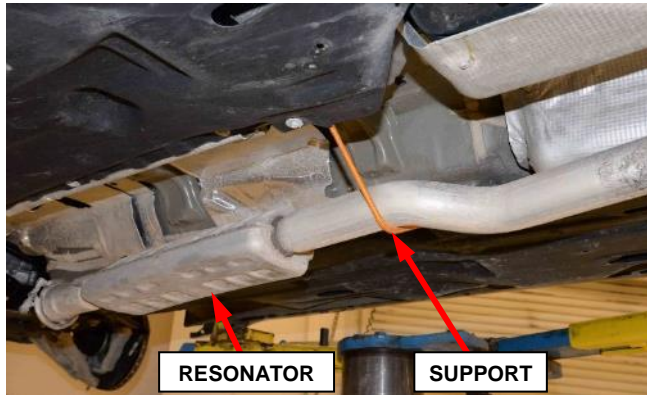


Figure 38 – Support Exhaust

f. Slide the crossunder pipe rearward separating the pipe hanger from the front isolator (Figure 39).

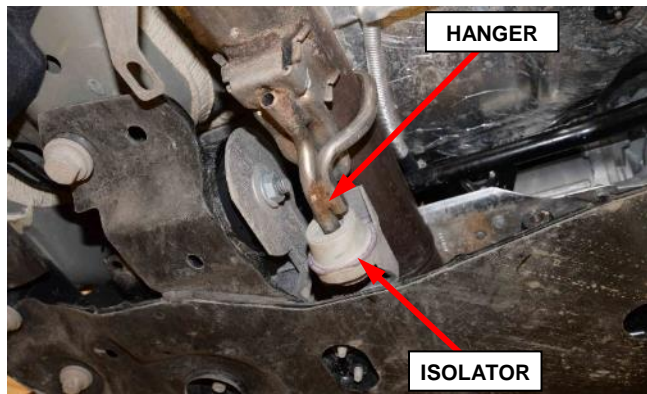


Figure 39 – Front Exhaust Isolator

g. Rotate and remove the crossunder pipe from the vehicle.

h. Remove and **DISCARD** the crossunder pipe to catalyst flange gasket (1) (Figure 40).

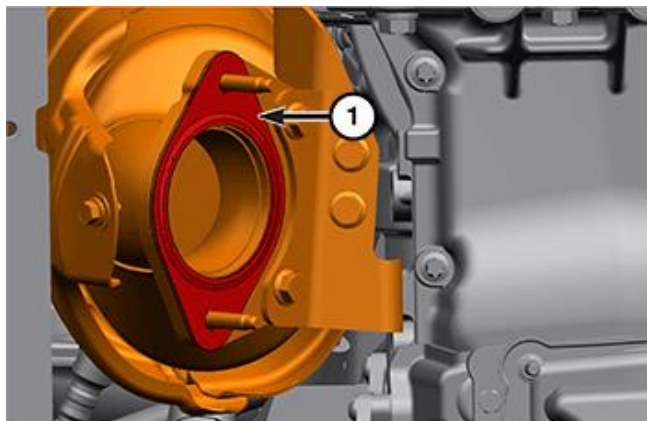


Figure 40 – Catalyst Flange Gasket

Service Procedure [Continued]

40. **2.2L Diesel Engine:** Remove the exhaust crossunder pipe following steps (a-k) (Figure 41).

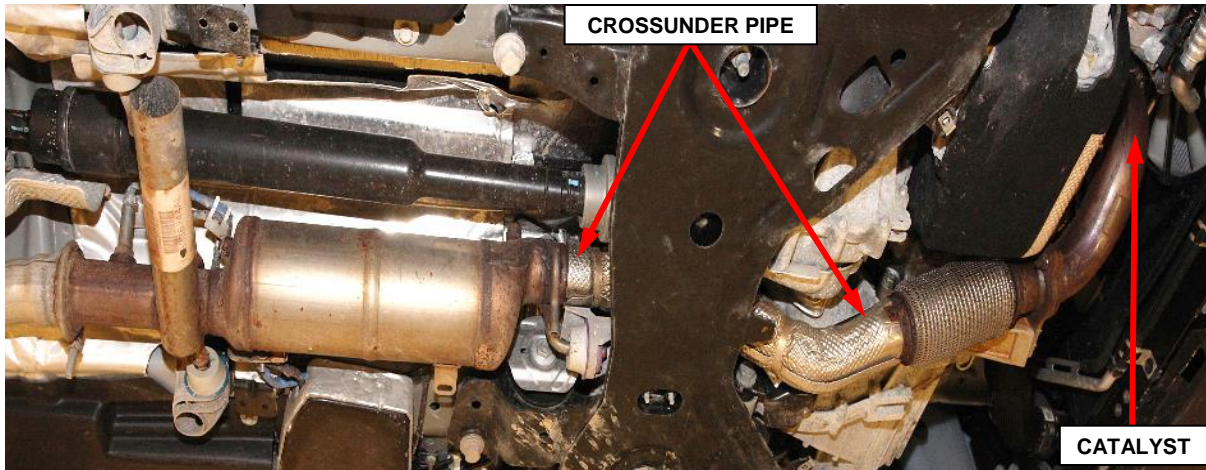


Figure 41 – Exhaust Crossunder Pipe

- a. Disconnect the electrical connectors for the exhaust temperature sensor, Particulate (PM) sensor, and NOx sensor (Figure 42).
- b. Release the wires from the retainers for the exhaust temperature sensor, Particulate (PM) sensor, and NOx sensor (Figure 43).

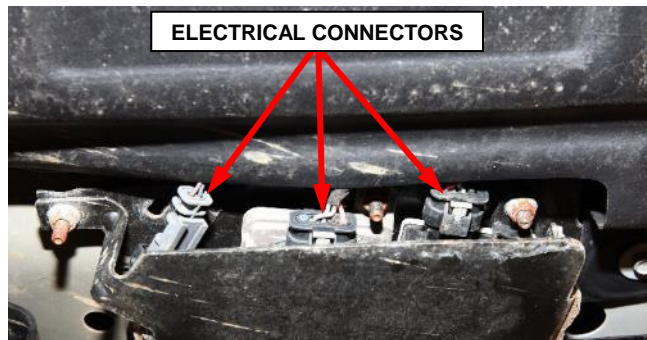


Figure 42 – Electrical Connectors

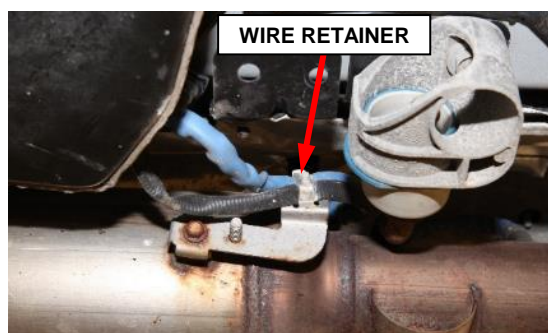
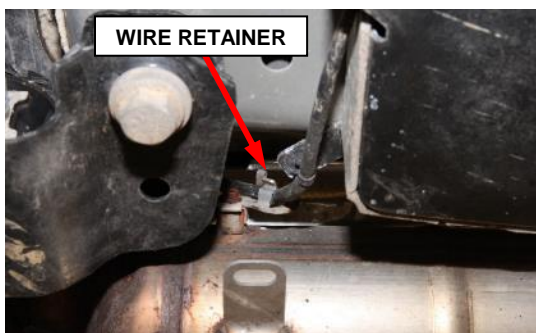


Figure 43 – Wire Harness Retainers

Service Procedure [Continued]

2.2L Engine: Remove the exhaust crossunder pipe (Continued).

- c. Remove the nuts (1), bolt (3) and the support bracket (2) (Figure 44).

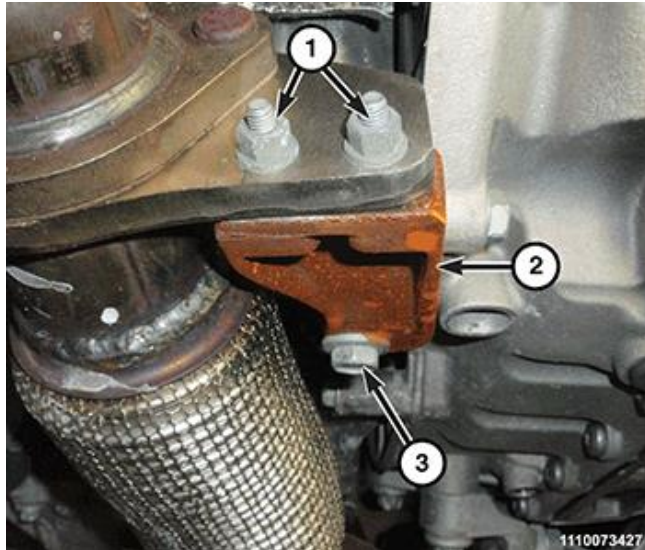


Figure 44 – Support Bracket

- d. Remove and **DISCARD** the flange nuts (1) securing the crossunder pipe to the Catalyst (Figure 45).

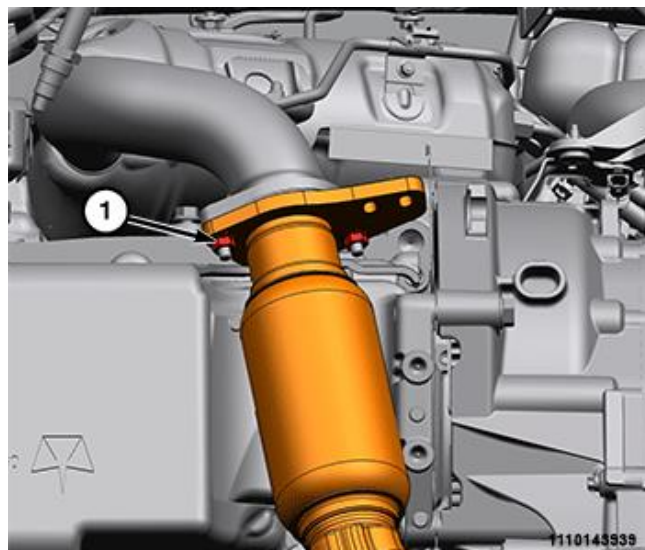


Figure 45 – Catalyst Flange Fasteners

Service Procedure [Continued]

2.2L Engine: Remove the exhaust crossunder pipe (Continued).

- e. Remove the two bolts (1) securing the exhaust isolator to the front suspension crossmember (Figure 46).



Figure 46 – Front Exhaust Isolator

- f. Loosen the exhaust clamp nut (1) securing the resonator to the crossunder pipe (Figure 47).

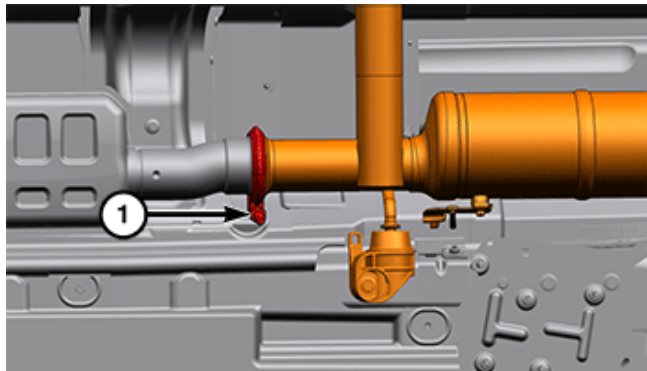


Figure 47 – Exhaust Clamp

- g. Remove the bolts (1) securing the crossunder pipe rear isolator to the vehicle body (Figure 48).

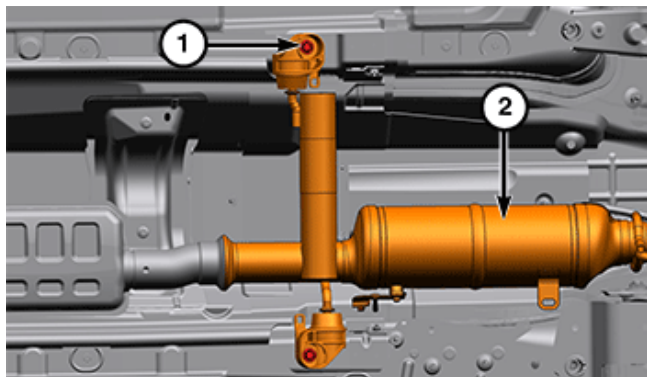


Figure 48 – Crossunder Pipe Isolators

Service Procedure [Continued]

2.2L Engine: Remove the exhaust crossunder pipe (Continued).

- h. Separate the crossunder pipe from the catalyst and the resonator.

- i. Support the exhaust system resonator (Figure 49).

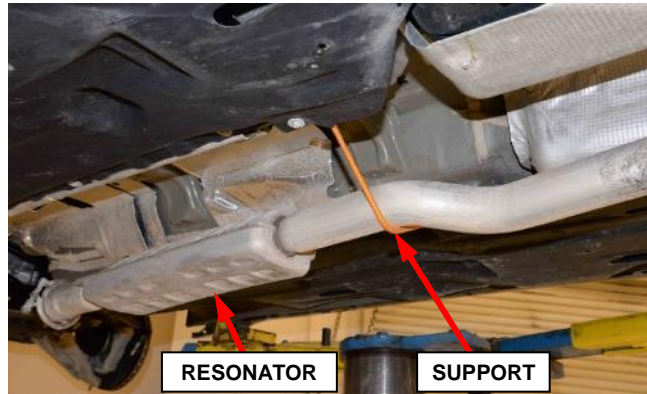


Figure 49 – Support Exhaust

- j. Rotate and remove the crossunder pipe from the vehicle.

- k. Remove and **DISCARD** the crossunder pipe to catalyst flange gasket (1) (Figure 50).

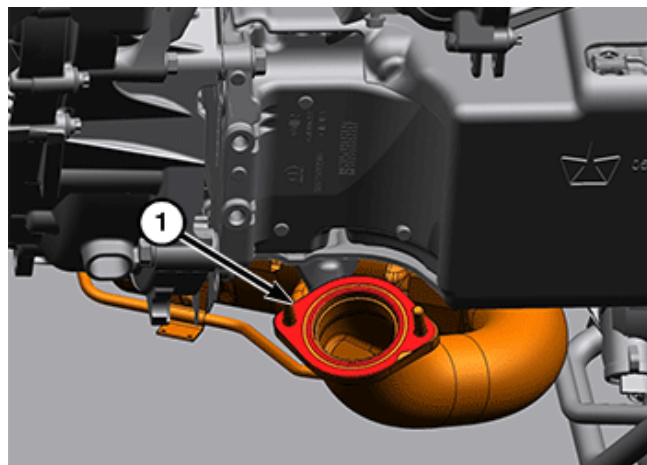


Figure 50 – Catalyst Flange Gasket

Service Procedure [Continued]

41. **2.4L Engine:** Remove the exhaust crossunder pipe following steps (a-h) (Figure 51).

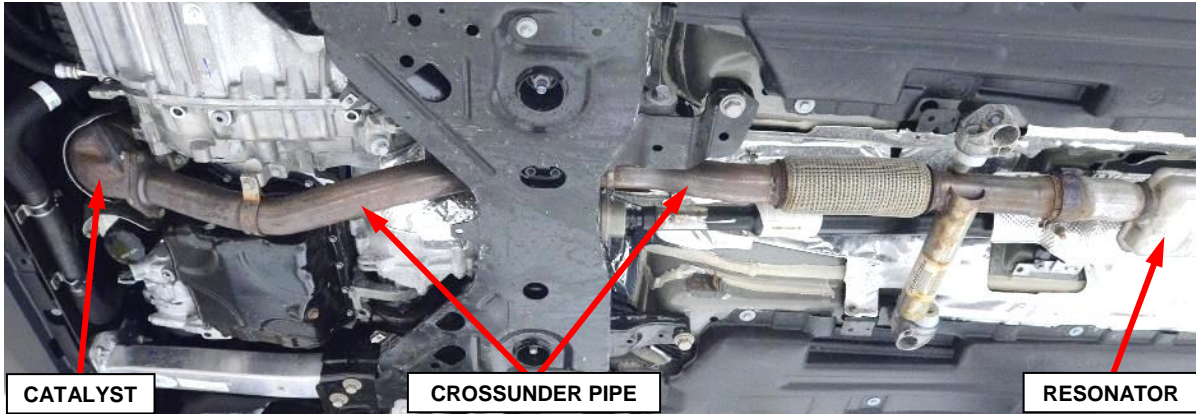


Figure 51 – Exhaust Crossunder Pipe

- a. Remove the and **DISCARD** flange nuts securing the crossunder pipe to the catalyst (Figure 52).
- b. Remove the pipe support bolt (Figure 52).

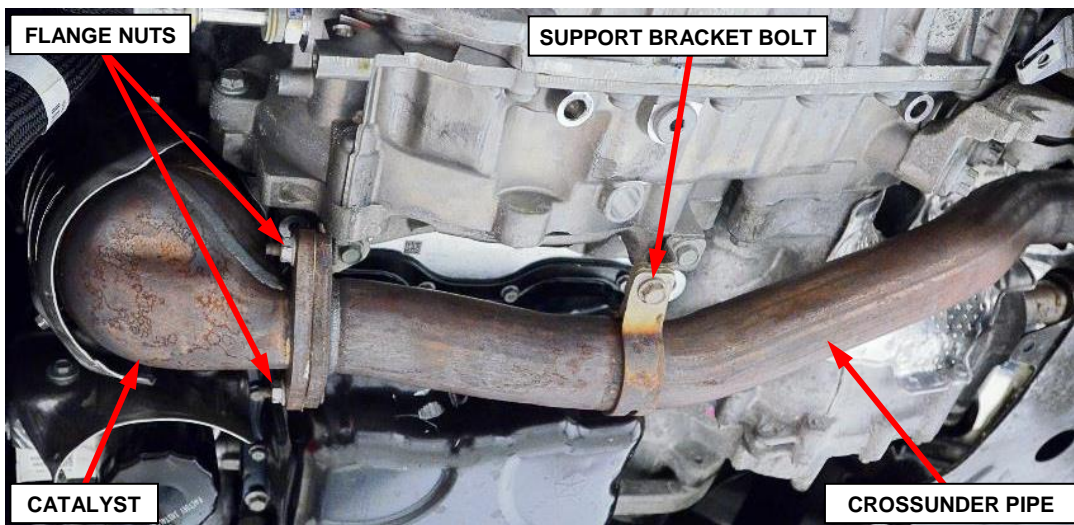


Figure 52 – Catalyst Flange Fasteners and Support Bracket

Service Procedure [Continued]

2.4L Engine: Remove the exhaust crossunder pipe (Continued).

- c. Loosen the exhaust clamp nut securing the resonator to the crossunder pipe (Figure 53).
- d. Remove the bolts securing the crossunder pipe rear isolator to the vehicle body (Figure 53).
- e. Separate the crossunder pipe from the catalyst and the resonator.

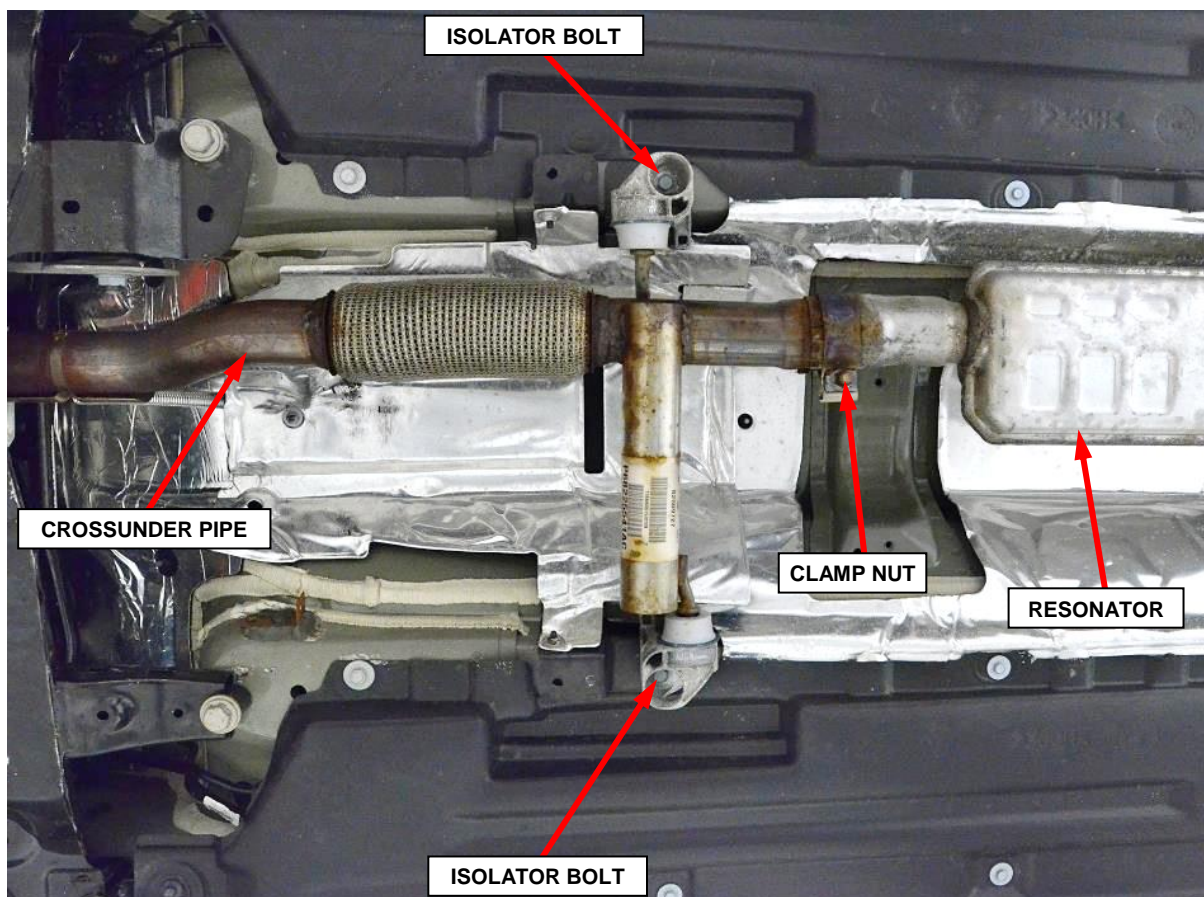


Figure 53 – Description

Service Procedure [Continued]

2.4L Engine: Remove the exhaust crossunder pipe (Continued).

- f. Support the exhaust system resonator (Figure 54).

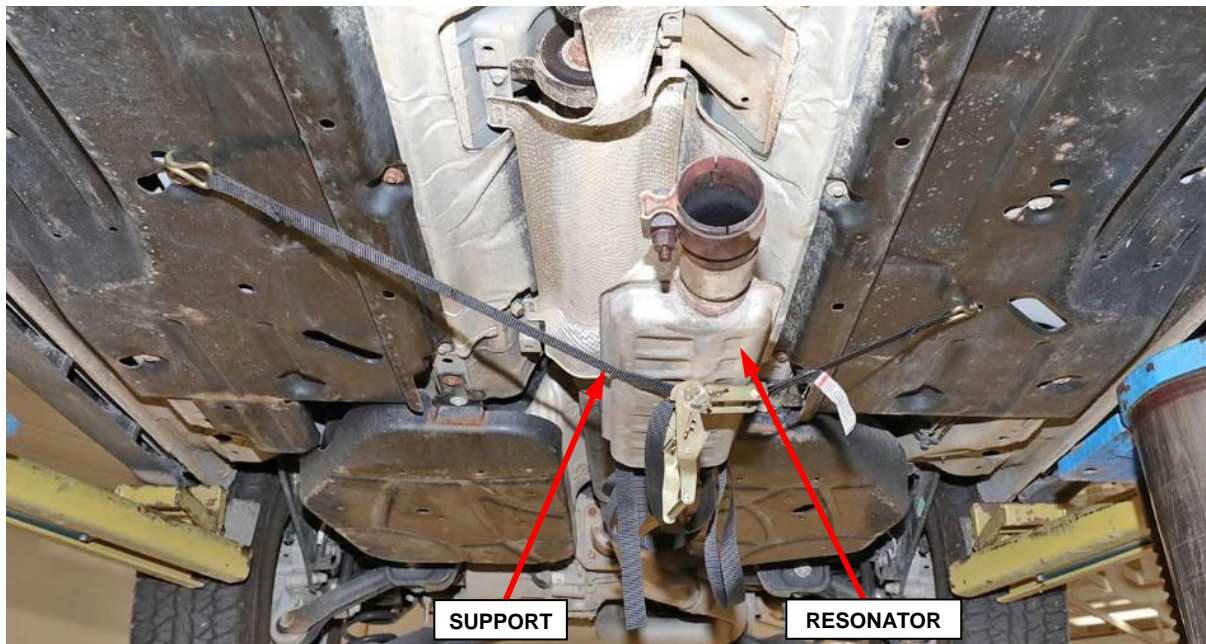


Figure 54 – Support Exhaust

- g. Rotate and remove the crossunder pipe from the vehicle.
- h. Remove and **DISCARD** the crossunder pipe to catalyst flange gasket (Figure 55).

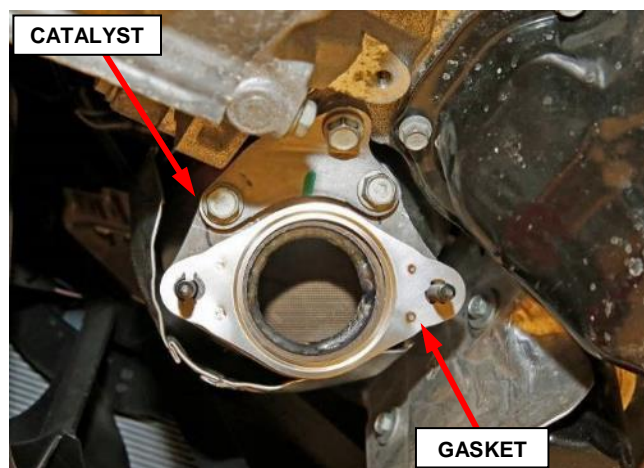


Figure 55 – Catalyst Flange Gasket

Service Procedure [Continued]

42. **3.2L Engine:** Remove the exhaust crossunder pipe and Y-pipe following steps (a-m) (Figure 56).

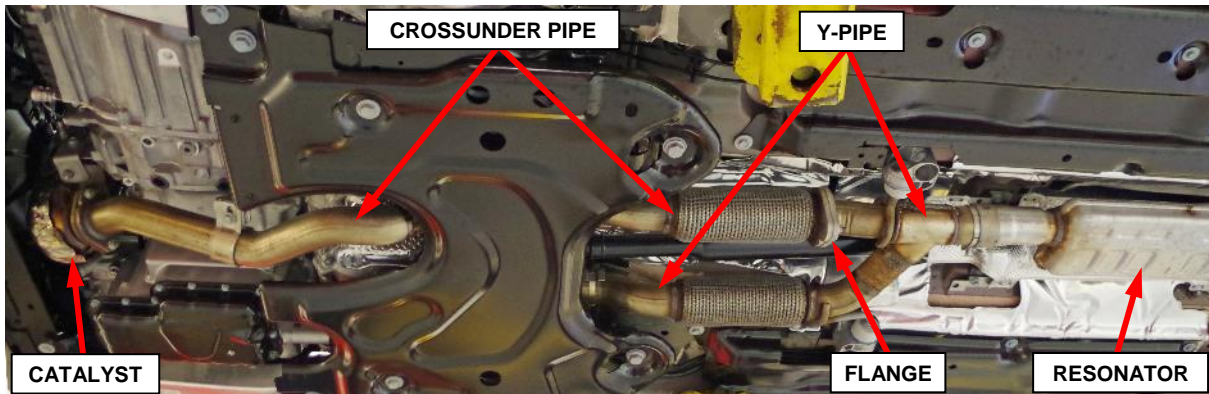


Figure 56 – Exhaust Crossunder Pipe and Y-Pipe

- a. Remove and **DISCARD** the rear crossunder pipe flange nuts securing the crossunder pipe to the Y-pipe (Figure 57).

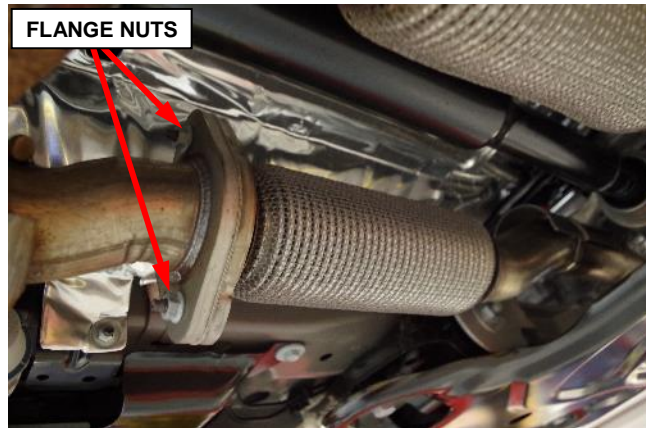


Figure 57 – Exhaust Crossunder Pipe

- b. Remove the crossunder pipe center support bolt (Figure 58).

- c. Remove and **DISCARD** the front crossunder pipe flange nuts securing the cross under pipe to the catalyst (Figure 58).

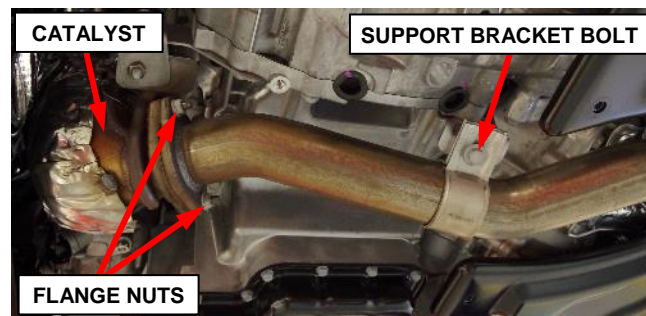


Figure 58 – Exhaust Crossunder Pipe

- d. Remove the crossunder pipe from the vehicle (Figure 56).

Service Procedure [Continued]

3.2L Engine: Remove the exhaust crossunder pipe and Y-pipe (Continued).

- e. Remove and **DISCARD** the flange gasket between the crossunder pipe to front catalyst (Figure 59).

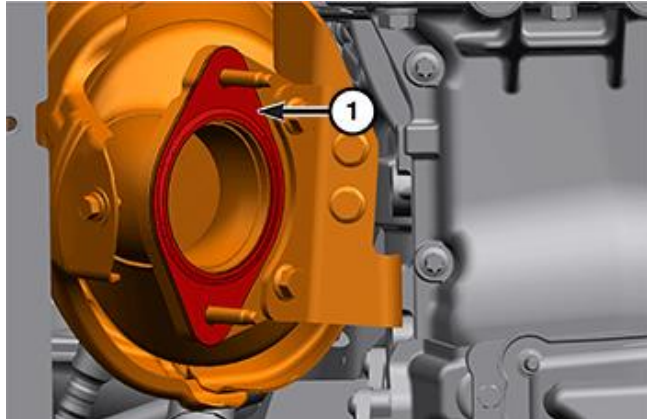


Figure 59 – Y-Pipe

- f. Remove and **DISCARD** the flange gasket between the crossunder pipe to Y-pipe (Figure 60).

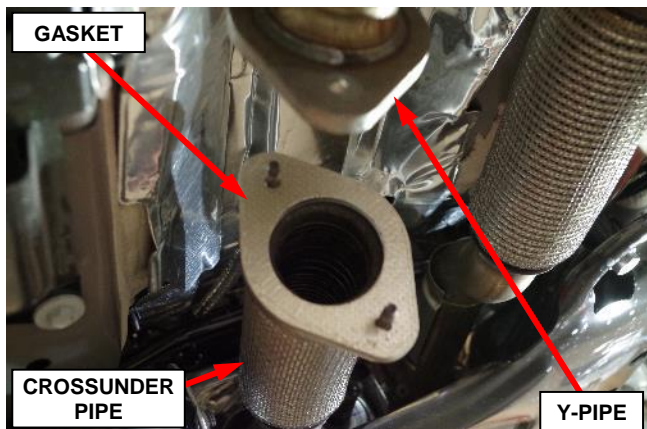


Figure 60 – Y-Pipe

- g. Loosen the clamp nut securing the resonator pipe to the Y-pipe (Figure 61).

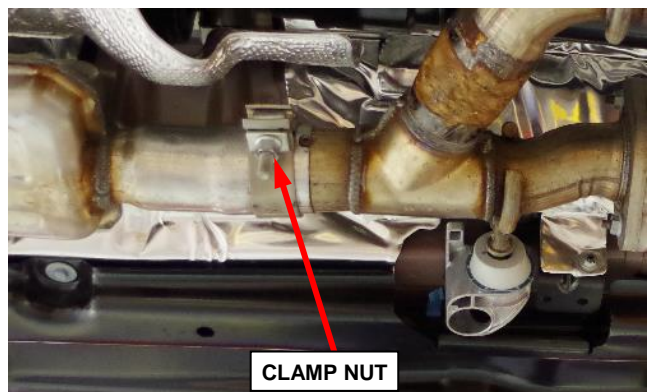


Figure 61 – Y-Pipe

- h. Support the exhaust system resonator.

Service Procedure [Continued]

3.2L Engine: Remove the exhaust crossunder pipe and Y-pipe (Continued).

- i. Remove the exhaust Y-pipe isolator bolts (Figure 62).

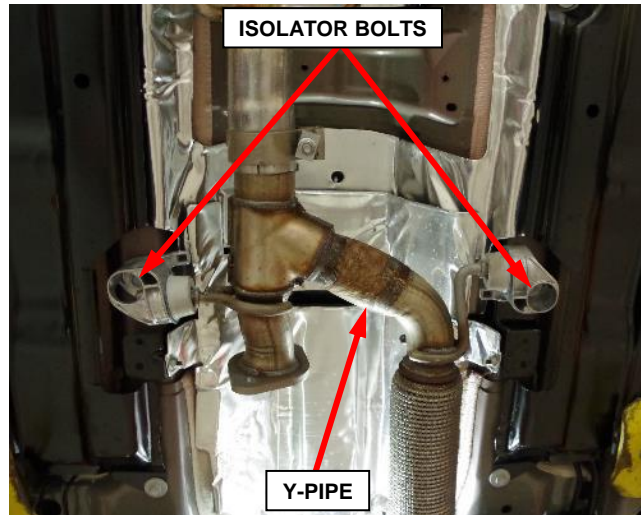


Figure 62 – Y-Pipe Isolator

- j. Remove and **DISCARD** the Y-pipe flange nuts securing the Y-pipe to the rear catalyst (Figure 63).

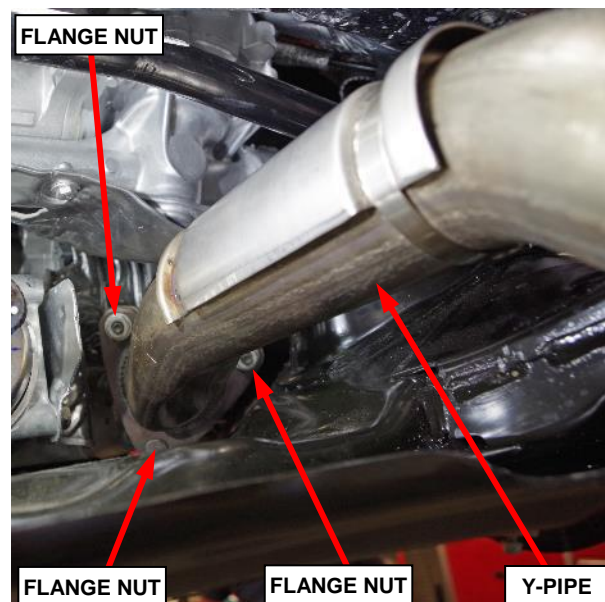


Figure 63 – Y-Pipe

Service Procedure [Continued]

3.2L Engine: Remove the exhaust crossunder pipe and Y-pipe (Continued).

- k. Separate the Y-Pipe from the rear catalyst then position the Y-pipe to the left for removal clearance (Figure 64).
- l. Separate the Y-pipe from the resonator pipe then remove the Y-pipe.

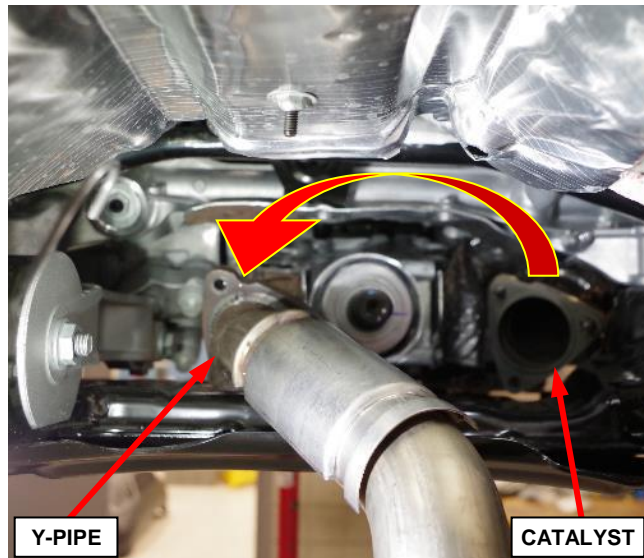


Figure 64 – Position Y-Pipe to Left

- m. Remove and **DISCARD** the flange gasket between the Y-pipe to the rear catalyst (Figure 65).

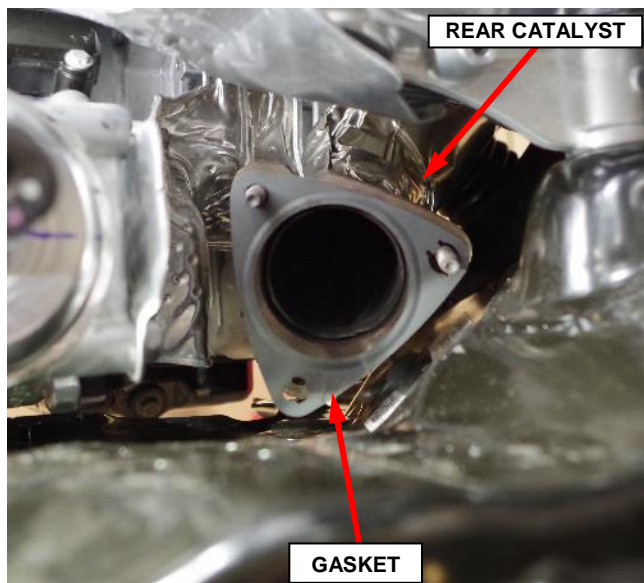


Figure 65 – Y-Pipe to Catalyst Gasket

Service Procedure [Continued]**All Vehicles:**

NOTE: Before lowering the front suspension crossmember, the location of the crossmember must be marked on the body of the vehicle. Do this so the crossmember can be relocated, upon reinstallation, against the body of vehicle in the same location as before removal. If the front suspension crossmember is not reinstalled in exactly the same location as before removal, the preset front wheel alignment settings (caster and camber) may be lost.

43. Mark the position of the crossmember with a grease pencil or equivalent (Figure 66).

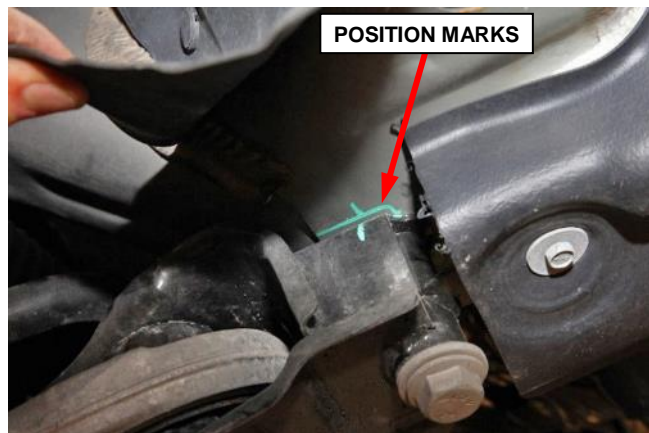
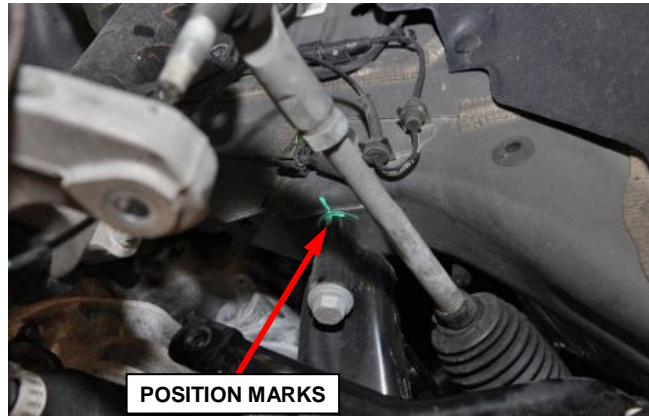


Figure 66 – Mark Crossmember Position

Service Procedure [Continued]

44. **If Applicable:** Remove the fasteners from the forward 1/3 of the plastic underbody shields to allow for shield flexibility and clearance while removing the front suspension crossmember. (Figure 67).

NOTE: This step does not apply to underbody metal skid plates that do not overlap the front suspension crossmember (Figure 68), Only the plastic shielding that overlaps the front suspension crossmember requires fastener removal (Figure 67).

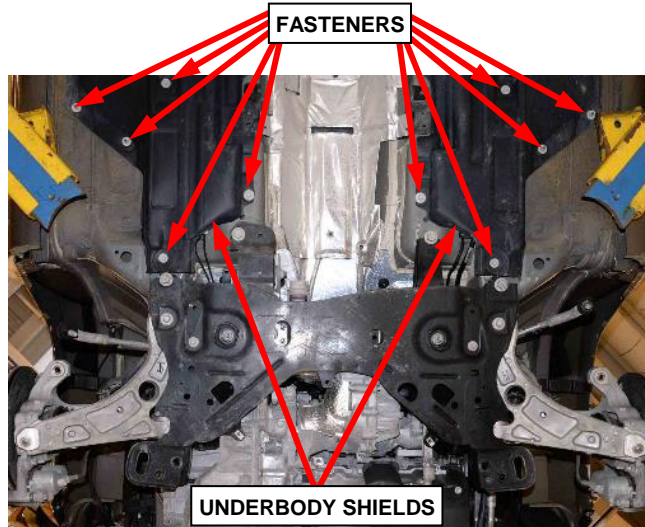
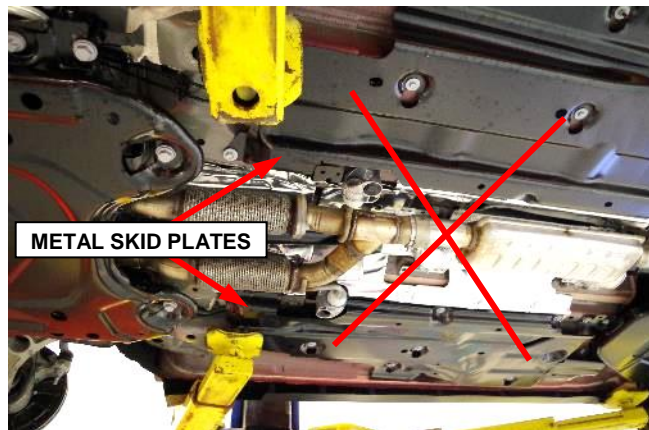


Figure 67 – Plastic Underbody Shield



**Figure 68 – Metal Skid Plates
Not Applicable Do Not Remove Fasteners**

Service Procedure [Continued]

45. Support the engine/transmission assembly with a suitable stand (Figure 69).

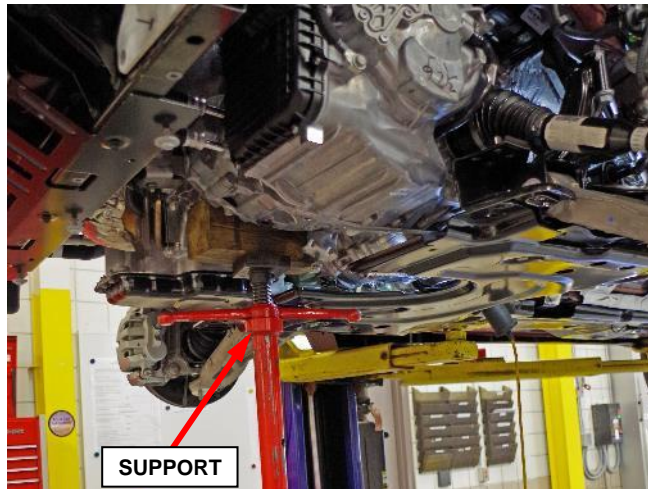


Figure 69 – Support Engine/Transmission

46. Remove the nut and bolt from the transmission pivot bracket end of the rear engine mount torque strut (Figure 70).

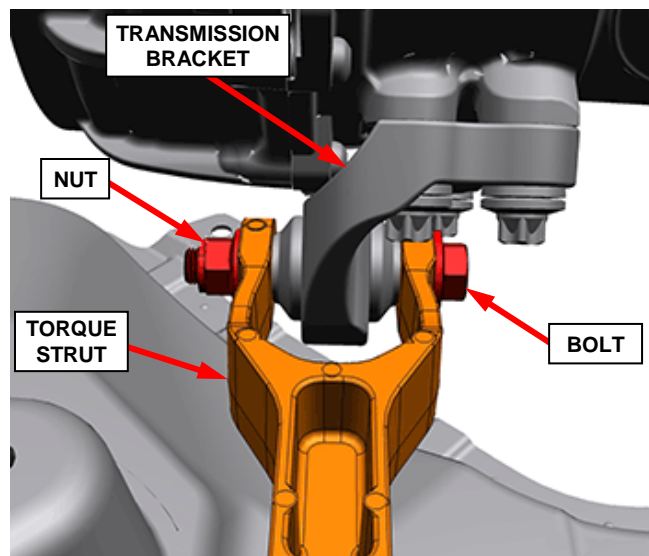


Figure 70 – Torque Strut

Service Procedure [Continued]**Suspension Crossmember and Steering Gear:**

Follow the appropriate service procedure for Suspension Crossmember and Steering Gear Removal:

- All Wheel Drive (AWD) / Four Wheel Drive (4WD) Page 40.
- Front Wheel Drive (FWD) Page 45.

Suspension Crossmember and Steering Gear Removal for AWD / 4WD configuration ONLY.

47. **AWD/4WD only:** Place the steering gear tie rod ends loosely into the steering knuckle for support. Do NOT secure the tie rod ends, this is only for steering gear support during removal of front suspension crossmember (Figure 71).

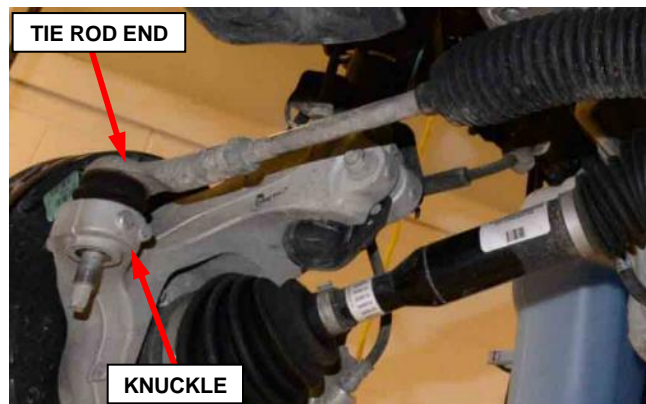


Figure 71 – Tie Rod End in Knuckle

48. **AWD/4WD only:** Remove the nuts securing the steering gear to the suspension crossmember (Figure 72).

NOTE: Place a wrench on the steering gear bolts to prevent rotation while removing the nuts.



Figure 72 – Steering Gear Nuts

Service Procedure [Continued]

49. **AWD/4WD only:** Remove the four lower rear bolts securing the suspension crossmember to the underbody **NOT** the front side upper bolts (Figure 73).

CAUTION: Leave the front side upper bolts securing the suspension crossmember to the frame rails securely in place until the crossmember is supported in the next step.

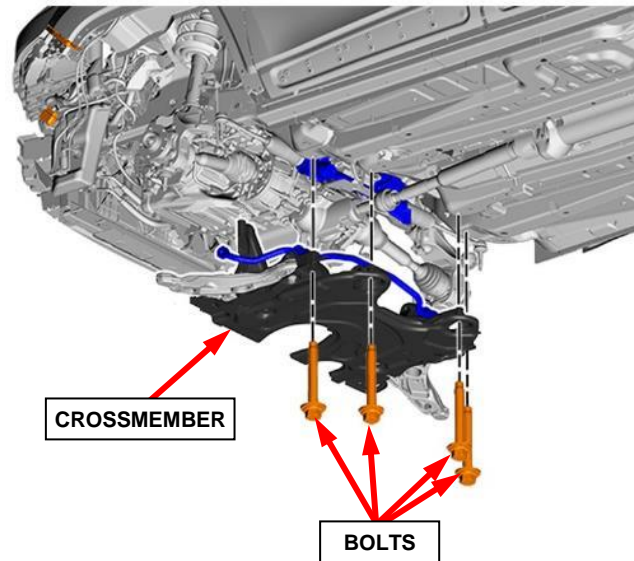
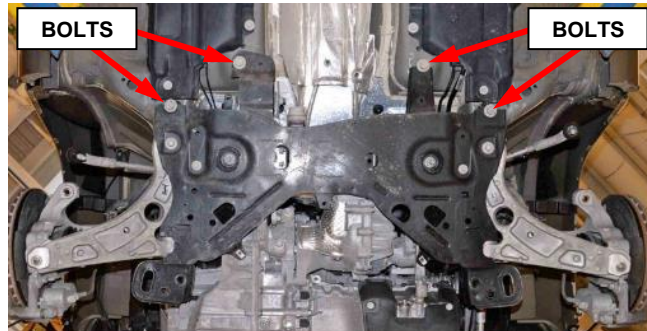


Figure 73 – Crossmember Lower Bolts

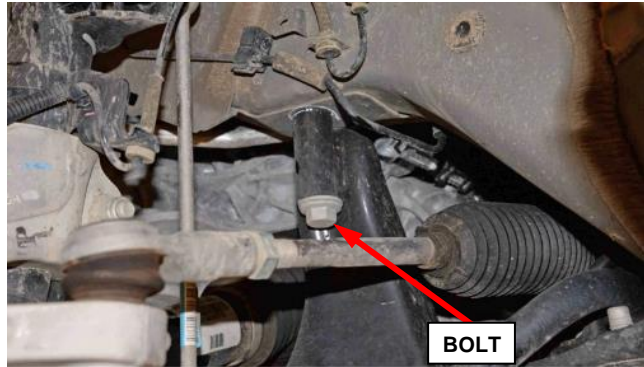
50. **AWD/4WD only:** support the suspension crossmember with a transmission jack, or equivalent (Figure 74).



Figure 74 – Support Crossmember

Service Procedure [Continued]

51. **AWD/4WD only:** Remove the two upper front tower bolts securing the suspension crossmember to the frame rails (Figure 75).



NOTE: The next step may be easier with the assistance of another technician.

52. **AWD/4WD only:** Lower the suspension crossmember down away from the vehicle while separating the ball joints from the lower control arms and the steering gear bolts from the suspension crossmember. Guide the front suspension stabilizer bar past the PTU output shaft.

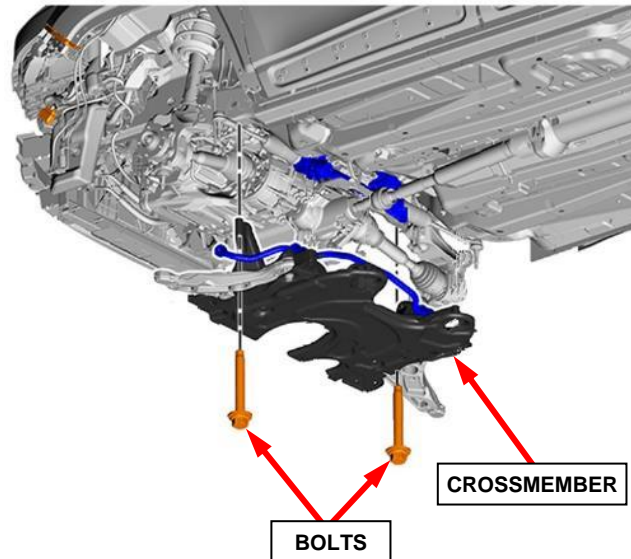


Figure 75 – Crossmember Upper Bolts

53. Keep the steering gear supported on the top of PTU assembly also tie rod ends loosely placed in steering knuckle for additional support (Figure 76).

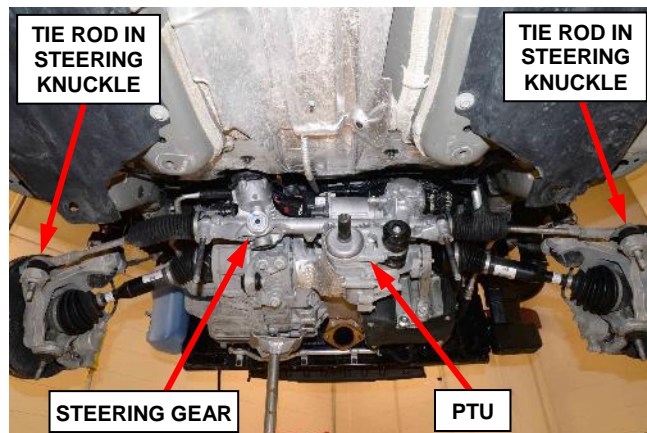


Figure 76 – Steering Gear Supported

Service Procedure [Continued]

54. **AWD/4WD only:** Release the shift cable retainer from the steering gear heat shield bracket (Figure 77).

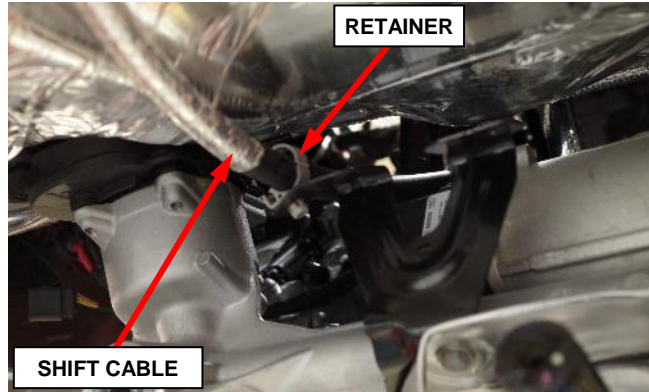


Figure 77 – Shift Cable Retainer

55. **AWD/4WD only:** Disconnect the two vehicle wire harness electrical connectors from the steering gear (Figure 78).

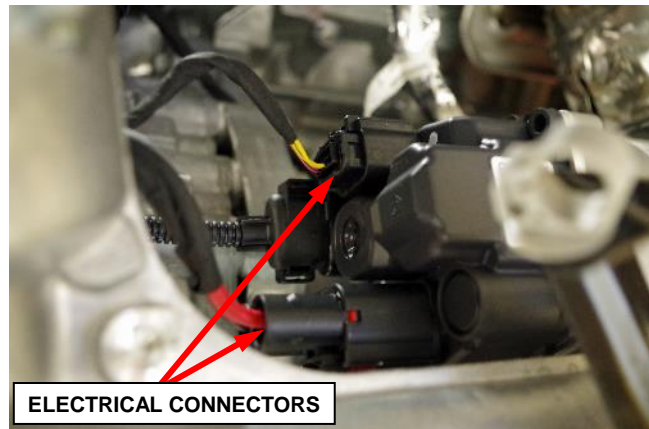


Figure 78 – Electrical Connectors

56. **AWD/4WD only:** Release the vehicle wire harness retainer from the steering gear housing (Figure 79).

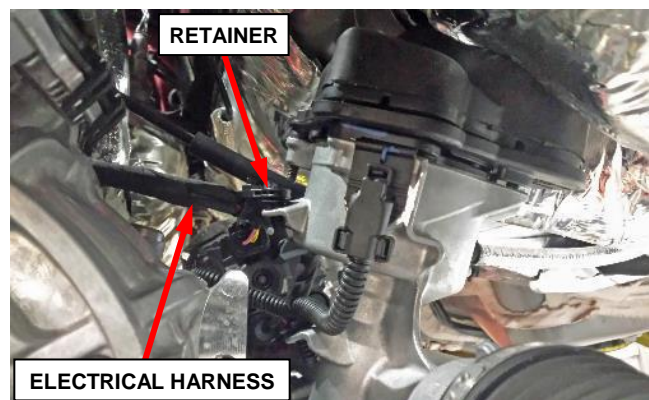


Figure 79 – Electrical Harness Retainer

Service Procedure [Continued]

57. **AWD/4WD only:** Using an adjustable length belt strap attached between the vehicle structure and engine, rotate the bottom of the engine and transmission assembly forward tilting the PTU down to create enough space for removal of the steering gear from the vehicle (Figure 80).

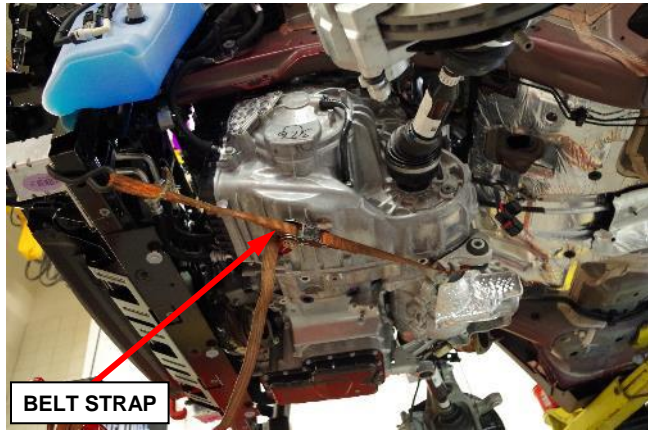


Figure 80 – Use a Belt Strap to Rotate the Engine/Transmission Assembly

NOTE: Rotating of the engine may also be accomplished with the assistance of another technician if an adjustable belt strap is not available.

58. **AWD/4WD only:** Remove the tie rod ends from the steering knuckles then tilt and remove the steering gear from the vehicle (Figure 81).

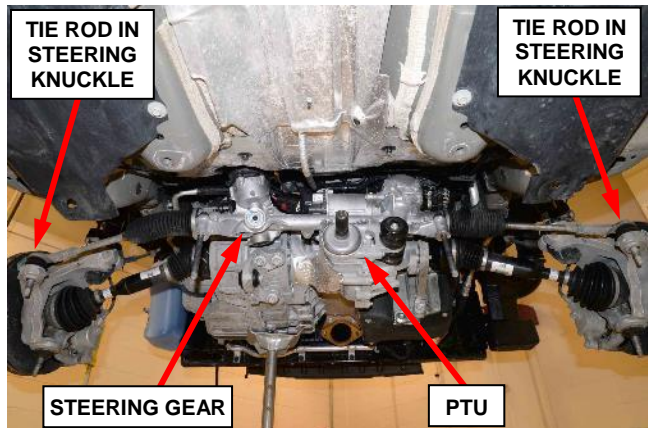


Figure 81 – Description

Service Procedure [Continued]

Suspension Crossmember and Steering Gear Removal for FWD configuration ONLY.

59. **FWD only:** Remove the four lower rear bolts securing the suspension crossmember to the underbody **NOT** the front side upper bolts (Figure 82).

CAUTION: Leave the front side upper bolts securing the suspension crossmember to the frame rails securely in place until the crossmember is supported in the next step.

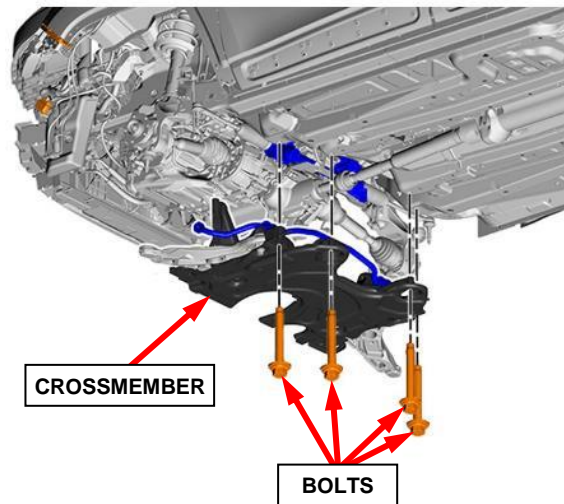
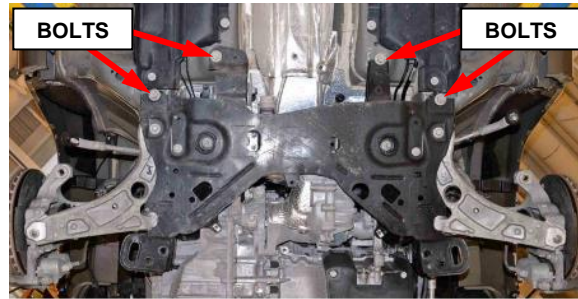


Figure 82 – Crossmember Lower Bolts

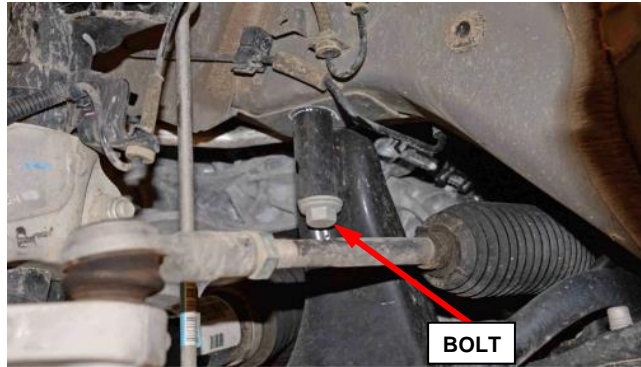
60. **FWD only:** support the suspension crossmember with a transmission jack, or equivalent (Figure 83).



Figure 83 – Support Crossmember

Service Procedure [Continued]

61. **FWD only:** Remove the two upper front tower bolts securing the suspension crossmember to the frame rails (Figure 84).



62. **FWD only:** Lower the suspension crossmember only slightly just enough to gain access to the shift cable retainer and steering gear electrical connectors.

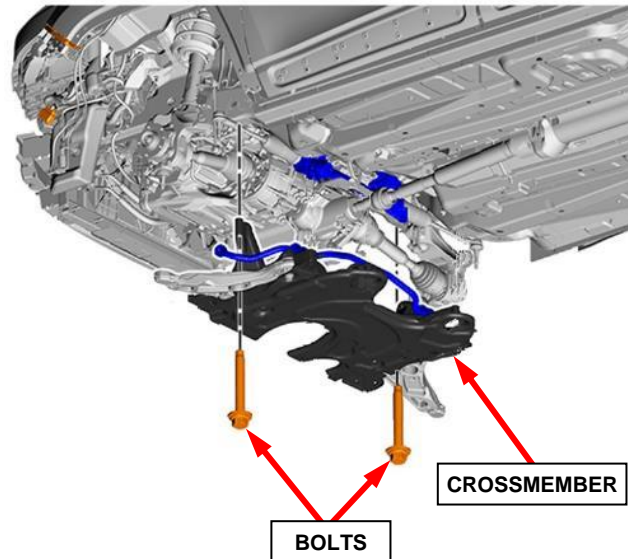


Figure 84 – Crossmember Upper Bolts

63. **FWD only:** Release the shift cable retainer from the steering gear heat shield bracket (Figure 85).

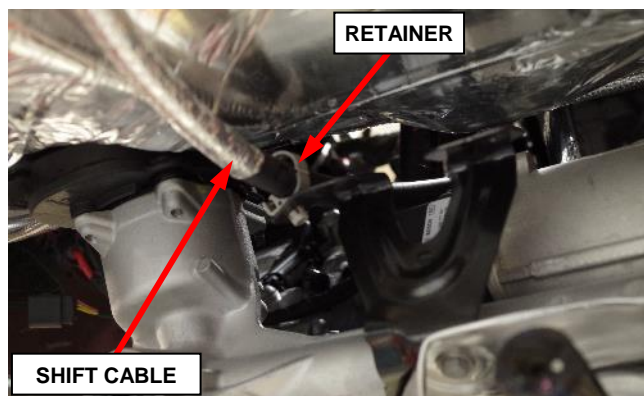


Figure 85 – Shift Cable Retainer

Service Procedure [Continued]

64. **FWD only:** Disconnect the two vehicle wire harness electrical connectors from the steering gear (Figure 86).

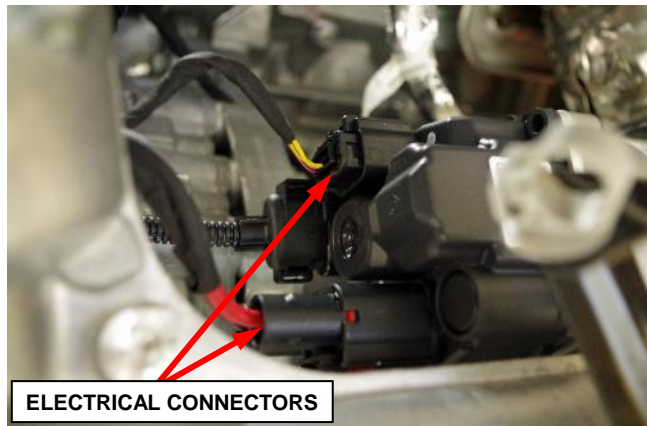


Figure 86 – Electrical Connectors

65. **FWD only:** Release the vehicle wire harness retainer from the steering gear housing (Figure 87).

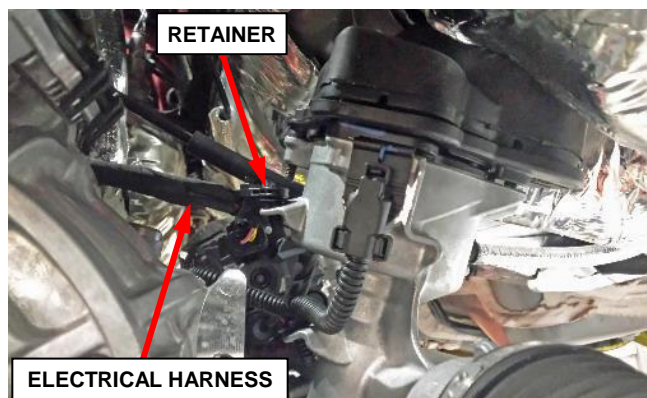


Figure 87 – Electrical Harness Retainer

NOTE: The next step may be easier with the assistance of another technician.

66. **FWD only:** Lower the suspension crossmember and steering gear down away from the vehicle while separating the ball joints from the lower control arms.
67. **FWD only:** Remove the nuts securing the steering gear to the suspension crossmember.
68. **FWD only:** Separate the steering gear from the suspension crossmember.

Service Procedure [Continued]

All Vehicles:

69. Unbox the new steering gear and remove all shipping plugs and material.

70. Transfer the heat shield, bracket, and fasteners from the old steering gear to the new steering gear. Tighten the fasteners to 8 N·m (71 in. lbs.) (Figures 88).

71. Transfer the dash seal and fastener from the old steering gear to the new steering gear. Tighten the fastener to 2.5 N·m (22 in. lbs.) (Figure 89).

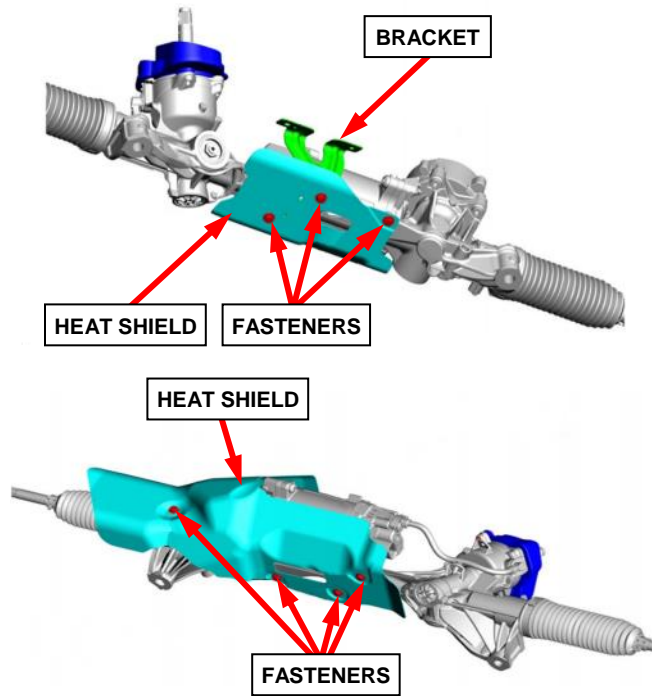


Figure 88 – Heat Shield and Bracket

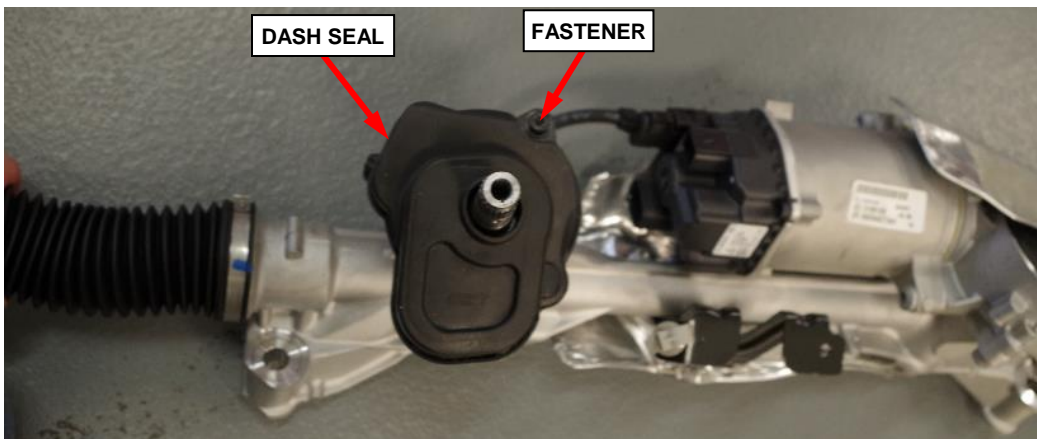


Figure 89 – Dash Seal

Service Procedure [Continued]**B. Steering Gear Installation:**

Follow the appropriate service procedure for Suspension Crossmember and Steering Gear Installation:

- **Front Wheel Drive (FWD) Page 49.**
- **All Wheel Drive (AWD) / Four Wheel Drive (4WD) Page 51.**

Suspension Crossmember and Steering Gear installation for FWD configuration ONLY.

1. **FWD only:** Position the steering gear to the suspension crossmember.
2. **FWD only:** Install the **NEW** bolts and **NEW** nuts securing the steering gear to the suspension crossmember. Tighten the nuts to 97 N·m (72 ft. lbs.).

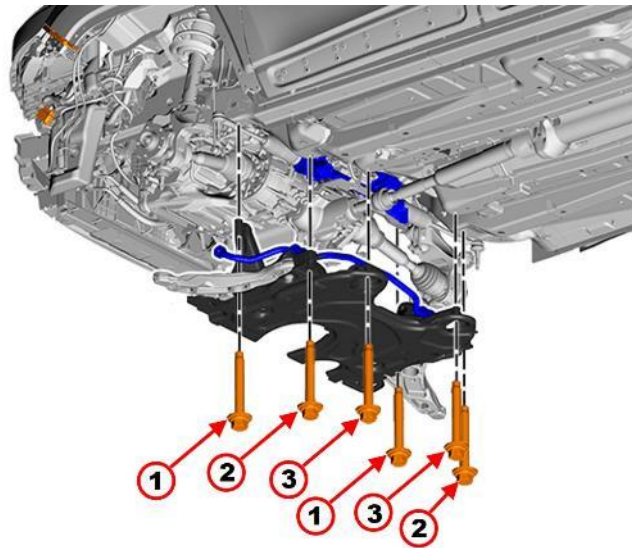
NOTE: The next step may be easier with the assistance of another technician.

3. **FWD only:** Support the crossmember with steering gear using a transmission jack, or equivalent (Figure 83). Raise the suspension crossmember to the vehicle while aligning the ball joints to the lower control arms and the steering gear input shaft with the dash panel opening.
4. **FWD only:** Attach the wire harness retainer to the steering gear (Figure 87).
5. **FWD only:** Connect the two vehicle wire harness electrical connectors to the steering gear (Figure 86).

Service Procedure [Continued]**Suspension Crossmember and Steering Gear installation for FWD configuration ONLY. (Continued)**

6. **FWD only:** Attach the shift cable retainer to the steering gear heat shield bracket (Figure 85).
7. **FWD only:** Install the two upper front tower bolts (1) securing the suspension crossmember to the frame rails but do not tighten the bolts at this time (Figure 90).
8. **FWD only:** Lower the transmission jack, or equivalent supporting the suspension crossmember (Figure 83).

9. **FWD only:** Install the four lower rear inner (3) and outer (2) bolts securing the suspension crossmember to the underbody but do not tighten the bolts at this time (Figure 90).

**Figure 90 – Crossmember Bolts**

10. **FWD only:** Check the position of the suspension crossmember to the alignment marks made previously on the vehicle body (Figure 66).
11. **FWD only:** Tighten the suspension crossmember bolts (Figure 90) to:
 - (1) Front Tower Bolts 175 N·m (129 ft. lbs.).
 - (2) Rear Outer Bolts 96 N·m + 110° (71 ft. lbs. + 110°).
 - (3) Rear Inner Bolts 55 N·m + 130° (41 ft. lbs. + 110°).

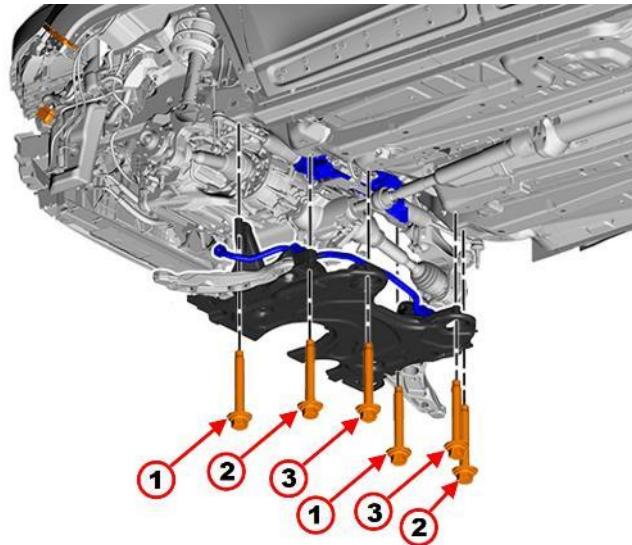
Service Procedure [Continued]**Suspension Crossmember and Steering Gear Installation for AWD / 4WD configuration ONLY.**

12. **AWD/4WD only:** Insert the **NEW** long bolts into the steering gear. Position the steering gear to the vehicle on the top of PTU assembly and place the tie rod ends into the steering knuckles for additional support of the steering gear (Figure 81).
13. **AWD/4WD only:** If a belt strap was used to rotate the bottom of the engine and transmission assembly forward, the belt strap may be removed (Figure 80).
14. **AWD/4WD only:** Attach the vehicle wire harness retainer to the steering gear housing (Figure 79).
15. **AWD/4WD only:** Connect the two vehicle wire harness electrical connectors to the steering gear (Figure 78).
16. **AWD/4WD only:** Attach the shift cable retainer to the steering gear heat shield bracket (Figure 77).
17. **AWD/4WD only:** Support the crossmember using a transmission jack, or equivalent (Figure 74). Raise the suspension crossmember to the vehicle while guiding the front suspension stabilizer bar past the PTU output shaft while aligning the ball joints to the lower control arms, aligning the steering gear mounting bolts to the crossmember, and align the crossmember with the alignment marks made previously on the vehicle body (Figure 66).

Service Procedure [Continued]**Suspension Crossmember and Steering Gear Installation for AWD / 4WD configuration ONLY.**

18. **AWD/4WD only:** Install the two upper front tower bolts (1) securing the suspension crossmember to the frame rails but do not tighten the bolts at this time (Figure 91).
19. **AWD/4WD only:** Lower the transmission jack, or equivalent supporting the suspension crossmember (Figure 74).

20. **AWD/4WD only:** Install the four lower rear inner (3) and outer (2) bolts securing the suspension crossmember to the underbody but do not tighten the bolts at this time (Figure 91).

**Figure 91 – Crossmember Bolts**

21. **AWD/4WD only:** Check the position of the suspension crossmember to the alignment marks made previously on the vehicle body (Figure 66).
22. **AWD/4WD only:** Tighten the suspension crossmember bolts (Figure 91) to:
- (1) Front Tower Bolts 175 N·m (129 ft. lbs.).
 - (2) Rear Outer Bolts 96 N·m + 110° (71 ft. lbs. + 110°).
 - (3) Rear Inner Bolts 55 N·m + 130° (41 ft. lbs. + 110°).
23. **AWD/4WD only:** Install the **NEW** nuts securing the steering gear to the suspension crossmember. Tighten the nuts to 97 N·m (72 ft. lbs.) (Figure 72).

Service Procedure [Continued]**All Vehicles:**

24. Install the rear engine mount torque strut to transmission pivot bracket bolt and nut. Tighten to 115 N·m (85 ft. lbs.) (Figure 70).
25. Remove the engine/transmission assembly support stand (Figure 69).
26. **If Applicable:** Install the fasteners previously removed from the forward 1/3 of the plastic underbody shields (Figure 67).

Exhaust System Crossunder Pipe:

- Follow the appropriate crossunder pipe installation procedure for engine size: 2.0L (Page 57), 2.2L (Page 56), 2.4L (Page 55), or 3.2L (Page 54).
- If any exhaust studs broke during disassembly, remove the broken stud then use bolt part number 06512082AA to substitute for the broken stud and use the exhaust system nuts specified in the parts section of this recall campaign. Submit a consequential damage claim for stud replacement.

Service Procedure [Continued]

27. **3.2L Engine:** Install the exhaust crossunder pipe and Y-pipe following steps (a-l).
- a. Install a **NEW** flange gasket between the Y-pipe and rear catalyst (Figure 65).
 - b. Position the Y-pipe to the vehicle and attach the Y-pipe to the resonator pipe and the catalyst.
 - c. Install the **NEW** nuts securing the Y-pipe flange to the rear catalyst. Tighten the nuts to 32 N·m (24 ft. lbs.) (Figure 63).
 - d. Install the exhaust Y-pipe isolator bolts. Tighten the bolts to 20 N·m (15 ft. lbs.) (Figure 62).
 - e. Tighten the clamp nut to 16 N·m (12 ft. lbs) securing the resonator pipe to the Y-pipe (Figure 61).
 - f. Remove the support from the exhaust system resonator.
 - g. Install a **NEW** flange gasket between the crossunder pipe and Y-pipe (Figure 60).
 - h. Install a **NEW** flange gasket (1) between the crossunder pipe and catalyst (Figure 59).
 - i. Install the crossunder pipe to the vehicle (Figure 56).
 - j. Install the **NEW** nuts securing the cross under pipe flange to the catalyst. Tighten the nuts to 32 N·m (24 ft. lbs.) (Figure 58).
 - k. Install the crossunder pipe center support bolt. Tighten the bolt to 20 N·m (15 ft. lbs.) (Figure 58).
 - l. Install the **NEW** nuts securing the cross under pipe flange to the Y-pipe. Tighten the nuts to 32 N·m (24 ft. lbs.) (Figure 57).

Service Procedure [Continued]

28. **2.4L Engine:** Install the exhaust crossunder pipe following steps (a-h) (Figure 51).
- a. Install a **NEW** flange gasket to the catalyst flange (Figure 55).
 - b. Install the crossunder pipe to the vehicle.
 - c. Install the crossunder pipe to the catalyst and the resonator.
 - d. Install the bolts securing the crossunder pipe rear isolator to the vehicle body. Tighten the bolts to 20 N·m (15 ft. lbs.) (Figure 53).
 - e. Install the **NEW** nuts securing the crossunder pipe flange to the catalyst. Tighten the nuts to 32 N·m (24 ft. lbs.) (Figure 52).
 - f. Install the pipe support bracket bolt. Tighten the bolt to 20 N·m (15 ft. lbs) (Figure 52).
 - g. Tighten the exhaust clamp nut securing the resonator to the crossunder pipe to 16 N·m (12 ft. lbs) (Figure 53).
 - h. Remove the support from under the exhaust system resonator (Figure 54).

Service Procedure [Continued]

29. **2.2L Diesel Engine:** Install the exhaust crossunder pipe following steps (a-k) (Figure 41).
- a. Install a **NEW** flange gasket (1) to the catalyst (Figure 50).
 - b. Install the crossunder pipe to the vehicle.
 - c. Install the crossunder pipe to the catalyst and the resonator.
 - d. Install the bolts (1) securing the crossunder pipe rear isolator to the vehicle body. Tighten the bolts to 26 N·m (19 ft. lbs.) (Figure 48).
 - e. Tighten the exhaust clamp nut (1) to 55 N·m (41 ft. lbs) securing the resonator to the crossunder pipe (Figure 47).
 - f. Install the two bolts (1) securing the exhaust isolator to the front suspension crossmember. Tighten the bolts to 18 N·m (13 ft. lbs.) (Figure 46).
 - g. Install the **NEW** nuts (1) securing the crossunder pipe to the Catalyst. Tighten the nuts to 26 N·m (19 ft. lbs.) (Figure 45).
 - h. Install the support bracket (2), nuts (1), and bolt (3). Tighten the nuts to 22 N·m (16 ft. lbs.) and tighten the bolt to 25 N·m (18 ft. lbs.) (Figure 44).
 - i. Install the wires to the retainers for the exhaust temperature sensor, Particulate (PM) sensor, and NOx sensor (Figure 43).
 - j. Connect the electrical connectors for the exhaust temperature sensor, Particulate (PM) sensor, and NOx sensor (Figure 42).
 - k. Remove the support from the exhaust system resonator (Figure 49).

Service Procedure [Continued]

30. **2.0L Engine:** Install the exhaust crossunder pipe following steps (a-g). (Figure 34).
 - a. Install a **NEW** flange gasket (1) to the catalyst flange (Figure 40).
 - b. Install the crossunder pipe to the vehicle while sliding the crossunder pipe hanger into the front isolator (Figure 39).
 - c. Install the crossunder pipe to the catalyst and the resonator.
 - d. Install the bolts (1) securing the crossunder pipe rear isolator to the vehicle body. Tighten the bolts to 20 N·m (15 ft. lbs.) (Figure 37).
 - e. Tighten the exhaust clamp nut (1) to 16 N·m (12 ft. lbs) securing the resonator (2) to the crossunder pipe (Figure 36).
 - f. Install the **NEW** nuts (1) securing the crossunder pipe flange to the catalyst. Tighten the nuts to 32 N·m (24 ft. lbs.) (Figure 35).
 - g. Remove the support from the exhaust system resonator (Figure 38).

Service Procedure [Continued]

31. **Front Wheel Drive (FWD) vehicles**, proceed to **Page 60**.

All Wheel Drive (AWD) / Four Wheel Drive (4WD) vehicles, install the propeller shaft following steps (a-h):

CAUTION: Propeller shaft installation is a two-person operation. Never allow propeller shaft to hang from the center bearing, or while only connected to power transfer unit (PTU) or rear driveline module flanges. A helper is required. If a propeller shaft section is hung unsupported, damage may occur to the joint, boot, and center bearing from over-angulation. This may result in driveline vibrations.

- a. Replace the Power Transfer Unit (PTU) output shaft snap ring with a **NEW** snap ring before the propeller shaft is reinstalled (Figure 33).
- b. Lightly apply grease to the PTO splines prior to installation.
- c. With the aid of a helper, install the propeller shaft into the PTU by wiggling the plug-on joint back and forth while pushing forward until splines engage and propeller shaft is fully seated (Figure 32).

NOTE: If the snap ring is fully engaged, the propeller shaft will not be removable from the PTU by hand.

- d. Perform the push/pull test to verify joint is fully seated over snap ring.
- e. Position the rear center bearing in place, install the rear center bearing bolts and tighten the bolts to 23 N·m (17 ft. lbs.) (Figure 31).
- f. Position the front center bearing in place, install the front center bearing bolts and tighten the bolts to 23 N·m (17 ft. lbs.) (Figure 31).
- g. Align the index marks on the rear propeller shaft flange and the rear pinion flange (Figure 30).

Service Procedure [Continued]

Propeller shaft installation AWD / 4WD configuration ONLY.
(Continued)

NOTE: The six bolts that are used to secure the propeller shaft to the Rear Drive Unit (RDU) input flange MUST be replaced. Do not reuse the bolts/washers.

NOTE: Use of Anti-seized compound is prohibited.

NOTE: Make sure the double washer is flat/flush to the joint housing prior to tightening the bolt to avoid damage to the washer, if damaged replace bolt washer assembly.

NOTE: No torque verification is allowed after 10 minutes of the bolts being tightened to specifications. ANY MANIPULATION of the bolts after 10 minutes of being tightened will require the bolt(s) to be replaced.

- h. Install **NEW** propeller shaft bolts and tighten the bolts to 21 N·m (15 ft. lbs.) (Figure 30).

Service Procedure [Continued]**All Vehicles:**

32. Install the lower load beams (2) (Figure 29).
33. Install the two bolts securing the lower load beam (2) to the cradle (3). Tighten the bolts to 89 N·m (65 ft. lbs.) (Figure 29).
34. Install the lower load beam extensions and bolts securing the load beam extensions to the radiator support (1). Tighten the bolts to 45 N·m (33 ft. lbs.) (Figure 29).
35. **If equipped**, install the tow hook bracket (6) and the tow hook bracket bolts (3) and (4). Tighten the tow hook bracket to rail bolts (3) to 26 N·m (19 ft. lbs.). Tighten the tow hook bracket to load beam bolt (4) to 45 N·m (33 ft. lbs.) (Figure 27).
36. **If equipped**, install the tow hook (1), tow hook bolts (2) and nut (5). Tighten the bolts (2) to 47 N·m (35 ft. lbs.) and nut (5) to 25 N·m (18 ft. lbs.) (Figure 27).
37. **If applicable**: Install the nut securing the air intake resonator to the vehicle (Figure 27).

NOTE: Use a NEW nut when installing the outer tie rod.

38. Install the outer tie rod end stud into the hole in the knuckle arm. Install a **NEW** nut on the outer tie rod end stud. While holding the tie rod end stud with a wrench, tighten to the nut to 40 N·m + 165° (30 ft. lbs. + 165°) (Figure 25).

NOTE: Use a NEW nut when installing the lower ball joint.

39. Install a **NEW** nut on the lower ball joint. Tighten the nut to 30 N·m + 95° (22 ft. lbs. + 95°) (Figure 23).

Service Procedure [Continued]

40. Position the stabilizer bar link to the strut. Install the nut securing the stabilizer bar link to strut. Tighten the nut to 60 N·m (44 ft. lbs.) (Figure 22).
41. **If equipped**, Install the vertical bracket (1) and the bolts (2) on both sides of the vehicle. Tighten the bolts to 27 N·m (20 ft. lbs.) (Figure 21).
42. **If equipped**, Connect the wire harness connector (1) to the vehicle height sensor (Figure 20).
43. **If equipped**, Connect the vehicle height sensor actuator rod (1) to the lower control arm (Figure 19).
44. Position the fascia to the vehicle (Figure 18).
45. Seat the fascia onto the clips under the headlights fully (Figure 18).
46. Seat the sides of the fascia onto the fender clips fully (Figure 18).
47. **If applicable** based on trim level, install the two screws securing the front fascia to the radiator core support (Figure 17).
48. Install the radiator closeout panel to the vehicle then install the push pin fasteners (Figure 16).
49. Connect the front fascia electrical wire harness slide lock connector on the left side of the vehicle (Figure 15).
50. Install the fastener on the inside of the wheel opening that attaches the side of the front fascia to the fender on both sides of the vehicle (Figure 14).
51. **Latitude / Altitude / Limited / Overland:** Install the one-piece wheel flare molding engage the clips on both sides of the vehicle (Figure 12).

Service Procedure [Continued]

52. Install both front wheelhouse splash shields to the vehicle following steps (a-c).
 - a. Engage the outboard edge of the wheelhouse splash shield to the fender flange (Figure 11).
 - b. Install the fasteners securing the wheelhouse splash shield to the vehicle (Figure 11).
 - c. Install the screw securing the wheelhouse splash shield to the sill trim (Figure 10).
53. **If applicable**, install the fasteners securing the front fascia lower edge to the vehicle (Figure 9).
54. **Upland / Trailhawk:** Install the **single rivet** securing the wheelhouse splash shield to the front fascia on both sides of the vehicle (Figure 8).
55. **Latitude / Altitude / Limited / Overland:** Install the **two outer rivets** securing the wheelhouse splash shield to the front fascia on both sides of the vehicle (Figure 7).
56. Install the engine belly pan or skid plate (1) to the vehicle then install the fasteners (2) (Figure 6).
57. Install Both front wheels to the hub then install the five wheel mounting (lug) bolts. Tighten the wheel mounting (lug) bolts to 135 N·m (100 ft. lbs.).
58. Lower the vehicle.

Service Procedure [Continued]

59. **Front Wheel Drive (FWD) vehicles**, proceed to **Step 56**.
All Wheel Drive (AWD) / Four Wheel Drive (4WD) vehicles, place the transmission in PARK following steps (a-b).
 - a. Install the shifter bezel and boot assembly to the center console (Figure 4).
 - b. Place the shift lever in the park position.
60. Install the intermediate shaft to the steering gear pinion shaft then install a **NEW** intermediate shaft pinch bolt. Tighten the bolt to 25 N·m (18 ft. lbs.) (Figure 3).
61. Remove the steering wheel holder (Figure 1).
62. Connect the ground cable eyelet to the IBS terminal then install the M8 hex nut. Tighten the nut to 11 N·m (8 ft. lbs.) (Figure 2).
63. Connect the Intelligent Battery Sensor (IBS) wire harness connector (Figure 2).
64. Proceed to **Section C. Programming and Alignment**.

Service Procedure [Continued]**C. Programming and Alignment**

NOTE: The wiTECH scan tool must be used to perform this recall. If the reprogramming flash for the EPS is aborted or interrupted, repeat the procedure.

CAUTION: the EPS software must be at the latest software calibration level after completing this recall.

1. Open the hood and install a battery charger. Verify that the charging rate provides 13.0 to 13.5 volts. Do not allow the charger to time out during the flash process. Set the battery charger timer (if so equipped) to continuous charge.

NOTE: Use an accurate stand-alone voltmeter. The battery charger volt meter may not be sufficiently accurate. Voltages outside of the specified range will cause an unsuccessful flash. If voltage reading is too high, apply an electrical load by activating the park or headlamps and/or HVAC blower motor to lower the voltage.

2. Connect the wiTECH micro pod II to the vehicle data link connector.
3. Place the ignition in the “**RUN**” position.
4. Open the wiTECH 2.0 website.
5. Enter your “**User id**” and “**Password**” and your “**Dealer Code**”, then select “**Sign In**” at the bottom of the screen. Click “**Accept**”.
6. From the “**Vehicle Selection**” screen, select the vehicle to be updated.

Service Procedure [Continued]

7. From the “**Action Items**” screen, select the “**Topology**” tab.
8. From the “**Topology**” tab, select the “**EPS**” module icon.
9. From the “**Flash**” tab, compare the “**Current Electronic Control Unit (ECU) Part Number**” with the “**New ECU Part Number**” listed.
 - If the “**Current ECU part Number**” is the same as the “**New Part Number**”, proceed to **Step 15**.
 - If the “**Current ECU part Number**” is NOT the same as the “**New Part Number**”, continue with **Step 10**.
10. From the **EPS** tab, select the **EPS** flash part number. Read the flash special instructions page. Select “**OK**” to continue.
11. From the flash ECU agreement page, agree to terms by checking the box.
12. Select “**Flash ECU**” and then follow the wiTECH screen instructions to complete the flash.
13. Confirm the software is at the latest available calibration level.
14. Click “**View DTCs**”, select “**Clear All DTCs**”, click “**Continue**” and then click “**Close**”.
15. Select vehicle view screen.
16. Select guided diagnostic under activities tab.

Service Procedure [Continued]

17. Select “**Proxi Configuration Alignment**” follow screen prompts.
18. Click “**View DTCs**”, select “**Clear All DTCs**”, click “**Continue**” and then click “**Close**”.
19. Select the “**Misc. Functions**” tab.
20. Select “**EPS Learn**” follow screen prompts.
21. Click “**View DTCs**”, select “**Clear All DTCs**”, click “**Continue**” and then click “**Close**”.
22. Perform eps verification test: Start the engine then turn the steering wheel from stop to stop then back to center.
23. Place the ignition in the “**OFF**” position and then remove the wiTECH micro pod II device from the vehicle.
24. Remove the battery charger from the vehicle.
25. Perform a wheel alignment to proper specifications.
26. Return the vehicle to inventory or the customer.

Completion Reporting and Reimbursement

Claims for vehicles that have been serviced must be submitted on the DealerCONNECT Claim Entry Screen located on the Service tab. Claims paid will be used by FCA to record recall service completions and provide dealer payments.

Use the following labor operation numbers and time allowances:

	Labor Operation Number	Time Allowance
Replace Steering Gear: 2.0L, 2.2L, 2.4L	19-V9-91-81	4.3 hours
Replace Steering Gear: 3.2L	19-V9-91-82	4.6 hours

Related Operations

Tow Hook Equipped	19-V9-91-60	0.4 hours
4X4 / AWD Equipped	19-V9-91-61	0.4 hours
Vehicle Height Sensor Equipped	19-V9-91-62	0.2 hours

Floor Plan Reimbursement	95-95-95-97	Calculate See Below
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Floor Plan Reimbursement represents the vehicle’s average daily allowance (see table below) multiplied by the number of days the vehicle was in dealer inventory and not available for sale. This reimbursement is limited to the number of days from the date of the stop sale to the date that the remedy was made available. Note: If the vehicle was received by your dealership (KZX date) AFTER the stop sale date, you will use the KZX date instead of the stop sale date. For this Recall, the stop sale was initiated on 09/05/2019 and the remedy was made available on 10/24/2019, therefore, the number of days cannot exceed 49 days.

Vehicle	Average Daily Allowance
2019 and 2020 (KL) Jeep Cherokee	[REDACTED]

Add the cost of the recall parts package plus applicable dealer allowance to your claim.

NOTE: See the Warranty Administration Manual, Recall Claim Processing Section, for complete recall claim processing instructions.

Completion Reporting and Reimbursement [Continued]

NOTE: No additional parts are anticipated for this campaign. If any exhaust studs broke during disassembly, use bolt part number 06512082AA to substitute for the broken stud and use the exhaust system nuts specified in the parts section of this recall campaign. Submit a consequential damage claim for stud replacement, the dealer must first check if a related LOP has been created for repairs prior to performing the repair. If no related LOP is found, the LOP review process must be followed to request a related Recall LOP be added as follows:

Submit a LOP Related Inquiry (located in DealerCONNECT > Service > Claim Administration) for evaluation and update.

- **IF the request is approved – the related Recall LOP will be added to the Labor Operations and you are to proceed with normal Recall claim entry process.**
- **IF the request is not approved – submit the repair under Warranty (W) if the repair has been pre-authorized by your Area Manager or Business Center representative.**

Dealer Notification

To view this notification on DealerCONNECT, select “Global Recall System” on the Service tab, then click on the description of this notification.

Owner Notification and Service Scheduling

All involved vehicle owners known to FCA are being notified of the service requirement by first class mail. They are requested to schedule appointments for this service with their dealers. A generic copy of the owner letter is attached.

Vehicle Lists, Global Recall System, VIP and Dealer Follow Up

All involved vehicles have been entered into the DealerCONNECT Global Recall System (GRS) and Vehicle Information Plus (VIP) for dealer inquiry as needed.

GRS provides involved dealers with an updated VIN list of their incomplete vehicles. The owner's name, address and phone number are listed if known. Completed vehicles are removed from GRS within several days of repair claim submission.

To use this system, click on the “**Service**” tab and then click on “**Global Recall System.**” Your dealer's VIN list for each recall displayed can be sorted by: those vehicles that were unsold at recall launch, those with a phone number, city, zip code, or VIN sequence.

Dealers must perform this repair on all unsold vehicles before retail delivery. Dealers should also use the VIN list to follow up with all owners to schedule appointments for this repair.

Recall VIN lists may contain confidential, restricted owner name and address information that was obtained from the Department of Motor Vehicles of various states. Use of this information is permitted for this recall only and is strictly prohibited from all other use.

Additional Information

If you have any questions or need assistance in completing this action, please contact your Service and Parts District Manager.

Customer Services / Field Operations
FCA US LLC

This notice applies to your vehicle,

[Model Year and Model]

VIN XXXXXXXXXXXXXXXXXXXX

V99/NHTSA 19V-637

LOGO

VEHICLE PICTURE

YOUR SCHEDULING OPTIONS

- 1. RECOMMENDED OPTION**
Call your authorized Chrysler / Dodge / Jeep® / RAM Dealership
- 2. Call the FCA Recall Assistance Center at 1-800-853-1403.** An agent can confirm part availability and help schedule an appointment
- 3. Visit recalls.mopar.com, scan the QR code below, or download the Mopar Owner’s Companion App.**

QR Code

Get access to recall notifications, locate your nearest dealer, and more through this website or Mopar Owner’s Companion App. You will be asked to provide your Vehicle Identification Number (VIN) to protect and verify your identity. The last eight characters of your VIN are provided above.

DEALERSHIP INSTRUCTIONS

Please reference Safety Recall V99.

IMPORTANT SAFETY RECALL

Steering Gear

Dear [Name],

This notice is sent to you in accordance with the National Traffic and Motor Vehicle Safety Act.

FCA US has decided that a defect, which relates to motor vehicle safety, exists in certain [2019 and 2020 Model Year (KL) Jeep® Cherokee] vehicles.

It is extremely important to take steps now to repair your vehicle to ensure the safety of you and your passengers.

WHY DOES MY VEHICLE NEED REPAIRS?

The steering gear on your vehicle ^[1] may have been built with a servo pinion hardness below specification. This could potentially result in a fracture and allow a metal shard to become lodged within the teeth of the steering rack. **If this occurs, it can result in a loss of steering control which can cause a vehicle crash without prior warning.**

HOW DO I RESOLVE THIS IMPORTANT SAFETY ISSUE?

FCA US will repair your vehicle ^[2] free of charge (parts and labor). To do this, your dealer will replace the steering gear. The estimated repair time is six hours. In addition, your dealer will require your vehicle for proper check-in, preparation, and check-out during your visit, which may require more time. Your time is important to us, so we recommend that you schedule a service appointment to minimize your inconvenience. Please bring this letter with you to your dealership.

TO SCHEDULE YOUR FREE REPAIR, CALL YOUR CHRYSLER, DODGE, JEEP OR RAM DEALER TODAY

WHAT IF I ALREADY PAID TO HAVE THIS REPAIR COMPLETED?

If you have already experienced this specific condition and have paid to have it repaired, you may visit www.fcarecallreimbursement.com to submit your reimbursement request online. ^[3] Once we receive and verify the required documents, reimbursement will be sent to you within 60 days. If you have had previous repairs performed and/or already received reimbursement, you may still need to have the recall repair performed.

We apologize for any inconvenience, but are sincerely concerned about your safety. Thank you for your attention to this important matter.

Customer Assistance/Field Operations
FCA US LLC



Mr. Mrs. Customer
1234 Main Street
Hometown, MI 48371

[1] If you no longer own this vehicle, please help us update our records. Call the FCA Recall Assistance Center at 1-800-853-1403 to update your information.

[2] If your dealer fails or is unable to remedy this defect without charge and within a reasonable time, you may submit a written complaint to the Administrator, National Highway Traffic Safety Administration, 1200 New Jersey Ave., S.E., Washington, DC 20590, or you can call the toll-free Vehicle Safety Hotline at 1-888-327-4236 (TTY 1-800-424-9153), or go to safercar.gov.

[3] You can also mail in your original receipts and proof of payment to the following address for reimbursement consideration: FCA Customer Assistance, P.O. Box 21-8004, Auburn Hills, MI 48321-8007, Attention: Recall Reimbursement.

Note to lessors receiving this recall notice: Federal regulation requires that you forward this recall notice to the lessee within 10 days.