

**December 8, 2023**

Version 2

## Product Update: 2022–24 Civic EPS Gearbox Inspection (Service Parts)

### AFFECTED VEHICLES

| Year    | Model | Trim         | VIN Range                            |
|---------|-------|--------------|--------------------------------------|
| 2022–24 | Civic | LX, EX, EX-T | Check iN VIN status for eligibility. |

### BACKGROUND

Due to a manufacturing error, certain service part electric power steering (EPS) gearbox assemblies were not made to proper specification which may affect the rack stroke. An incorrect rack stroke may cause changes in driving dynamics.

### CUSTOMER NOTIFICATION

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

Do an iN VIN status inquiry to verify eligibility.

Some vehicles affected by this campaign may be in your new or used vehicle inventory. Repair these vehicles before they are sold.

### CORRECTIVE ACTION

Inspect the EPS gearbox part number label and, if necessary replace the EPS gearbox assembly.

### PARTS INFORMATION

| Part Name           | Part Number   | Quantity |
|---------------------|---------------|----------|
| Gearbox             | 53640-T21-306 | 1        |
| Flange Bolt (12X75) | 90161-SX8-T00 | 4        |
| Washer Bolt (14X85) | 90179-T20-A01 | 4        |
| Flange Bolt (12X30) | 90174-T20-A01 | 2        |
| Washer Bolt (14X45) | 90163-TGH-A01 | 2        |
| Washer Bolt (14X85) | 90130-T20-A00 | 1        |
| Flange Bolt (14X35) | 90181-TBA-A00 | 2        |

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

| Part Name            | Part Number   | Quantity |
|----------------------|---------------|----------|
| Flange Bolt (14X80)  | 90108-T20-A00 | 3        |
| Split Pin (3.0X22)   | 94201-30220   | 2        |
| Washer Bolt (10X25)  | 90159-TBA-A00 | 3        |
| Self-Lock Nut (12mm) | 90215-SB0-003 | 6        |
| Flange Nut (10mm)    | 90002-S10-000 | 2        |

#### TOOLS INFORMATION

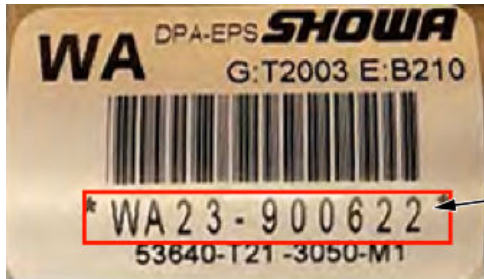
| Part Name                          | Part Number   | Quantity |
|------------------------------------|---------------|----------|
| Subframe Adapter                   | VSB02C000016  | 1        |
| Ball Joint Thread Protector (12mm) | 07AAF-SDAA100 | 1        |
| Ball Joint Remover (28mm)          | 07MAC-SL00202 | 1        |
| Subframe Alignment Pin             | 070AG-SJAA10S | 1        |

## WARRANTY CLAIM INFORMATION

NOTE: Due to the number of possibly affected Service Parts, all gearbox/racks replaced are being called in for inspection. If deemed as an inappropriate replacement, the claim may be subject to debit.

### REQUIRED:

1. Attach the photo of the EPS gearbox label to the warranty claim form. Required photos must be included when submitting your claim, or the claim may be subject to a debit. The photos must be clear; retake any unclear photos before submitting.



EPS SERIAL  
NUMBER

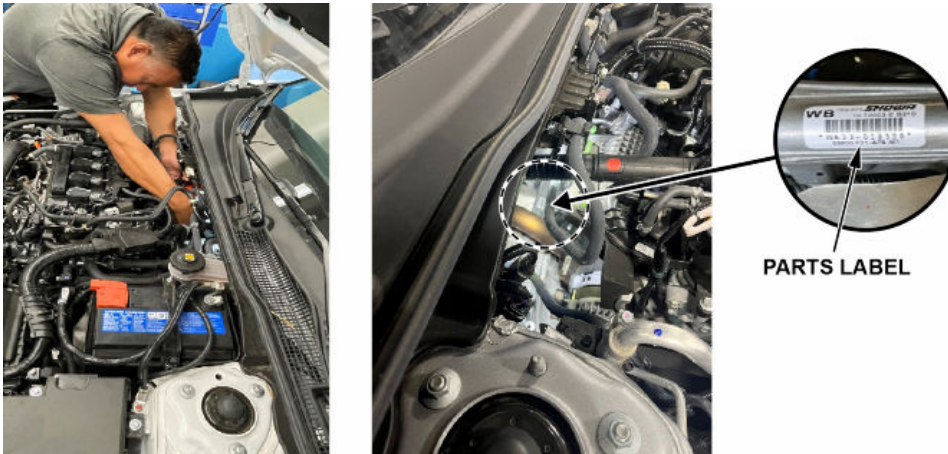
2. Input the EPS serial number into the Test Code field in the warranty claim form when the claim is being submitted.

| Repair Information                                                                      |                      |                                                     |       |                           | <input type="checkbox"/> View Flat Rate Labor Time |
|-----------------------------------------------------------------------------------------|----------------------|-----------------------------------------------------|-------|---------------------------|----------------------------------------------------|
| Defect Code (Exclude Dash)* 03214                                                       |                      | Test Code                                           |       |                           | WA23900622                                         |
| Item                                                                                    | Labor Operation No.* | Labor Description                                   | Time* |                           |                                                    |
| 1                                                                                       | 5131C0               | STEERING GEARBOX, ELECTRIC POWER STEERING - REPLACE | 1.9   | <a href="#">Delete</a>    |                                                    |
| 2                                                                                       |                      |                                                     |       | <a href="#">Delete</a>    |                                                    |
| 3                                                                                       |                      |                                                     |       | <a href="#">Delete</a>    |                                                    |
| Total Time                                                                              |                      |                                                     | 1.9   | <a href="#">More &gt;</a> |                                                    |
| M.I.L. On <input type="checkbox"/> NO <input type="checkbox"/> Diagnostic Trouble Codes |                      |                                                     |       |                           |                                                    |

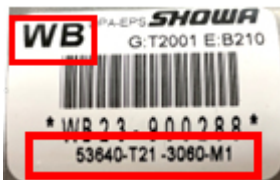
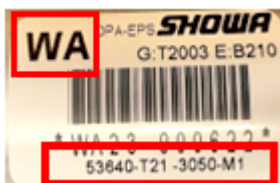
| Operation Number | Description                                                                | Flat Rate Time | Defect Code | Symptom Code | Template ID | Failed Part Number |
|------------------|----------------------------------------------------------------------------|----------------|-------------|--------------|-------------|--------------------|
| 5135D9           | Inspect the parts label (includes photos)                                  | 0.3 hr         | 6GT00       | DG400        | A23089A     | 53640-T21-306      |
| Operation Number | Description                                                                | Flat rate Time | Defect Code | Symptom Code | Template ID | Failed Part Number |
| 5131M3           | Replace the EPS gearbox (includes inspection, VSA relearn, and alignment). | 2.0 hr         | 6GT00       | DG400        | A23089B     | 53640-T21-306      |

## INSPECTION PROCEDURE

1. Open the hood and wait for the engine to cool down.
2. Locate the parts label on the EPS gearbox.



3. Inspect the label on the EPS gearbox and check the ID and part number on the label.
  - If the ID and part number is WA with P/N 53640-T21-3050-M1 or WB with P/N 53640-T21-3060-M1, **take a picture of the label and attach it to the warranty claim.** Then, go to the **REPAIR PROCEDURE**.



- If the EPS has any other ID or part number, no EPS gearbox replacement is needed. **Take a picture of the label and attach it to the warranty claim,** no further action needed.

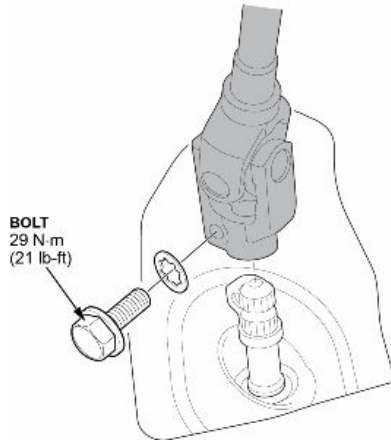
## REPAIR PROCEDURE

Refer to Service Information for a more in-depth power steering gearbox removal repair procedure.

1. Disconnect the 12-volt battery terminals.
2. Disconnect the steering joint.

### NOTE:

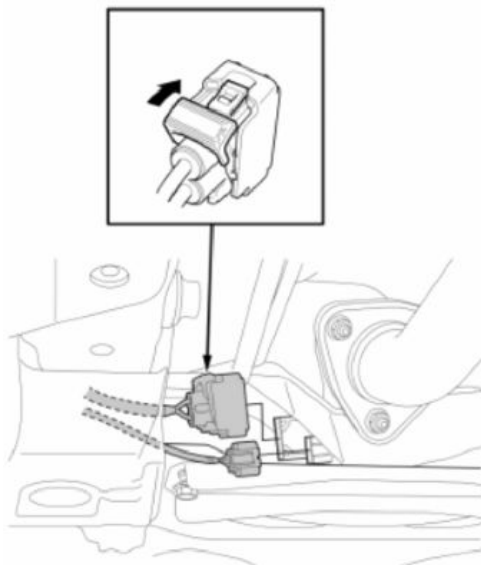
- Set the steering wheel straight ahead before disconnecting the shaft.
- **Do not turn** the steering wheel while disconnecting the steering joint.



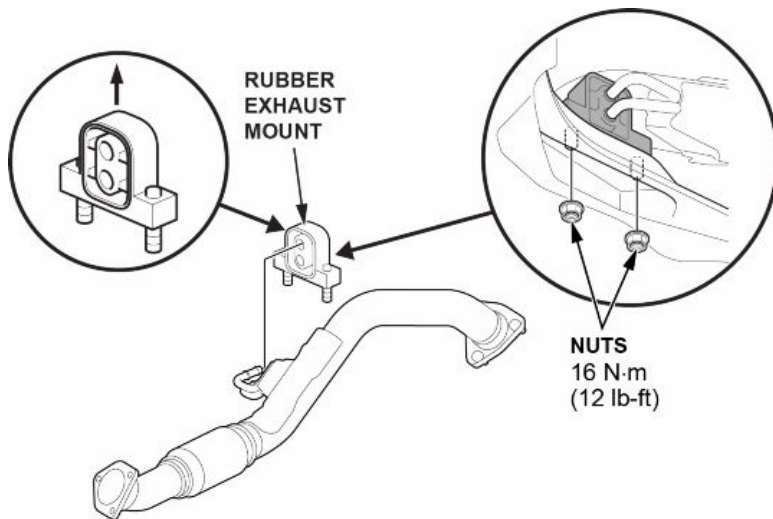
3. Raise the vehicle to a comfortable working height.

NOTE: **Keep** the vehicle elevated for the remainder of the procedure.

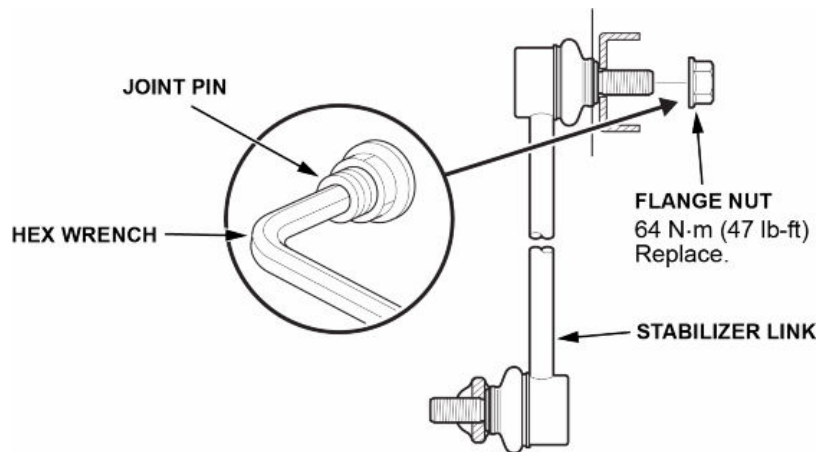
4. Remove the front wheels **108N·m (80-lb-ft)**.
5. Remove the engine undercover.
6. Disconnect the EPS harness connectors.



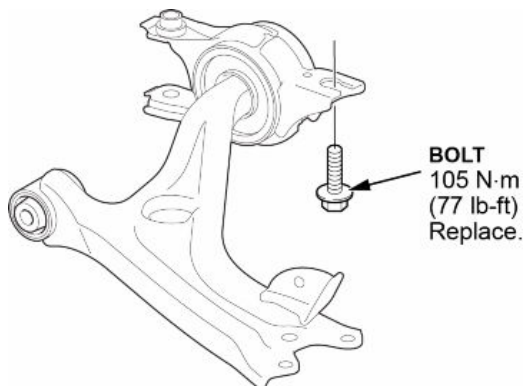
7. Remove the rubber exhaust mount.



8. Disconnect the stabilizer links located on top.



9. Remove the front lower assembly bolt (both sides).

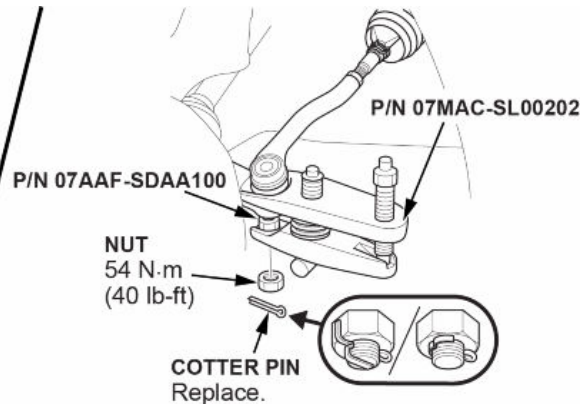


10. Loosen the outer tie-rod end nuts and disconnect the tie-rod end ball joints (both sides).

NOTE: Always use a ball joint remover to disconnect a ball joint. Do not strike the housing or any other part of the ball joint connection to disconnect it.

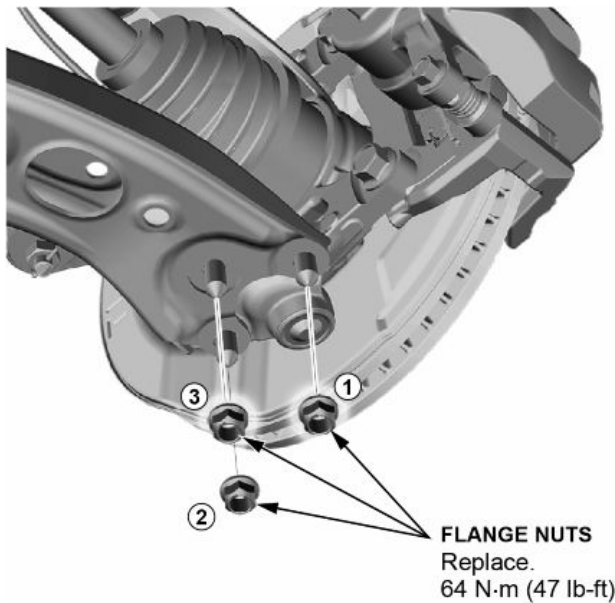


OUTER TIE-ROD NUT

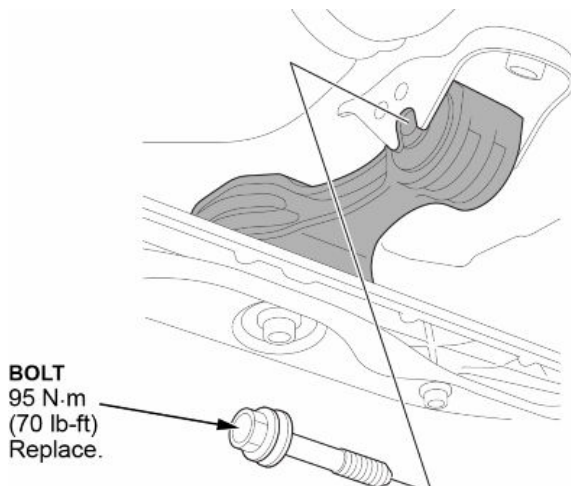


11. Disconnect the front lower arms.

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

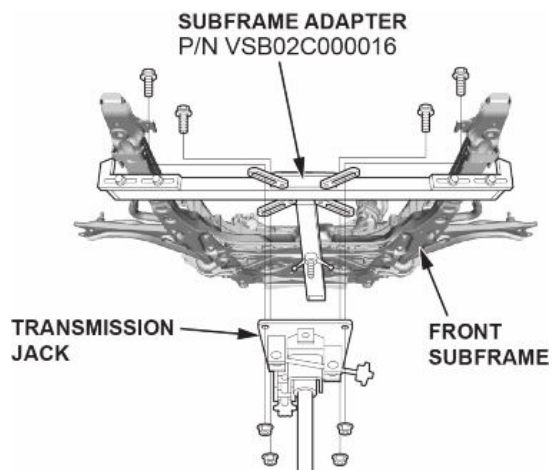


12. Remove the engine torque rod front bolt.

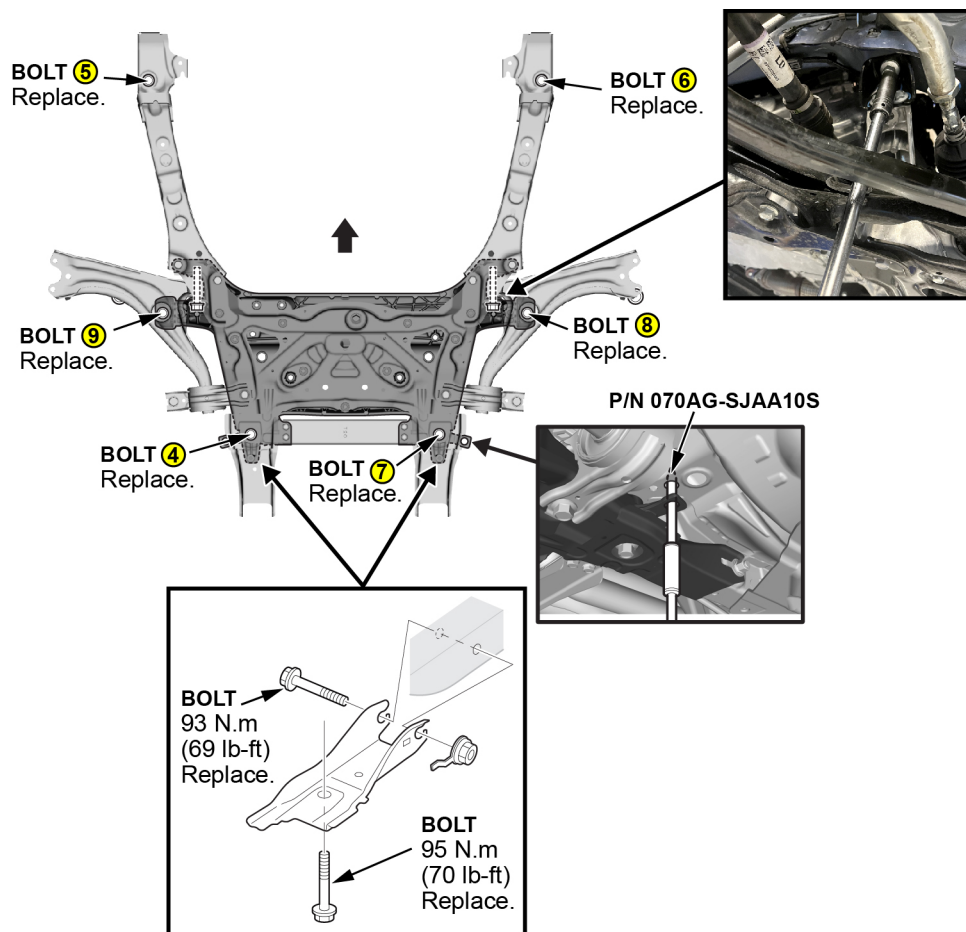




13. Attach the subframe adapter to the front subframe.



14. Raise a transmission jack and line up the slots in the subframe adapter arms with the bolt holes on the transmission jack base, then securely attach the four bolts. Then, remove the bolts highlighted in yellow only.

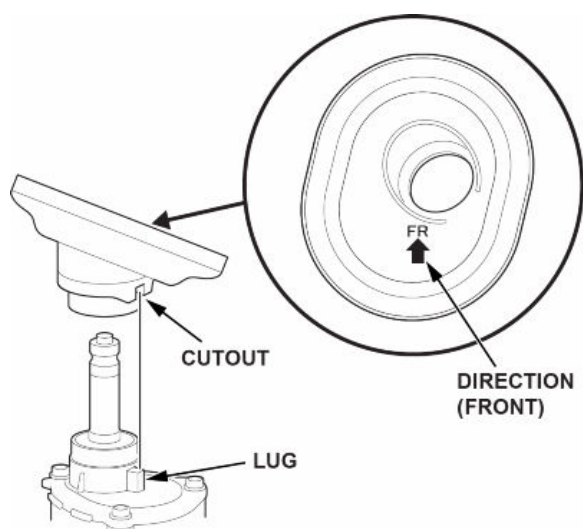


15. Remove the front subframe.

16. Transfer the tie rod ends to the replacement gearbox.

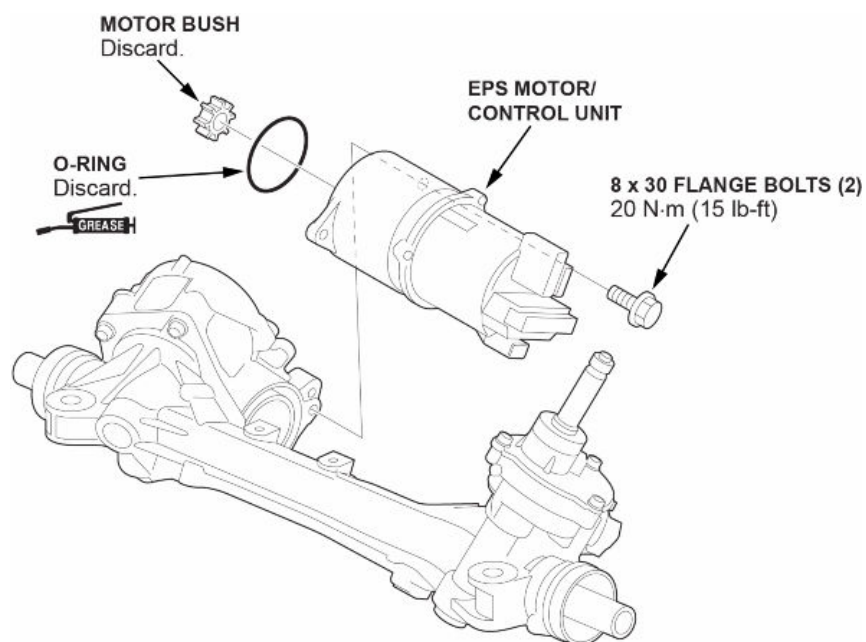


17. Transfer the steering shaft boot to the replacement gearbox.



18. Remove the steering gearbox from the subframe.

19. Separate the EPS motor/control unit from the removed gearbox and retain for installation on the new gearbox.



20. Install new O-ring (the O-ring is kitted with the new gearbox) to the EPS motor/control unit.

NOTE:

- Apply steering grease or equivalent to the O-ring.
- Discard the motor bush.

21. Install the EPS motor/control unit on the replacement rack with the barcode facing up, but do not install the mounting bolts.



**EPS MOTOR CONTROL UNIT**  
Turn unit two or three times to the right and left (about 45 degrees).



**BARCODE**  
Install with barcode facing up.

22. To seat the EPS motor/control unit turn it **two or three times** to both the **left and right** in a **45° arc**, as shown below.



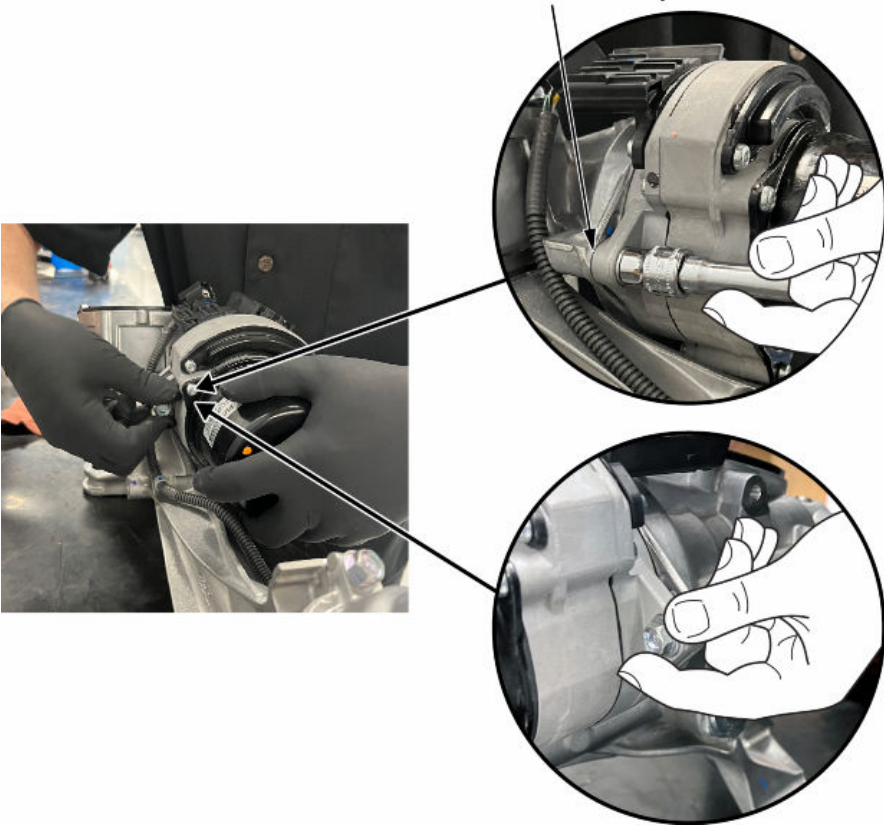
**EPS MOTOR CONTROL UNIT**  
Turn unit two or three times to the right and left (about 45 degrees).

23. Loosely install the EPS motor/control unit mounting bolts by hand but do not fully torque them yet.

NOTE:

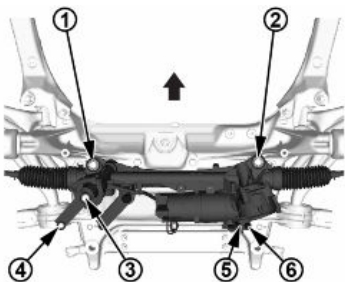
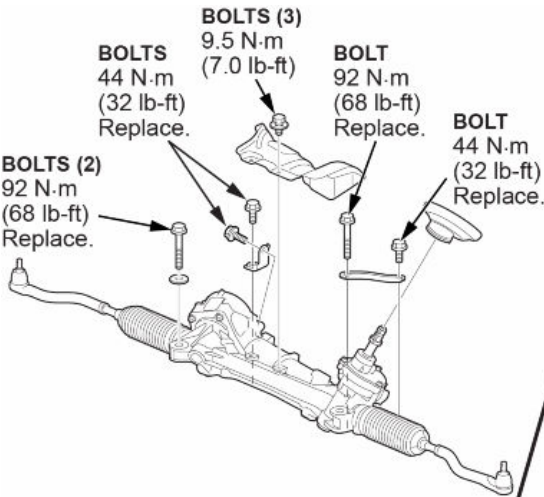
- To prevent damaging the motor and/or gearbox, **DO NOT** use power tools to install or tighten the bolts.
- Make sure the EPS motor/control unit is evenly seated on the P/S gearbox.

EPS MOTOR/CONTROL UNIT  
Make sure unit is evenly seated.



24. Torque the EPS motor/control unit mounting bolts to **20 N·m (15 lb-ft)**.

25. Install the EPS gearbox to the subframe and torque to spec as shown.



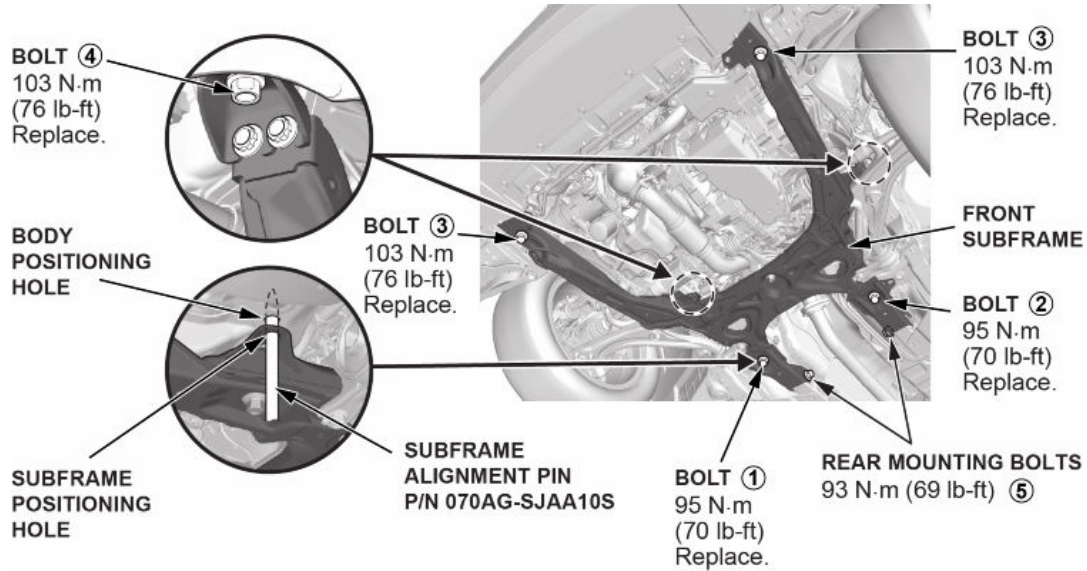
Installation Directions

| Position | Direction |
|----------|-----------|
| a        | Front     |

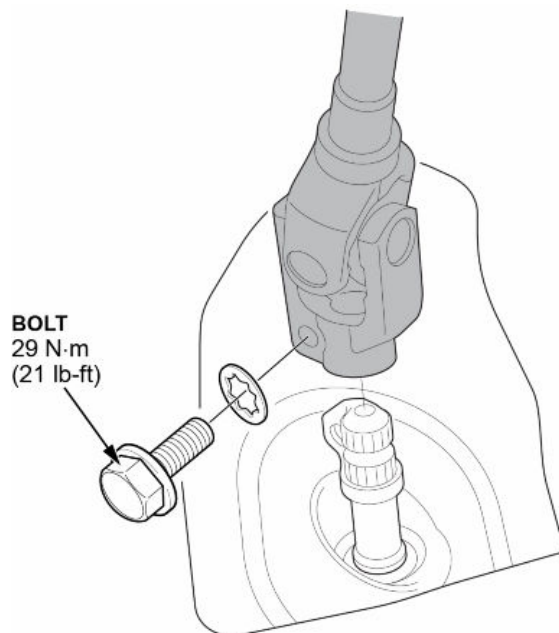
Tightening Procedure

| Step | Operation           | Object    | Specification |
|------|---------------------|-----------|---------------|
| 1    | Temporarily Tighten | All Bolts | —             |
| 2    | Tighten             | All Bolts | ①→②→③→④→⑤→⑥   |

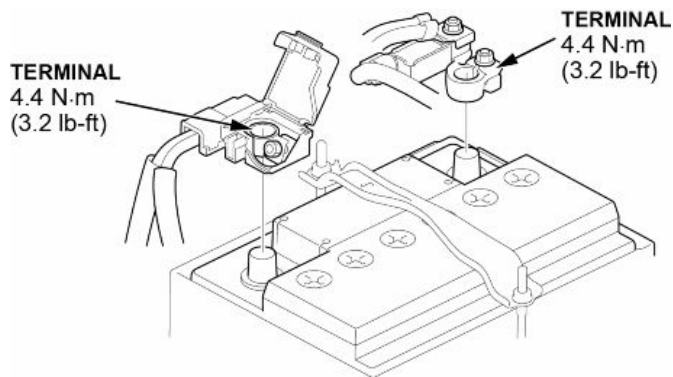
26. Raise a transmission jack and line up the slots in the sub frame adapter arms with the bolt holes on the transmission jack base. Loosely install the four bolts sub frame mounting bolts and the front subframe rear stay mounting bolts. Torque the front sub frame bolts **103 N·m (76 lb-ft)**, **95 N·m (70 lb-ft)**, **93 N·m (69 LB-ft)**.



27. Install the pinion shaft to the steering joint **29 N·m (21 lb-ft)**.



28. Connect the 12-volt battery.



29. Install all removed parts in the reverse order of removal.

30. With the front wheels set straight ahead, make sure the steering wheel is centered.

31. Make sure the turning revolutions from center to full lock (left and right) are equal.

NOTE: **If not**, check the installation of the steering wheel and the engagement of the joint/pinion shaft splines.

32. With the tires raised, check for noise and abnormality by turning the steering wheel **fully** to the **right and left** several times.

33. Confirm the EPS provides power assist.

34. Check that the EPS indicator does not come on.

35. Do a wheel alignment.

36. Do the VSA Sensor Neutral Position Memorization.

- Park the vehicle on a flat and level surface.
- Connect HDS to the DLC.
- Turn the vehicle to the ON mode, but do not start the engine.
- 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.

END