

## Service Bulletin

23-085

November 1, 2023 Version 3

# Safety Recall: 2022-24 Civic Touring/Sport EPS Inspection (Service Parts)

Supersedes 23-085, dated October 25, 2023, to revise the information highlighted in yellow.

#### **AFFECTED VEHICLES**

Year	Model	Trim	VIN Range
2022–24	Civic	Touring, Sport	Check iN VIN status for eligibility.

### **REVISION SUMMARY**

Under INSPECTION PROCEDURE, step 3 was updated.

#### **BACKGROUND**

Due to a manufacturing error, certain electric power steering (EPS) service part assemblies were set with the incorrect rack stroke specifications. An incorrect rack stroke may cause the tire, or if so equipped, tire with snow chains, to interfere with the lower control arm, possibly causing tire and/or chain damage.

## **CUSTOMER NOTIFICATION**

Owners of affected vehicles will be sent a notification of this safety recall.

Do an iN VIN status inquiry to verify eligibility.

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

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

## **CORRECTIVE ACTION**

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

**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.

## **PARTS INFORMATION**

Part Name	Part Number	Quantity	
Gearbox (4-door, 5-door, Touring, Sport)	53640-T21-305	1	
Flange Bolt (12X75)	90161-SX8-T00	4	
Washer Bolt (14X85)	90179-T20-A01	4	
Flange Bolt (12X30)	90174-T20-A01	2	
Flange Bolt (10X20)	90165-THR-A00	4	
Washer Bolt (14X45)	90163-TGH-A01	2	
Flange Bolt (14X105)	90175-TRW-A00	1	
Flange Bolt (14X33)	90164-T20-A00	5	
Washer Bolt (14X85)	90130-T20-A00	1	
Flange Bolt (14X35)	90181-TBA-A00	2	
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 Remover (28mm)	07MAC-SL00202	1
Subframe Alignment Pin	070AG-SJAA10S	1
Ball Joint Thread Protector (12mm)	07AAF-SDAA100	1

#### **WARRANTY CLAIM INFORMATION**

NOTE: Attach the photo of the EPS label to the warranty claim form. Required photos must be included when submitting your claim, or the claim may be subject to a debit. Retake any unclear photos prior to submitting.



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



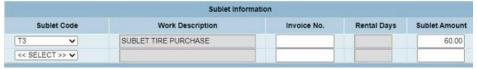
5135A8 Inspect the parts label (includes photos) 0.3 hr 6GX00 YFW00 A23085A 53640-T21-305	Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
	5135A8		0.3 hr	6GX00	YFW00	A23085A	53640-T21-305

Operation Number	Description	Flat rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
5131L8	Replace the EPS gearbox (includes inspection, VSA relearn, and alignment).	1.9 hr	6GX00	YFW00	A23085B	53640-T21-305
А	Inspect the front tires.	0.1 hr	6GX00	YFW00	A23085B	53640-T21-305
В	Replace one front tire (includes balance).	0.3 hr	6GX00	YFW00	A23085C	53640-T21-305
С	Replace second front tire (includes balance).	0.3 hr	6GX00	YFW00	A23085D	53640-T21-305

Provide a clear image of the damaged tire showing the interference condition, write the last seven characters of the VIN on the damaged tire; Contact your DPSM for consultation/approval.

Only purchase new tires through Tire Rack when replacing a tire using this bulletin.

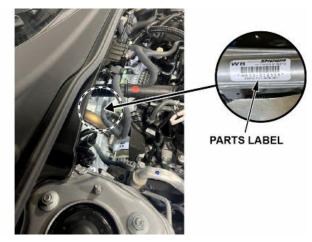
To submit a warranty claim for a dealer installed tire replacement, select the T3 sublet code in the Sublet Information field and enter the total sublet amount. Include \$10.00 per tire for handling and upload the tire invoice.



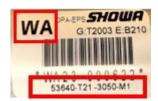
## **INSPECTION PROCEDURE**

- 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 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, continue to step 4.

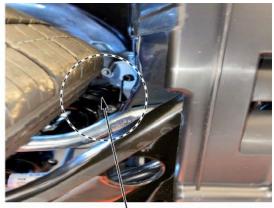




• If the EPS has any other ID or part number, no EPS gearbox replacement is needed. Take a picture of the label and attach it to the warranty claim, no further action needed.

4. Place the vehicle on a lift and inspect both front tires inner side walls of the tire. Check both the front left and right for interference/rubbing marks with the lower control arm and/or outer tie rod.





INNER TIRE CONTACT WITH LOWER ARM AND/OR OUTER TIE ROD

Is there any sign of interference/damage marks on the inner tire with the control arm?

**YES** - Any tire with signs/evidence of interference requires replacement. Provide a clear image showing the interference condition and write the last seven characters of the VIN on the damaged tire. Contact your DPSM for consultation/approval. Go to the REPAIR PROCEDURE.



Write the last seven characters of the vehicles VIN.

NOTE: Failure to provide clear photos for tire replacement will be subject to debit.

**NO** - Tires do not require replacement. Go to the REPAIR PROCEDURE.

## **REPAIR PROCEDURE**

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

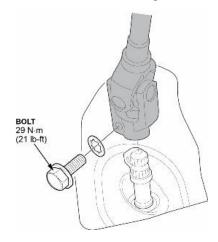
- 1. Disconnect the 12-volt battery terminals.
- 2. Raise the vehicle to a comfortable working height.

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

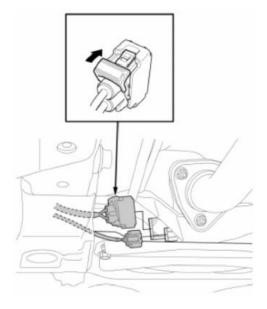
- 3. Remove the front wheels 108 N·m (80 lb-ft).
- 4. Disconnect the steering joint.

## NOTE:

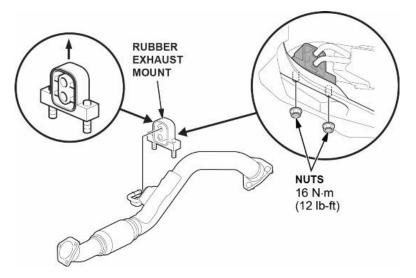
- Set the steering wheel straight ahead before disconnecting the shaft.
- Do not turn the steering wheel while disconnecting the steering joint.



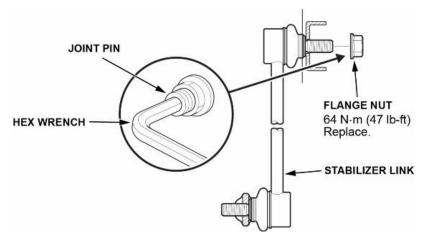
- 5. Remove the engine undercover.
- 6. Disconnect the EPS harness connectors.



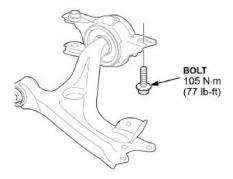
7. Remove the rubber exhaust mount.



8. Disconnect the stabilizer links located on top.

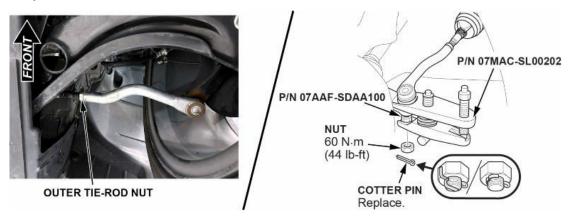


9. Remove the front lower assembly bolt (both sides).



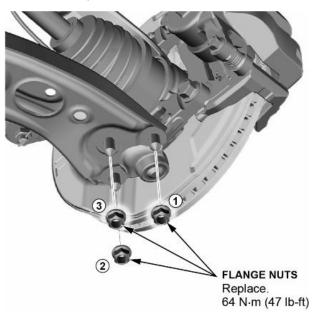
10. Loosen the outer tie-rod end nut (both sides).

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.

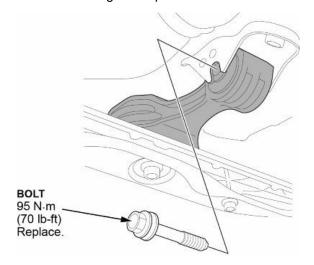


11. Disconnect the front lower arms.

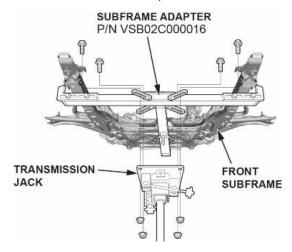
NOTE: During reassembly, loosely install the new flange nuts, then tighten them to the specified torque in the numbered sequence shown.



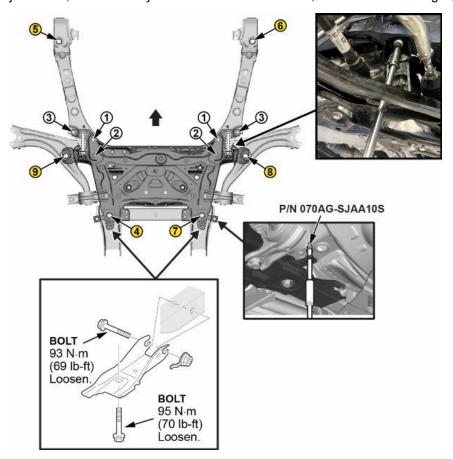
12. Remove the engine torque rod front bolt.



13. Attach the subframe adapter to the front subframe.

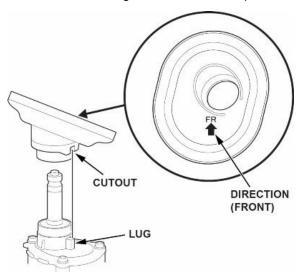


14. Raise a transmission jack and line up the slots in the subframe adapter arms with the bolt holes on the transmission jack base, then securely attach the four bolts. Then, remove the bolts highlighted in yellow only.

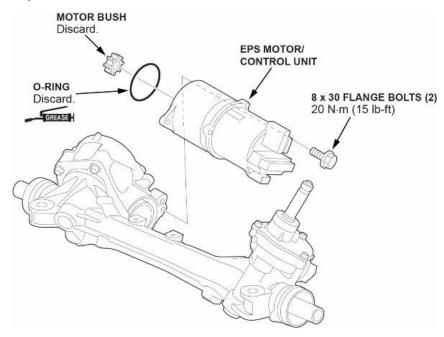


- 15. Remove the front subframe.
- 16. Transfer the tie rod ends to the replacement gearbox.

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 rack and retain for installation on the new gearbox.

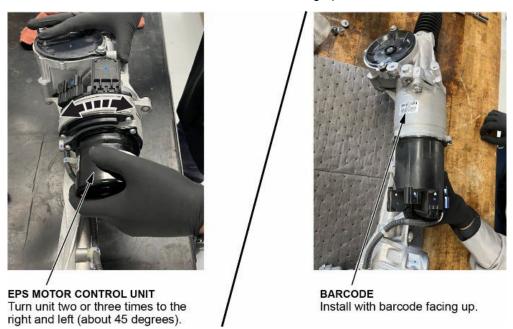


 $20. \ \ Install\ new\ O\text{-ring}\ (the\ O\text{-ring}\ is\ kitted\ in\ the\ new\ gearbox)\ to\ the\ EPS\ motor/control\ unit.$ 

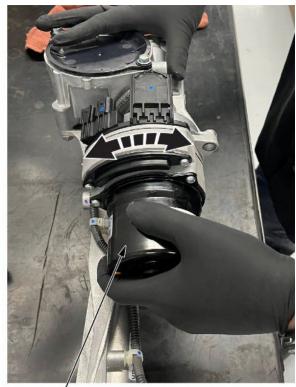
## NOTE:

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

21. Install the EPS motor/control unit with the label facing up, but do not install the mounting bolts.



22. Turn the EPS motor/control unit two or three times to both the left and right in a 45° arc.



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

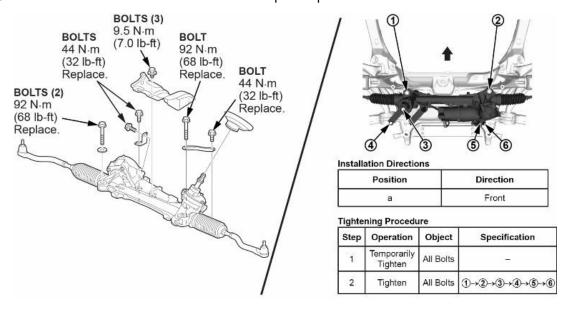
23. Loosely install the EPS motor/control unit mounting bolts by hand but do not fully torque them yet.

#### NOTE:

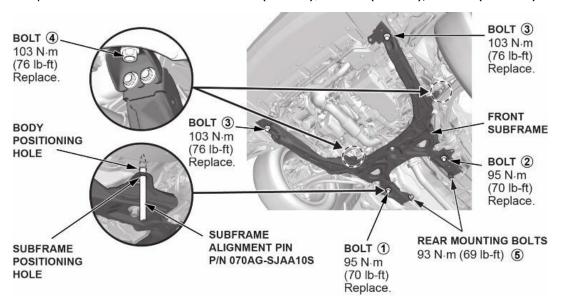
- To prevent damaging the motor and/or gearbox, **DO NOT** use power tools to install or tighten the bolts.
- Make sure the EPS motor/control unit is evenly seated on the P/S gearbox.



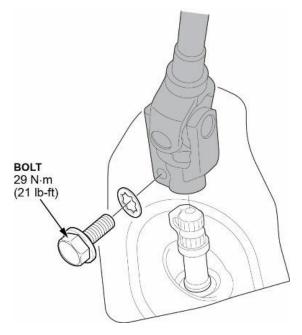
- 24. Torque the EPS motor/control unit mounting bolts to 20 N·m (15 lb-ft).
- 25. Install the EPS rack to the subframe and torque to spec as shown.



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. Install all removed parts in the reverse order of removal.
- 29. With the front wheels set straight ahead, make sure the steering wheel is centered.
- 30. 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.
- 31. With the tires raised, check for noise and abnormality by turning the steering wheel **fully** to the **right and left** several times.
- 32. Confirm the EPS provides power assist.
- 33. Check that the EPS indicator does not come on.
- 34. Do a wheel alignment.

## **Do the VSA Sensor Neutral Position Memorization**

- 35. Park the vehicle on a flat and level surface.
- 36. Connect HDS to the DLC.
- 37. Turn the vehicle to the ON mode, but do not start the engine.
- 38. Set the steering wheel in the straight ahead position.
- 39. Select the **ADJUSTMENT** from the **ABS/TCS/VSA** menu with the HDS, then select **ALL SENSOR**, and follow the screen prompts.

**END**