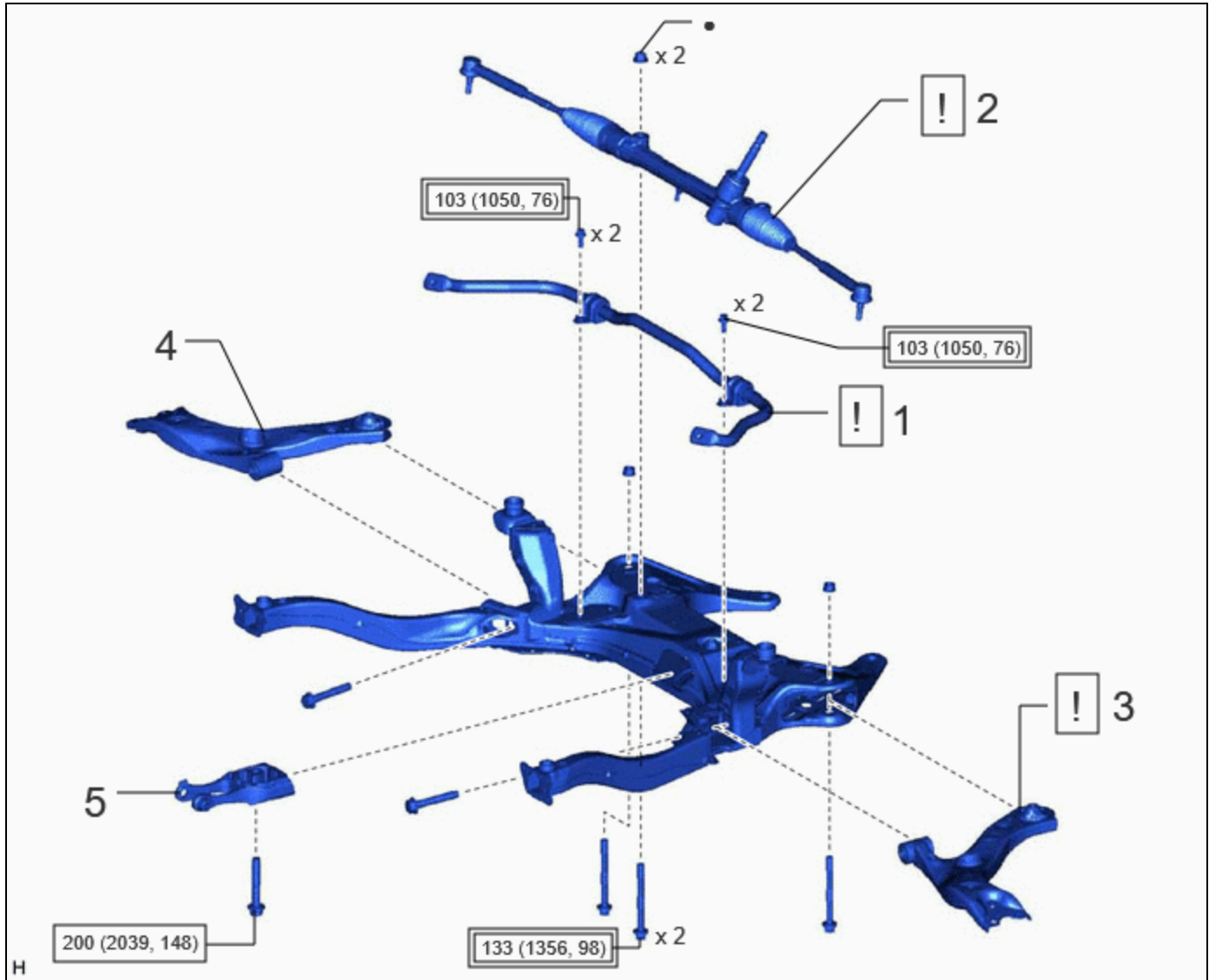


Last Modified: 12-04-2024	6.11:8.1.0	Doc ID: RM100000002BNLL
Model Year Start: 2023	Model: Prius Prime	Prod Date Range: [03/2023 -]
Title: FRONT SUSPENSION: FRONT SUSPENSION MEMBER: INSTALLATION; 2023 - 2024 MY Prius Prius Prime [03/2023 -]		




INSTALLATION



CAUTION / NOTICE / HINT

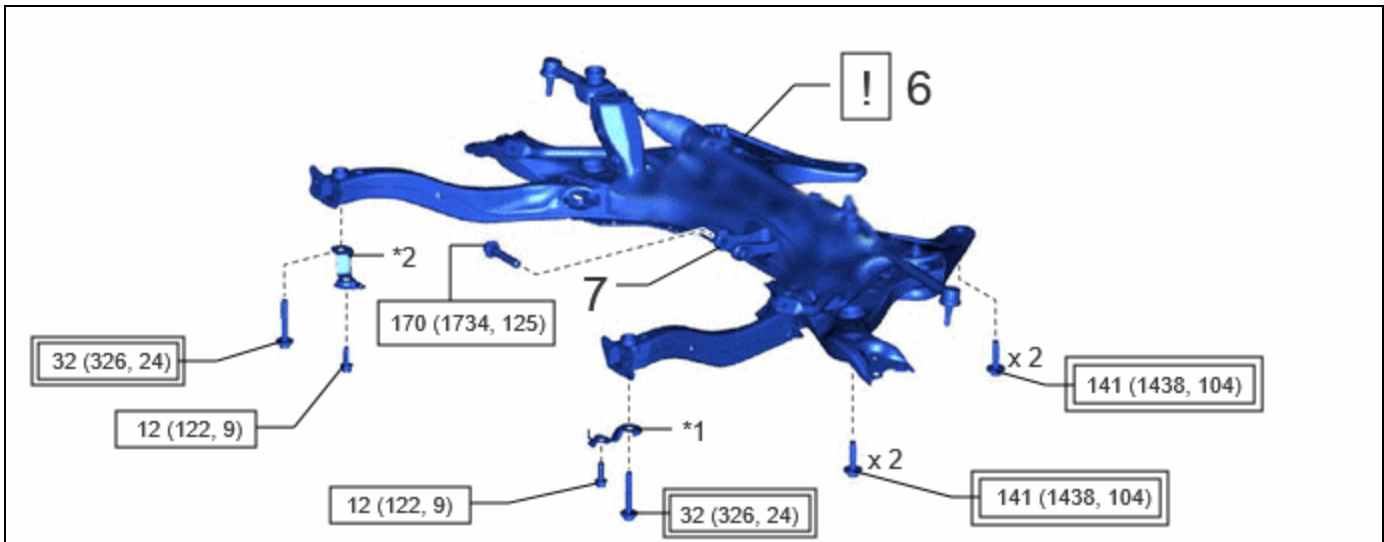
COMPONENTS (INSTALLATION)








PROCEDURE		PART NAME CODE			
1	FRONT STABILIZER BAR	48811	INFO	-	-

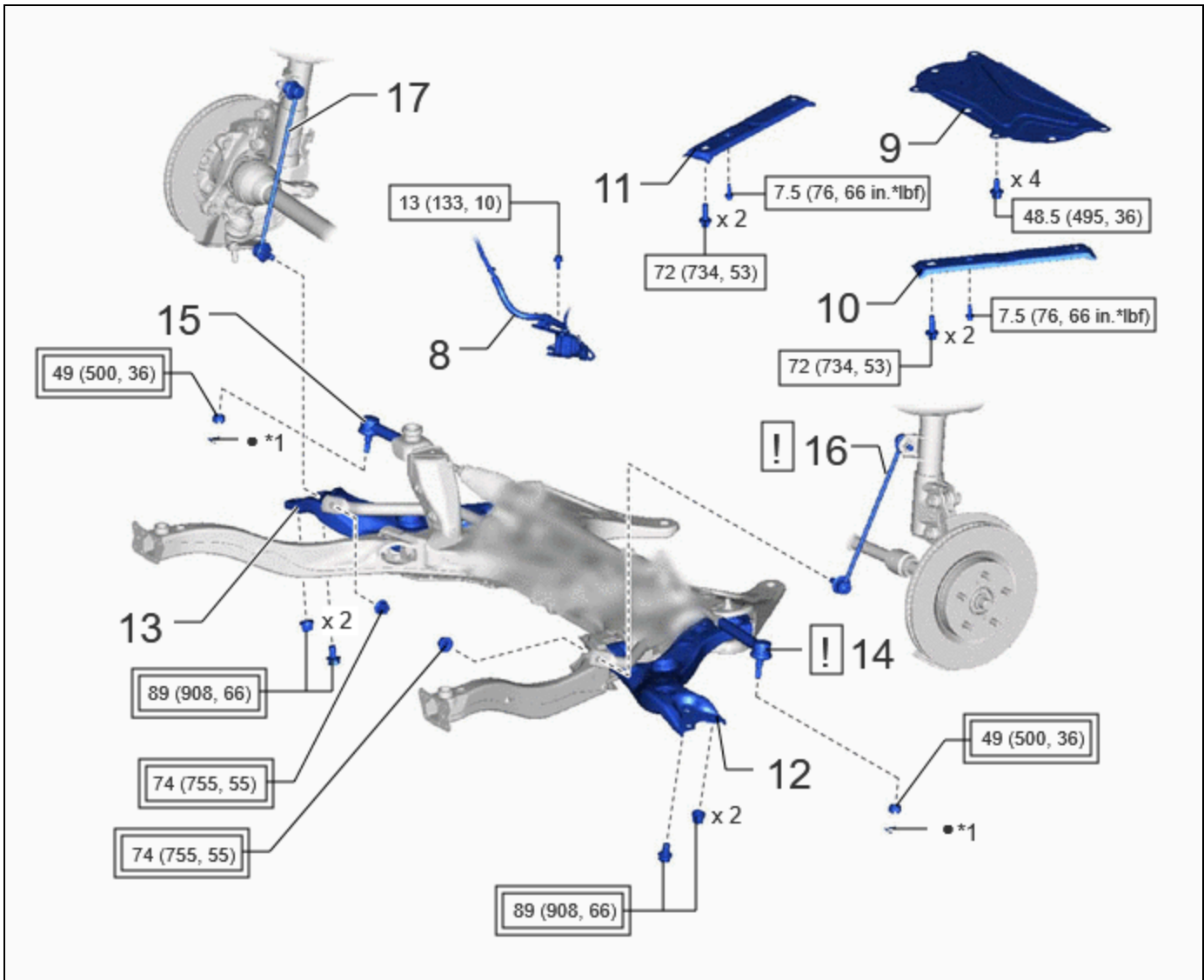
	PROCEDURE	PART NAME CODE			
2	STEERING LINK ASSEMBLY	-	INFO	-	-
3	TEMPORARILY INSTALL FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY LH	48069	INFO	-	-
4	TEMPORARILY INSTALL FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY RH	48068	-	-	-
5	INSTALL ENGINE MOVING CONTROL ROD	12363A	-	-	-

	Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping" : N*m (kgf*cm, ft.*lbf)		N*m (kgf*cm, ft.*lbf): Specified torque
•	Non-reusable part	-	-








	PROCEDURE	PART NAME CODE			
6	FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY	51201	INFO	-	-
7	CONNECT ENGINE MOVING CONTROL ROD	12363A	-	-	-

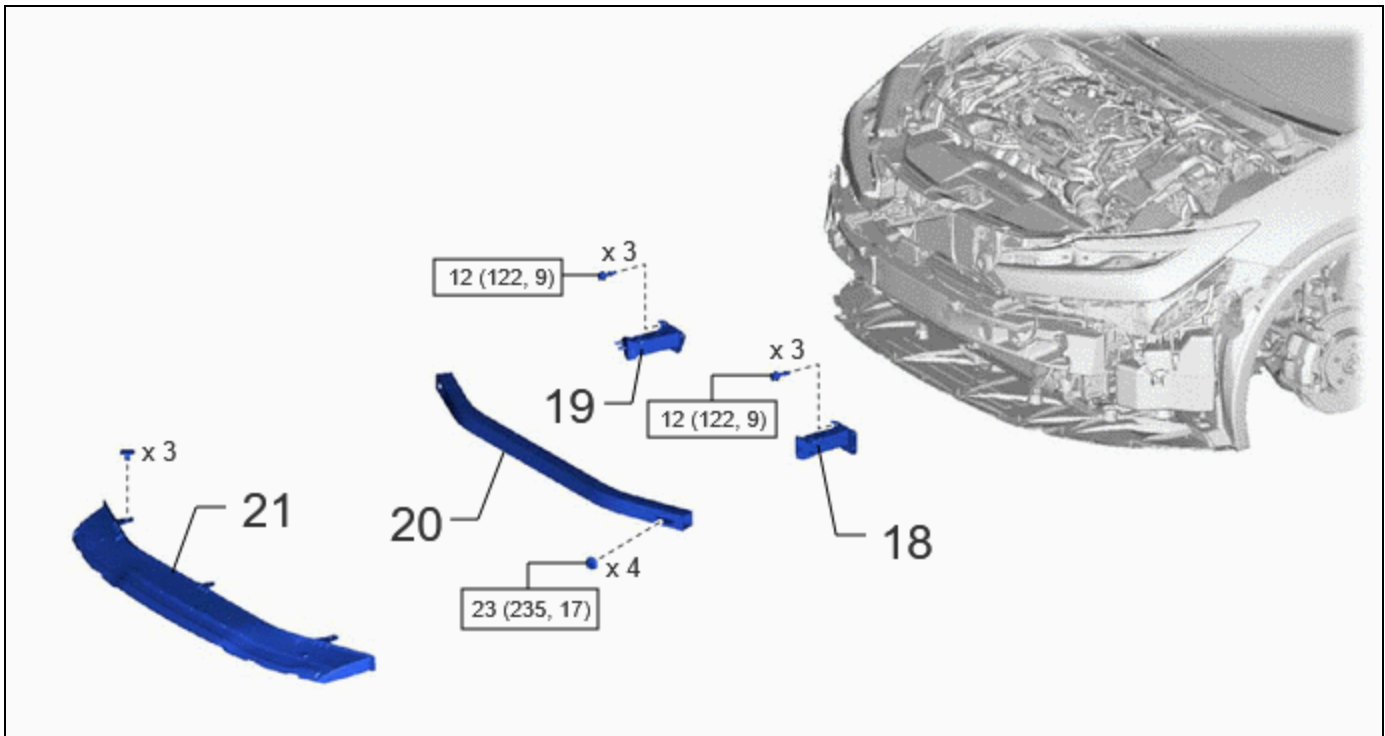
*1	CENTER RADIATOR SUPPORT LH	*2	CENTER RADIATOR SUPPORT RH
	Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping" : N*m (kgf*cm, ft.*lbf)		N*m (kgf*cm, ft.*lbf): Specified torque







PROCEDURE	PART NAME CODE	!	📄	⚙️
8 WIRE HARNESS CLAMP BRACKET	-	-	-	-
9 NO. 2 ENGINE UNDER COVER	51442	-	-	-
10 NO. 2 CROSSMEMBER GUSSET LH	51322	-	-	-
11 NO. 2 CROSSMEMBER GUSSET RH	51321	-	-	-
12 CONNECT FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY LH	48069	-	-	-
13 CONNECT FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY RH	48068	-	-	-
14 TIE ROD END SUB-ASSEMBLY LH	45047	INFO	-	-
15 TIE ROD END SUB-ASSEMBLY RH	45046	-	-	-
16 FRONT STABILIZER LINK ASSEMBLY LH	48810	INFO	-	-

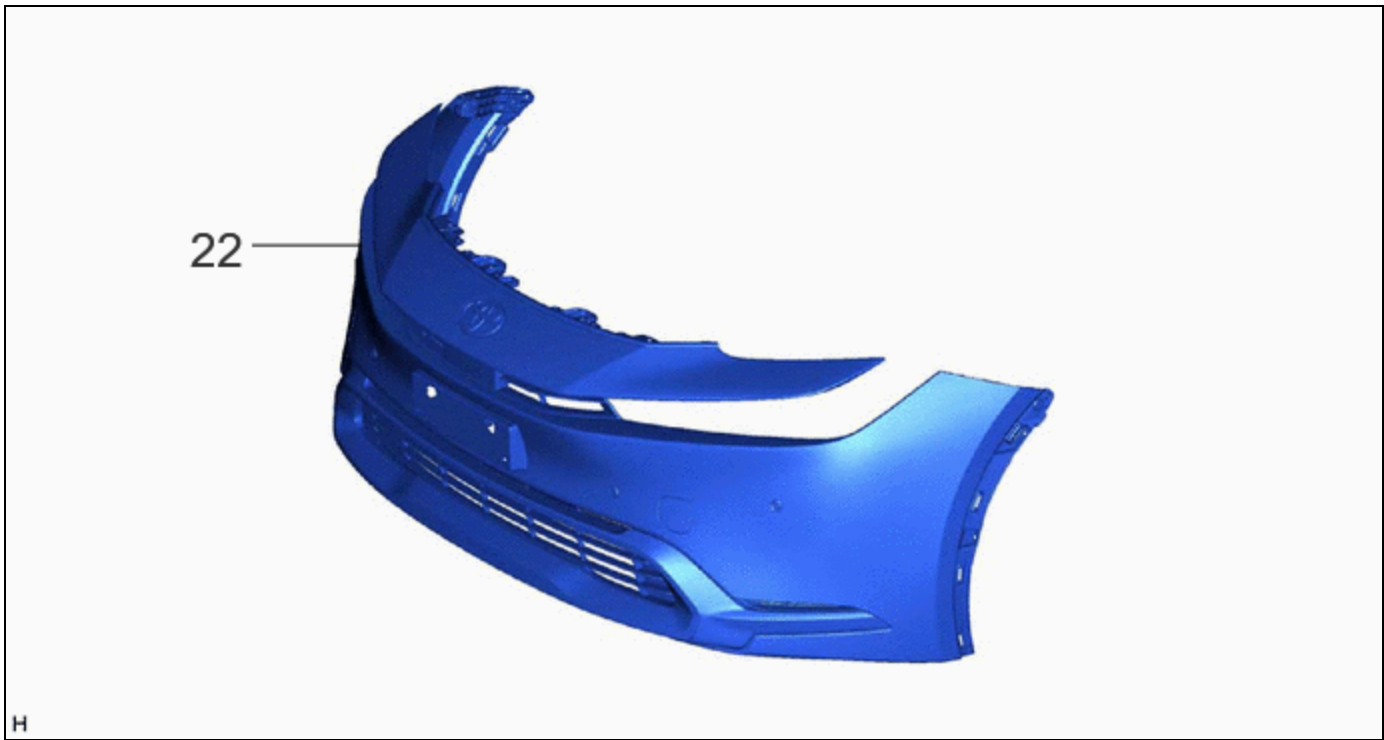
PROCEDURE		PART NAME CODE			
17	FRONT STABILIZER LINK ASSEMBLY RH	48820B	-	-	-

*1	COTTER PIN	-	-
	Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping" : N*m (kgf*cm, ft.*lbf)		N*m (kgf*cm, ft.*lbf): Specified torque
•	Non-reusable part	-	-






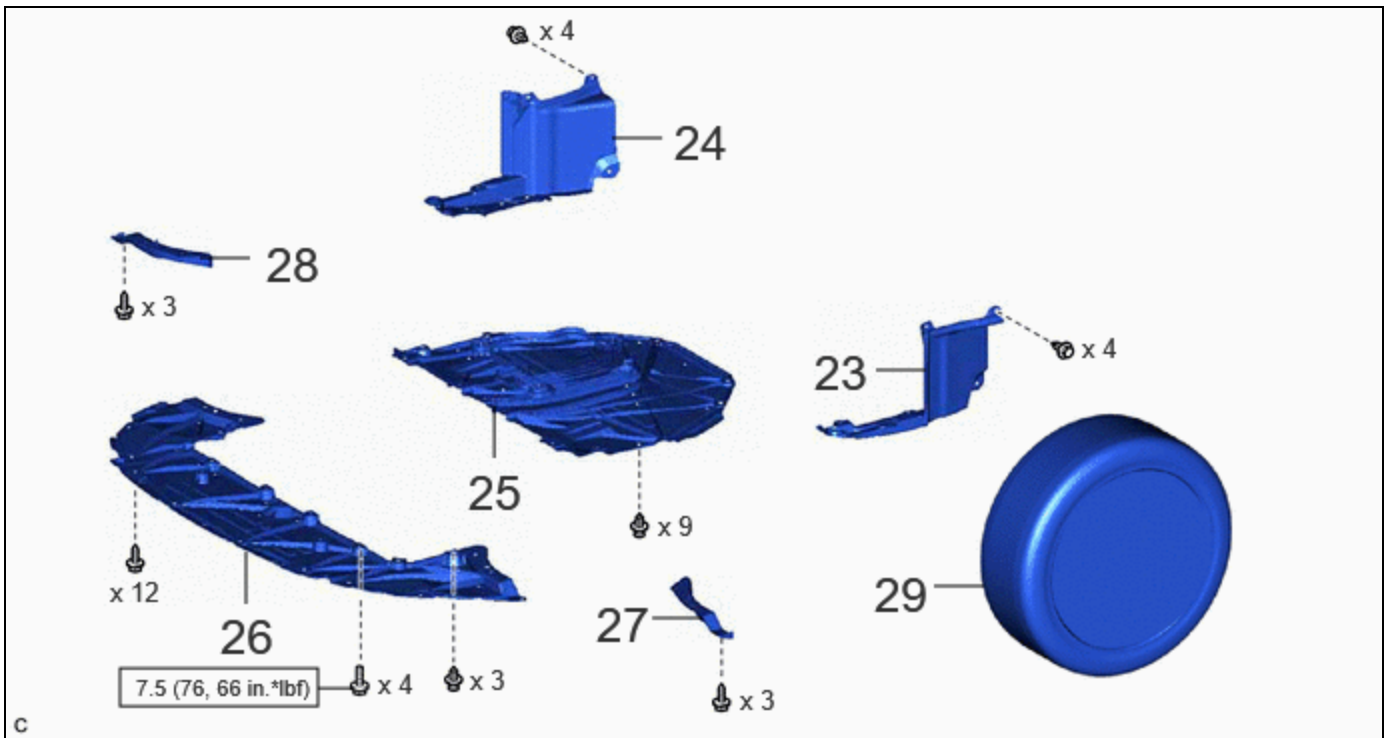
PROCEDURE		PART NAME CODE			
18	FRONT BUMPER EXTENSION SUB-ASSEMBLY LH	52103A	-	-	-
19	FRONT BUMPER EXTENSION SUB-ASSEMBLY RH	52102B	-	-	-
20	NO. 2 FRONT BUMPER REINFORCEMENT	52132A	-	-	-
21	FRONT BUMPER LOWER ABSORBER	52618	-	-	-

	N*m (kgf*cm, ft.*lbf): Specified torque	-	-
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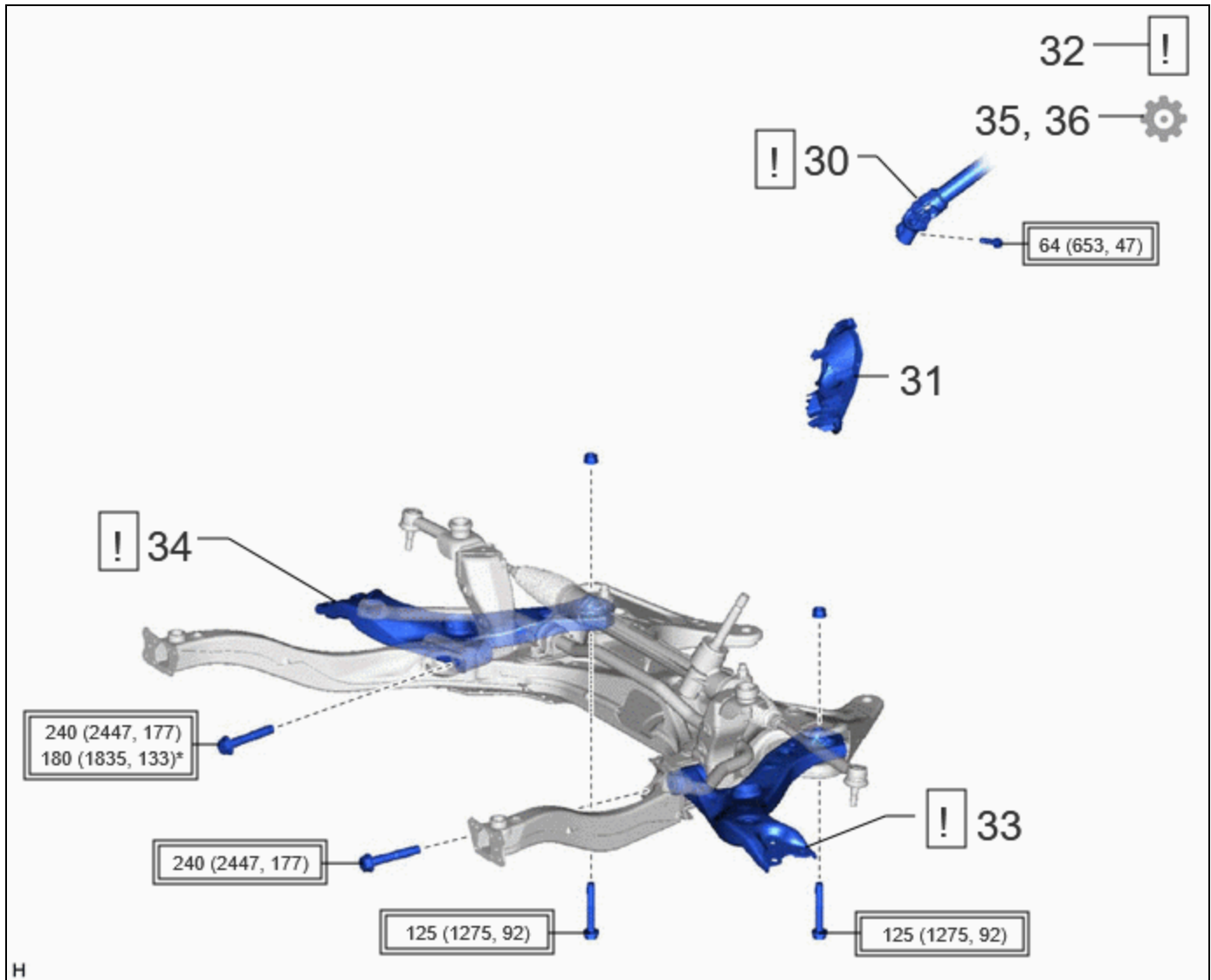
PROCEDURE		PART NAME CODE			
22	FRONT BUMPER ASSEMBLY	-	-	-	-







C

	PROCEDURE	PART NAME CODE			
23	REAR ENGINE UNDER COVER LH	51444A	-	-	-
24	REAR ENGINE UNDER COVER RH	51443C	-	-	-
25	NO. 1 ENGINE UNDER COVER ASSEMBLY	51410	-	-	-
26	CENTER ENGINE UNDER COVER	51451A	-	-	-
27	FRONT WHEEL OPENING EXTENSION PAD LH	53852B	-	-	-
28	FRONT WHEEL OPENING EXTENSION PAD RH	53851D	-	-	-
29	FRONT WHEELS	-	-	-	-

	N*m (kgf*cm, ft.*lbf): Specified torque	-	-
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	PROCEDURE	PART NAME CODE			
30	NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY	45260	INFO	-	-
31	COLUMN HOLE COVER SILENCER SHEET	45259A	-	-	-
32	STABILIZE SUSPENSION	-	INFO	-	-
33	FULLY TIGHTEN FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY LH	48069	INFO	-	-
34	FULLY TIGHTEN FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY RH	48068	INFO	-	-
35	INSPECT AND ADJUST FRONT WHEEL ALIGNMENT	-	-	-	INFO
36	PERFORM INITIALIZATION	-	-	-	INFO


	Tightening torque for "Major areas involving basic vehicle performance such as moving/turning/stopping" : N*m (kgf*cm, ft.*lbf)	*	For use with SST
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PROCEDURE


1. INSTALL FRONT STABILIZER BAR

	Click here INFO
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2. INSTALL STEERING LINK ASSEMBLY

	Click here INFO
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3. TEMPORARILY INSTALL FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY LH

	<p>NOTICE:</p> <p>Because the nut has its own stopper, do not turn the nut. Tighten the bolt with the nut secured.</p>
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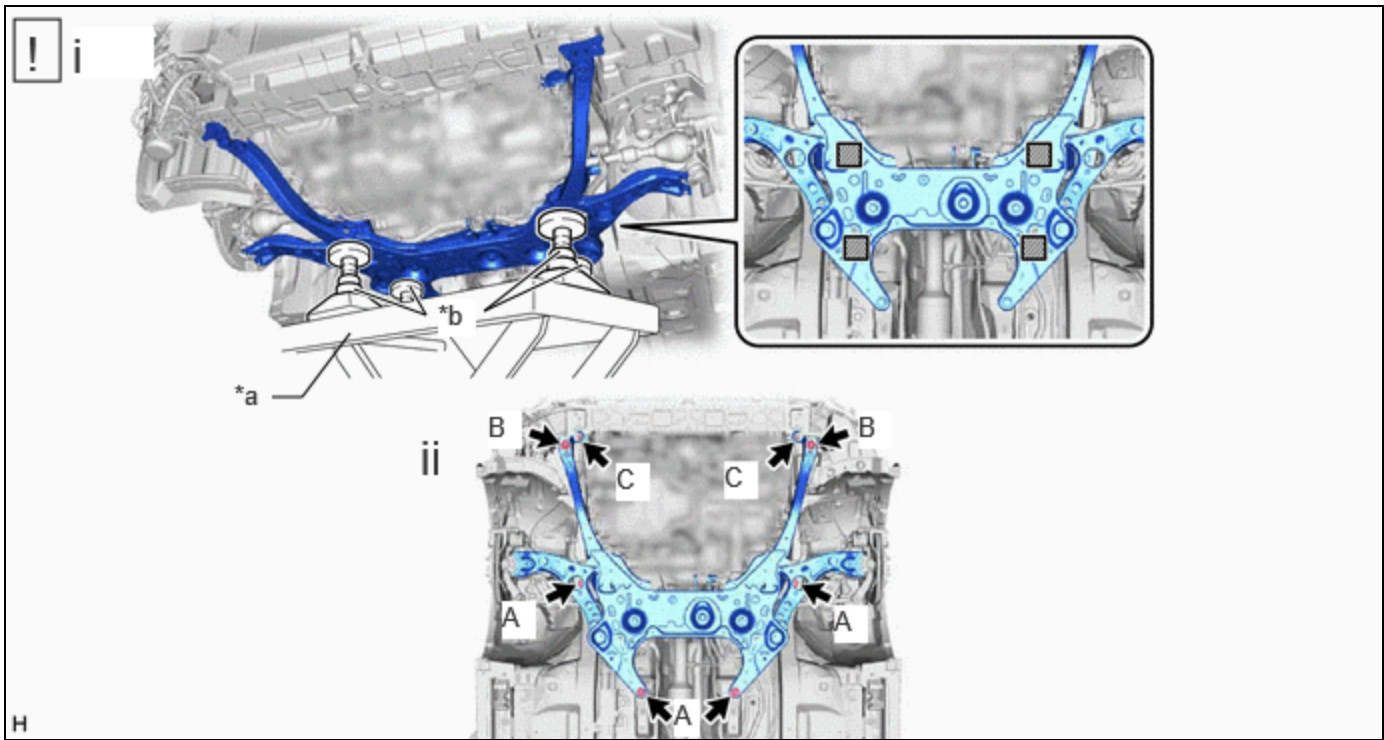
4. TEMPORARILY INSTALL FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY RH

5. INSTALL ENGINE MOVING CONTROL ROD

Torque:

200 N·m {2039 kgf·cm, 148 ft·lbf}

6. INSTALL FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY



*a	Engine Lifter	*b	Attachment
	Attachment placement location	-	-

(1) Slowly jack up the front suspension crossmember sub-assembly with an engine lifter using 4 attachments or equivalent tools.

CAUTION:

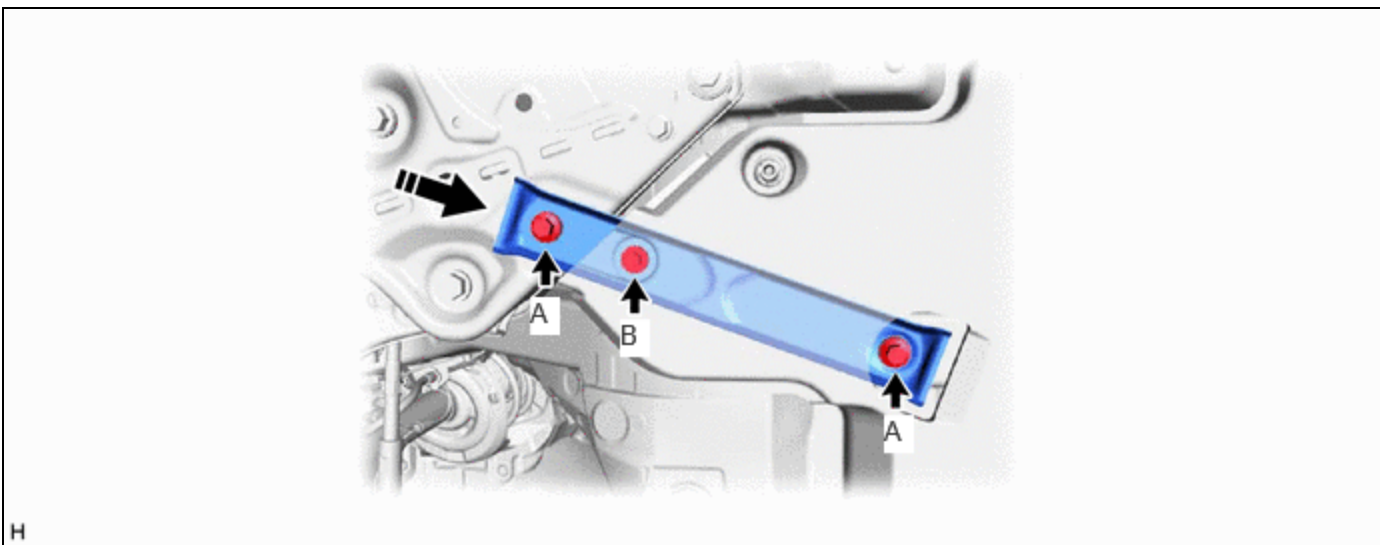
- The front suspension crossmember sub-assembly is a very heavy component. Make sure that it is supported securely.
- If the front suspension crossmember sub-assembly is not securely supported, it may drop, resulting in serious injury.




NOTICE:

- Use attachments to keep the front suspension crossmember sub-assembly level.
- Make sure that the front suspension crossmember sub-assembly not hit the protrusion of the reinforcement.

(2) Install the front suspension crossmember sub-assembly with the 8 bolts, center radiator support LH and center radiator support RH.

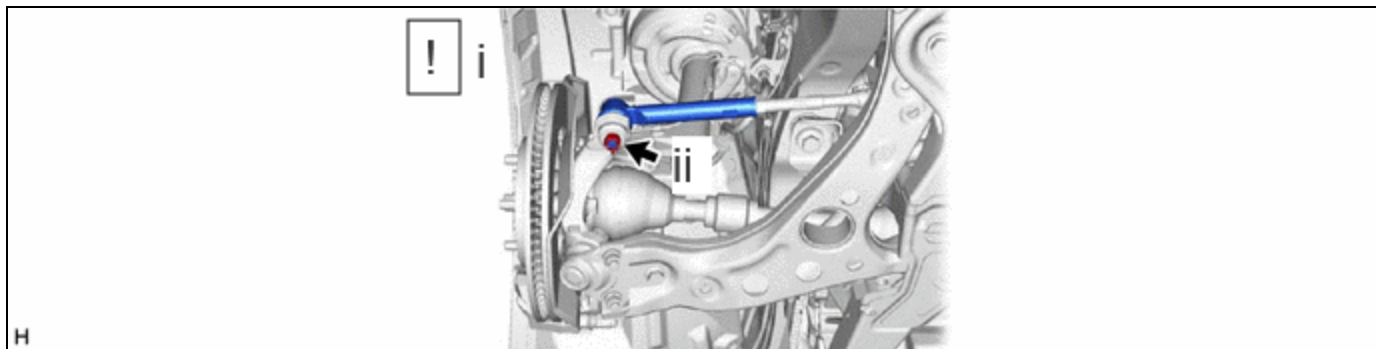
Torque:**Bolt (A) :****141 N·m {1438 kgf·cm, 104 ft·lbf}****Bolt (B) :****32 N·m {326 kgf·cm, 24 ft·lbf}****Bolt (C) :****12 N·m {122 kgf·cm, 9 ft·lbf}****7. CONNECT ENGINE MOVING CONTROL ROD****Torque:****170 N·m {1734 kgf·cm, 125 ft·lbf}****8. CONNECT WIRE HARNESS CLAMP BRACKET****Torque:****13 N·m {133 kgf·cm, 10 ft·lbf}****9. INSTALL NO. 2 ENGINE UNDER COVER****Torque:****48.5 N·m {495 kgf·cm, 36 ft·lbf}****10. INSTALL NO. 2 CROSSMEMBER GUSSET LH**

H

	Install in this Direction	-	-
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Torque:**Bolt (A) :****72 N·m {734 kgf·cm, 53 ft·lbf}****Bolt (B) :****7.5 N·m {76 kgf·cm, 66 in·lbf}****11. INSTALL NO. 2 CROSSMEMBER GUSSET RH****12. CONNECT FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY LH**Click here [INFO](#)**13. CONNECT FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY RH**

14. CONNECT TIE ROD END SUB-ASSEMBLY LH



(1) Connect the tie rod end sub-assembly LH to the steering knuckle LH with the nut.

Torque:

49 N·m {500 kgf·cm, 36 ft·lbf}

NOTICE:

- Do not damage the ball joint dust cover.
- Further tighten the nut up to 60° if the holes for the cotter pin are not aligned.

(2) Install a new cotter pin.

15. CONNECT TIE ROD END SUB-ASSEMBLY RH

16. CONNECT FRONT STABILIZER LINK ASSEMBLY LH

Torque:

74 N·m {755 kgf·cm, 55 ft·lbf}

HINT:

If the ball joint turns together with the nut, use a 6 mm hexagon socket wrench to hold the stud bolt.

17. CONNECT FRONT STABILIZER LINK ASSEMBLY RH

18. INSTALL FRONT BUMPER EXTENSION SUB-ASSEMBLY LH

for M20A-FXS HEV Model: Click here [INFO](#)

for M20A-FXS PHEV Model: Click here [INFO](#)

for 2ZR-FXE: Click here [INFO](#)

19. INSTALL FRONT BUMPER EXTENSION SUB-ASSEMBLY RH

for M20A-FXS HEV Model: Click here [INFO](#)

for M20A-FXS PHEV Model: Click here [INFO](#)

for 2ZR-FXE: Click here [INFO](#)

20. INSTALL NO. 2 FRONT BUMPER REINFORCEMENT

Click here [INFO](#)

21. INSTALL FRONT BUMPER LOWER ABSORBER

22. INSTALL FRONT BUMPER ASSEMBLY

Click here [INFO](#)

23. INSTALL REAR ENGINE UNDER COVER LH**24. INSTALL REAR ENGINE UNDER COVER RH****25. INSTALL NO. 1 ENGINE UNDER COVER ASSEMBLY****26. INSTALL CENTER ENGINE UNDER COVER**

for M20A-FXS HEV Model: Click here [INFO](#)

for M20A-FXS PHEV Model: Click here [INFO](#)

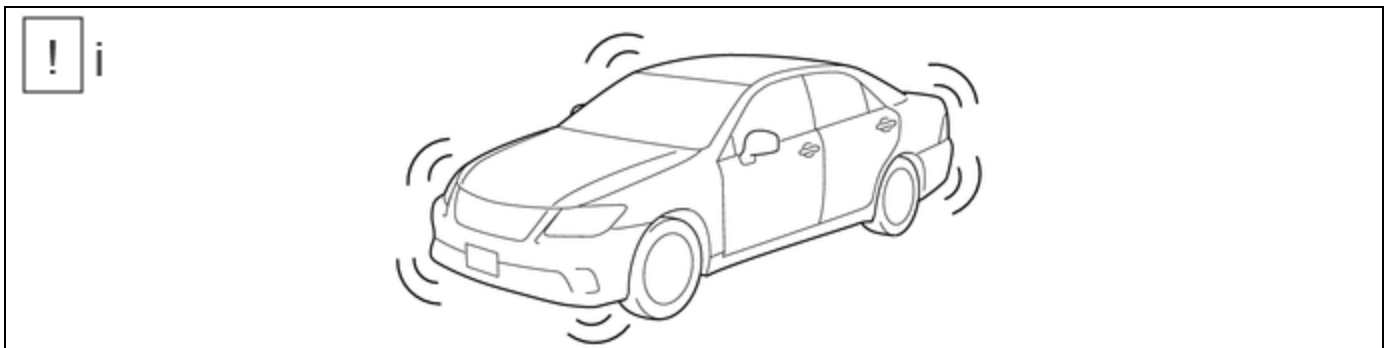
for 2ZR-FXE: Click here [INFO](#)

27. INSTALL FRONT WHEEL OPENING EXTENSION PAD LH**28. INSTALL FRONT WHEEL OPENING EXTENSION PAD RH****29. INSTALL FRONT WHEELS**

Click here [INFO](#)

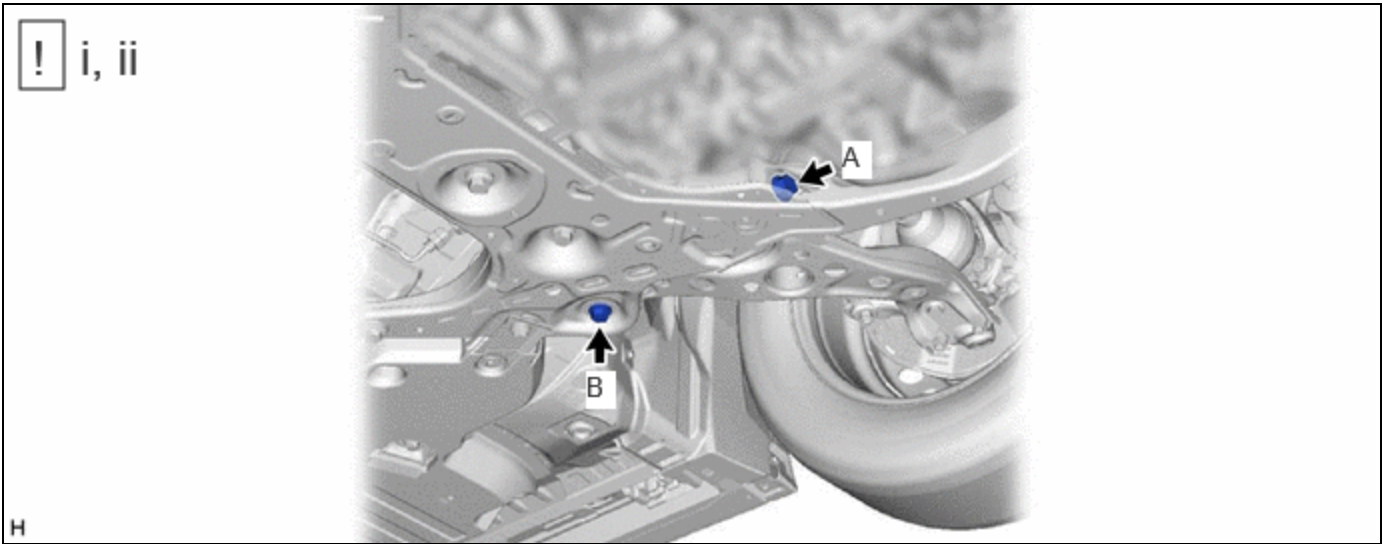
30. CONNECT NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY**31. INSTALL COLUMN HOLE COVER SILENCER SHEET**

Click here [INFO](#)

32. STABILIZE SUSPENSION

(1) Press down on the vehicle several times to stabilize the suspension.

33. FULLY TIGHTEN FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY LH



(1) Fully tighten the bolt (A).

Torque:

240 N·m {2447 kgf·cm, 177 ft·lbf}

(2) Fully tighten the bolt (B).

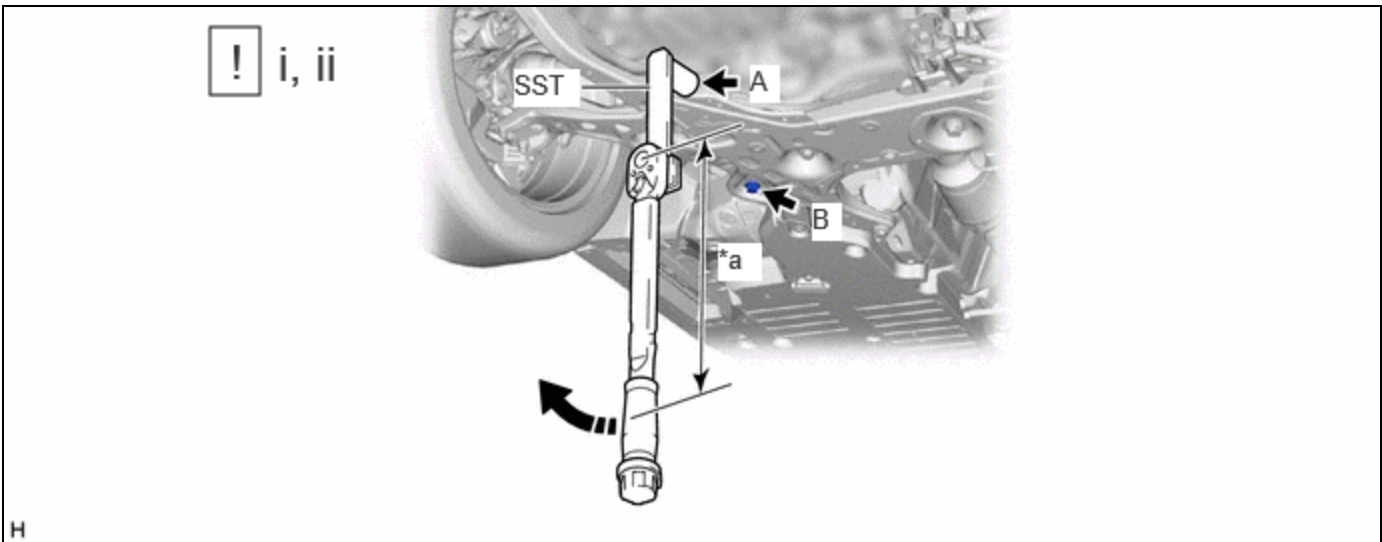
Torque:

125 N·m {1275 kgf·cm, 92 ft·lbf}

NOTICE:

Because the nut has its own stopper, do not turn the nut. Tighten the bolt with the nut secured.

34. FULLY TIGHTEN FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY RH



*a	Torque Wrench Fulcrum Length	-	-
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(1) Using SST, fully tighten the bolt (A).

Torque:

Specified tightening torque :

240 N·m {2447 kgf·cm, 177 ft·lbf}

SST: 09961-01270

HINT:

- Calculate the torque wrench reading when changing the fulcrum length of the torque wrench.

Click here [INFO](#)

- When using SST (fulcrum length of 200 mm (7.87 in.)) + torque wrench (fulcrum length of 600 mm (23.6 in.)): 180 N*m (1835 kgf*cm, 133 ft.*lbf)

(b) Fully tighten the bolt (B).

Torque:

125 N·m {1275 kgf·cm, 92 ft·lbf}

NOTICE:

Because the nut has its own stopper, do not turn the nut. Tighten the bolt with the nut secured.

35. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

Click here [INFO](#)

36. PERFORM INITIALIZATION

Parking Assist Monitor System	INFO
Panoramic View Monitor System	INFO
Advanced Park	INFO

