

Last Modified: 05-13-2024	6.11:8.1.0	Doc ID: RM1000000028IZ7
Model Year Start: 2023	Model: GR Corolla	Prod Date Range: [11/2022 -]
Title: FRONT SUSPENSION: FRONT SUSPENSION MEMBER: INSTALLATION; 2023 - 2025 MY Corolla Corolla Hatchback Corolla HV GR Corolla [11/2022 -]		

INSTALLATION

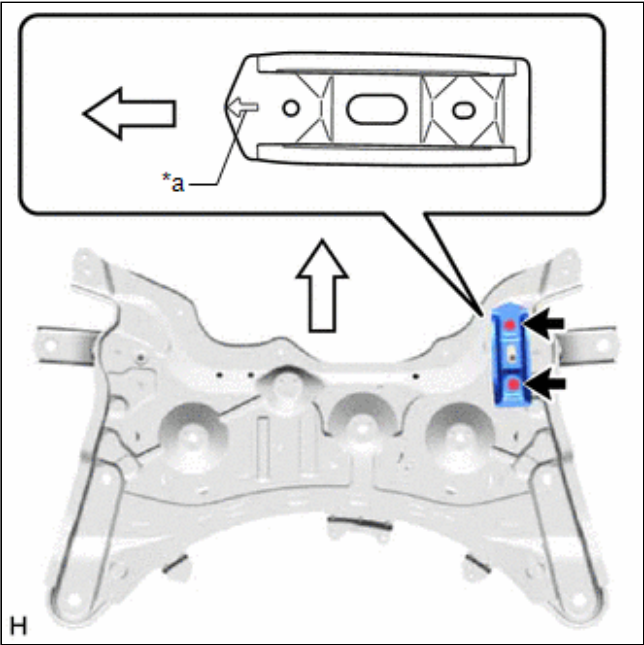
PROCEDURE

1. INSTALL FRONT DIFFERENTIAL SUPPORT GUARD LH (w/ Differential Support Guard)

(a) Install the front differential support guard LH to the front suspension crossmember sub-assembly with the 2 bolts.

Torque:
18.5 N·m {189 kgf·cm, 14 ft·lbf}

NOTICE:
Make sure to install the front differential support guard LH with its arrow facing the front of the vehicle.

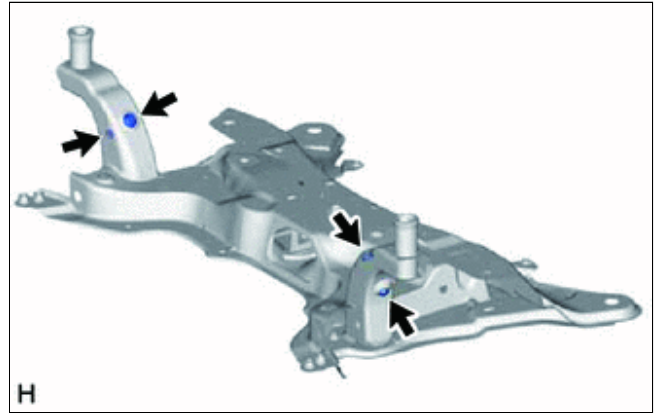


*a	Arrow
	Front of the Vehicle

2. INSTALL HOLE PLUG (except G16E-GTS)

(a) Install the 4 hole plugs to the front suspension crossmember sub-assembly.

HINT:
There are 2 different shapes of hole plug.



3. INSTALL FRONT SUSPENSION MEMBER PLATE (except G16E-GTS)

- (a) Install the 2 front suspension member plates to the front suspension crossmember sub-assembly.

4. TEMPORARILY INSTALL FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY LH

- (a) Temporarily install the front lower No. 1 suspension arm sub-assembly LH to the front suspension crossmember sub-assembly with the 2 bolts and nut.

5. TEMPORARILY INSTALL FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

6. INSTALL ENGINE MOVING CONTROL ROD

- (a) Install the engine moving control rod to the front suspension crossmember sub-assembly with the bolt.

Torque:

200 N·m {2039 kgf·cm, 148 ft·lbf}

7. INSTALL FRONT STABILIZER BAR

Click here [INFO](#)

8. INSTALL FRONT NO. 1 STABILIZER BRACKET LH (except G16E-GTS)

Click here [INFO](#)

9. INSTALL FRONT NO. 1 STABILIZER BRACKET RH (except G16E-GTS)

HINT:

Perform the same procedure as for the LH side.

10. INSTALL FRONT STABILIZER BRACKET (for G16E-GTS)

Click here [INFO](#)

11. INSTALL STEERING LINK ASSEMBLY

for G16E-GTS: Click here [INFO](#)

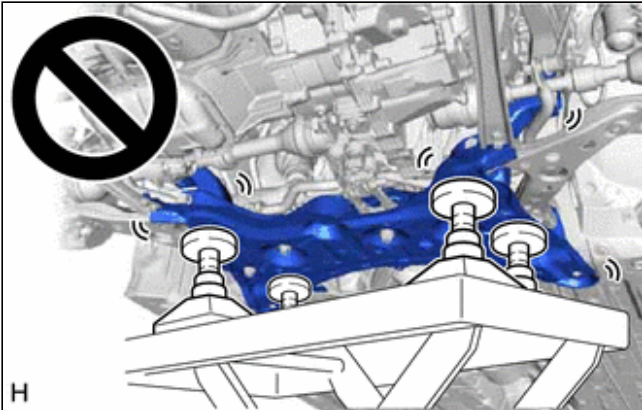
except G16E-GTS: Click here [INFO](#)

12. INSTALL FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY (except G16E-GTS)

- (a) 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.

(b) Install the front suspension crossmember sub-assembly to the vehicle body with the 4 bolts.

Torque:

141 N·m {1438 kgf·cm, 104 ft·lbf}

(c) Lower the engine lifter.

(d) Install the engine moving control rod with the bolt.

Torque:

170 N·m {1734 kgf·cm, 125 ft·lbf}

(e) Install the 2 wire harness clamp brackets to the front suspension crossmember sub-assembly with the 2 bolts.

Torque:

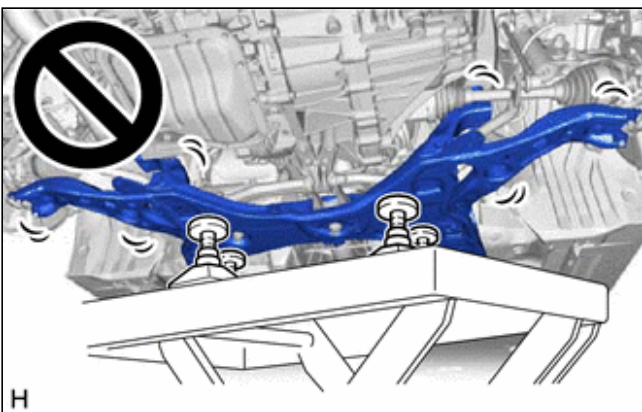
13 N·m {133 kgf·cm, 10 ft·lbf}

13. INSTALL FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY (for G16E-GTS)

(a) 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.

- (b) Install the front suspension crossmember sub-assembly to the vehicle body with the 4 bolts.

Torque:

141 N·m {1438 kgf·cm, 104 ft·lbf}

- (c) Lower the engine lifter.

- (d) Install the engine moving control rod with the bolt.

Torque:

170 N·m {1734 kgf·cm, 125 ft·lbf}

- (e) Install the wire harness clamp bracket to the front suspension crossmember sub-assembly with the bolt.

Torque:

13 N·m {133 kgf·cm, 10 ft·lbf}

- (f) Engage the clamp to install the wire harness to the front suspension crossmember sub-assembly.

- (g) Engage the 2 clamps to install the wire harness to the No. 2 steering rack housing bracket.

14. CONNECT FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY LH

for G16E-GTS: Click here [INFO](#)

except G16E-GTS: Click here [INFO](#)

15. CONNECT FRONT LOWER NO. 1 SUSPENSION ARM SUB-ASSEMBLY RH**HINT:**

Perform the same procedure as for the LH side.

16. CONNECT TIE ROD END SUB-ASSEMBLY LH

Click here [INFO](#)

17. CONNECT TIE ROD END SUB-ASSEMBLY RH**HINT:**

Perform the same procedure as for the LH side.

18. CONNECT FRONT STABILIZER LINK ASSEMBLY LH

- (a) Connect the front stabilizer link assembly LH to the front stabilizer bar with the nut.

Torque:

74 N·m {755 kgf·cm, 55 ft·lbf}

NOTICE:

Do not damage the boot of the ball joint.

HINT:

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

19. CONNECT FRONT STABILIZER LINK ASSEMBLY RH**HINT:**

Perform the same procedure as for the LH side.

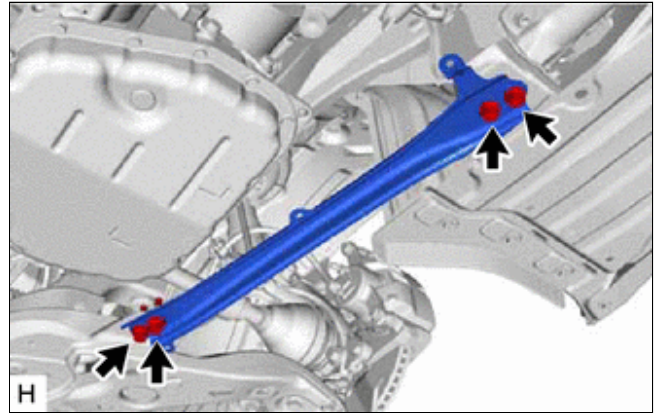
20. INSTALL REAR SIDE RAIL REINFORCEMENT SUB-ASSEMBLY LH

- (a) Install the rear side rail reinforcement sub-assembly LH to the front suspension crossmember sub-assembly and

vehicle body with the 4 bolts.

Torque:

70 N·m {714 kgf·cm, 52 ft·lbf}



21. INSTALL REAR SIDE RAIL REINFORCEMENT SUB-ASSEMBLY RH (except G16E-GTS)

HINT:

Perform the same procedure as for the LH side.

22. INSTALL REAR SIDE RAIL REINFORCEMENT SUB-ASSEMBLY RH (for G16E-GTS)

- (a) Install the rear side rail reinforcement sub-assembly RH to the front suspension crossmember sub-assembly, the No. 1 air tube and vehicle body with the 6 bolts.

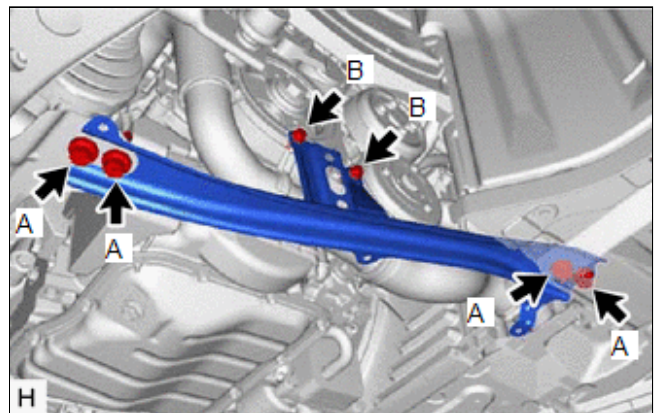
Torque:

Bolt (A) :

70 N·m {714 kgf·cm, 52 ft·lbf}

Bolt (B) :

7.0 N·m {71 kgf·cm, 62 in·lbf}



23. CONNECT NO. 1 STEERING COLUMN HOLE COVER SUB-ASSEMBLY

Click here [INFO](#)

24. CONNECT NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY

Click here [INFO](#)

25. INSTALL COLUMN HOLE COVER SILENCER SHEET

Click here [INFO](#)

26. INSTALL FRONT WHEELS

Click here [INFO](#)

27. STABILIZE SUSPENSION

- (a) Lower the vehicle.
(b) Bounce the vehicle up and down several times to stabilize the suspension.

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

for M20A-FKS: Click here [INFO](#)

for ZR Series Engine: Click here [INFO](#)

for G16E-GTS: Click here [INFO](#)

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

for M20A-FKS: Click here [INFO](#)

for ZR Series Engine: Click here [INFO](#)

for G16E-GTS: Click here [INFO](#)

30. INSTALL NO. 2 ENGINE UNDER COVER AIR GUIDE (for G16E-GTS with Engine Under Cover Air Guide)

Click here [INFO](#)

31. INSTALL WINDSHIELD WASHER JAR ASSEMBLY (for G16E-GTS with Engine Under Cover Air Guide)

Click here [INFO](#)

32. INSTALL INLET HOSE (for G16E-GTS with Engine Under Cover Air Guide)

Click here [INFO](#)

33. INSTALL FRONT BUMPER ASSEMBLY (for G16E-GTS with Engine Under Cover Air Guide)

Click here [INFO](#)

34. INSTALL FRONT FENDER SPLASH SHIELD SUB-ASSEMBLY RH (for G16E-GTS with Engine Under Cover Air Guide)

Click here [INFO](#)

35. ADD WASHER FLUID (for G16E-GTS with Engine Under Cover Air Guide)

Click here [INFO](#)

36. INSTALL REAR ENGINE UNDER COVER LH (for G16E-GTS)

(a) w/o Engine Under Cover Air Guide:

(1) Install the rear engine under cover LH to the vehicle with the screw and 5 clips.

(b) w/ Engine Under Cover Air Guide:

(1) Install the rear engine under cover LH to the vehicle with the 3 screw and 5 clips.

37. INSTALL REAR ENGINE UNDER COVER LH (except G16E-GTS)

for M20A-FKS: Click here [INFO](#)

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

38. INSTALL REAR ENGINE UNDER COVER RH

for M20A-FKS: Click here [INFO](#)

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

for G16E-GTS: Click here [INFO](#)

39. INSTALL NO. 1 ENGINE UNDER COVER ASSEMBLY

for M20A-FKS: Click here [INFO](#)

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

for G16E-GTS: Click here [INFO](#)

40. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

Click here [INFO](#)

