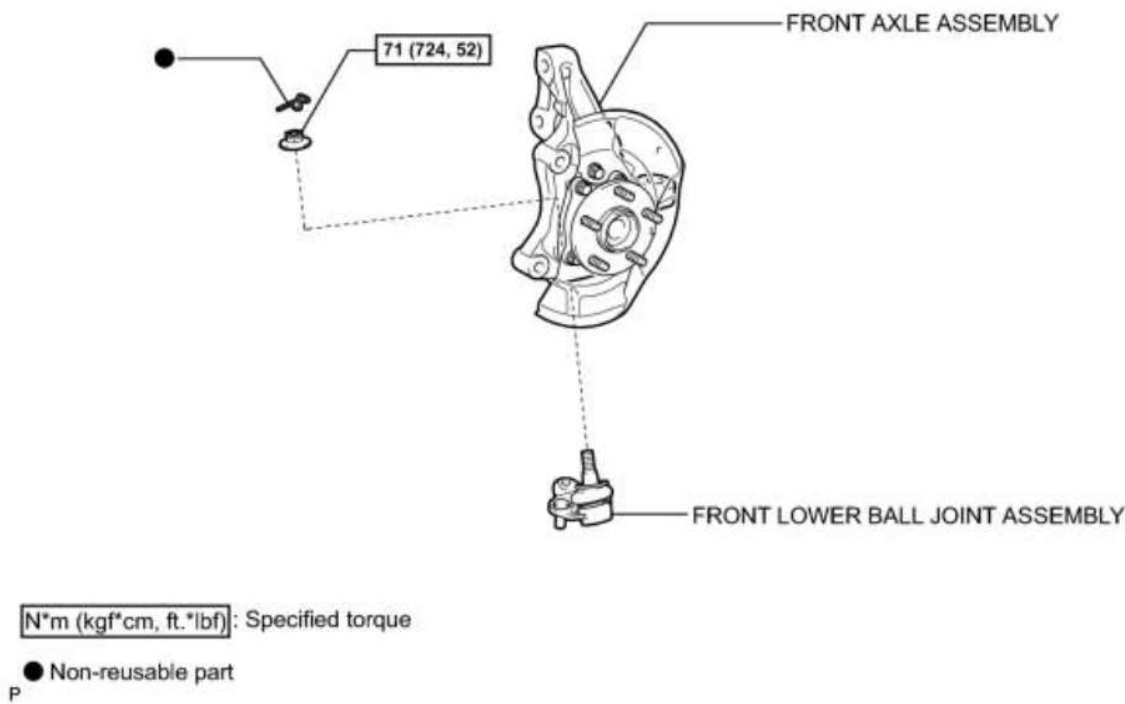


COMPONENTS

ILLUSTRATION



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REMOVAL

HINT:

- Use the same procedure for the LH side and RH side.
- The procedure listed below is for the LH side.

1. REMOVE FRONT AXLE ASSEMBLY

HINT:

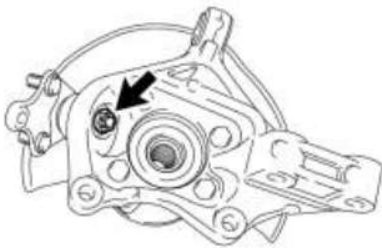
Refer to the procedure up to Remove Front Axle Assembly [INFO](#).

2. REMOVE FRONT LOWER BALL JOINT ASSEMBLY

(a) Secure the front axle assembly in a vise.

NOTICE:

When using a vise, do not overtighten it.



(b) Remove the clip and nut.

c

(c) Install SST to the front lower ball joint as shown in the illustration.

SST: 09960-20010

09961-02050

09961-02050

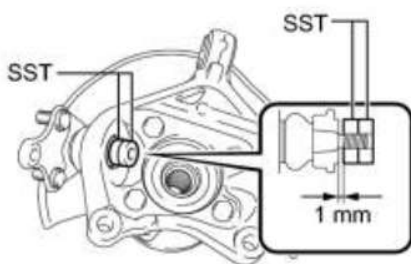
NOTICE:

Check that the clearance measurement between SST and the front axle assembly is 1 mm (0.0394 in.).

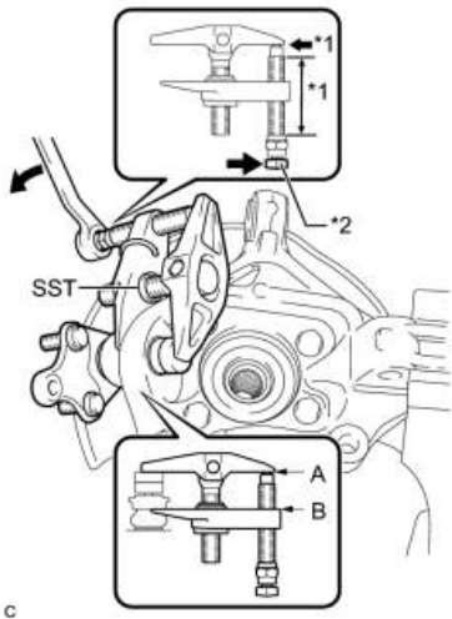
(d) Using SST, remove the front lower ball joint assembly from the front axle assembly as shown in the illustration.

SST: 09960-20010

09961-02010



c



09961-02050

09961-02050

Text in Illustration

*1	Apply grease
*2	Place the wrench here.

CAUTION:

Apply grease to the threads and end of the SST bolt.

- Install SST so that A and B are parallel.
- Be sure to place the wrench on the part indicated in the illustration.
- Do not damage the front lower ball joint dust cover.

INSPECTION

1. INSPECT FRONT LOWER BALL JOINT ASSEMBLY

(a) Inspect the turning torque of the ball joint.

(1) Secure the front lower ball joint assembly in a vise using aluminum plates.

(2) Install the nut to the front lower ball joint stud.

(3) Using a torque wrench, turn the nut continuously at a rate of 3 to 5 seconds per turn and take the torque reading on the 5th turn.

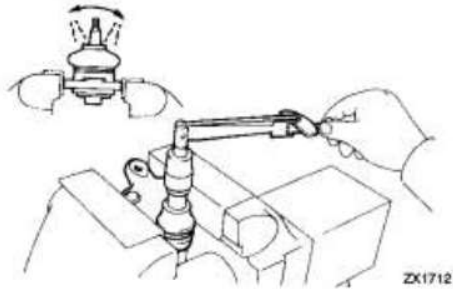
Torque: 0.98 to 4.90 N·m (10 to 50 kgf·cm, 8.7 to 43in·lbf)

HINT:

If the turning torque is not within the specified range, replace the front lower ball joint assembly with a new one.

(b) Inspect the dust cover.

(1) Check that the dust cover is not cracked and that there is no grease on it.



INSTALLATION

HINT:

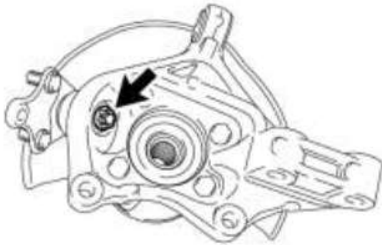
- Use the same procedure for the LH side and RH side.
- The procedure listed below is for the LH side.

1. INSTALL FRONT LOWER BALL JOINT ASSEMBLY

(a) Secure the front axle assembly in a vise.

NOTICE:

When using a vise, do not overtighten it.



(b) Install the front lower ball joint assembly to the front axle assembly with the nut.

Torque: **71 N·m (724 kgf·cm, 52ft·lbf)**

c

(c) Install a new clip.

NOTICE:

Further tighten the nut up to 60° if the holes for the cotter pin are not aligned.

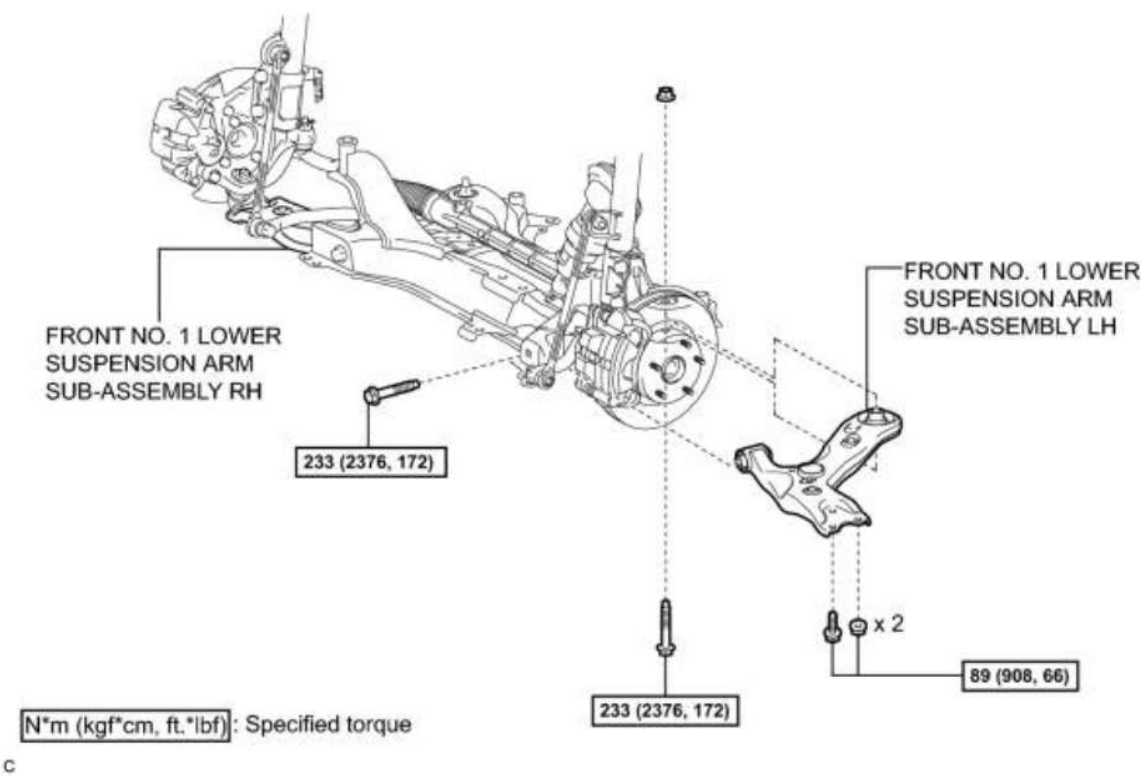
2. INSTALL FRONT AXLE ASSEMBLY

HINT:

Refer to the procedure from Install Front Axle Assembly [INFO](#).

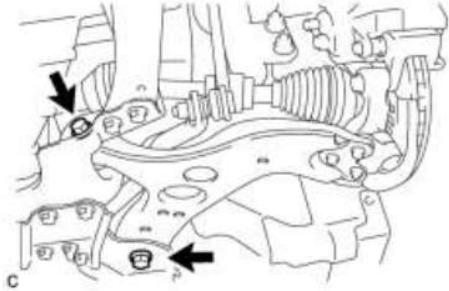
COMPONENTS

ILLUSTRATION



REMOVAL

1. REMOVE FRONT WHEELS
2. REMOVE NO. 1 ENGINE UNDER COVER
3. SEPARATE FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY LH INFO
4. REMOVE FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY LH



(a) Remove the 2 bolts, nut, and front No. 1 lower suspension arm sub-assembly LH from the front suspension member.

NOTICE:

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

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

HINT:

Refer to the procedure up to Remove Front No. 1 Lower Suspension Arm Sub-assembly RH INFO.

INSTALLATION

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

HINT:

Refer to the procedure from Temporarily Tighten Front No. 1 Lower Suspension Arm Sub-assembly RH INFO.

2. TEMPORARILY TIGHTEN FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY LH



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

NOTICE:

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

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

4. INSTALL FRONT WHEELS

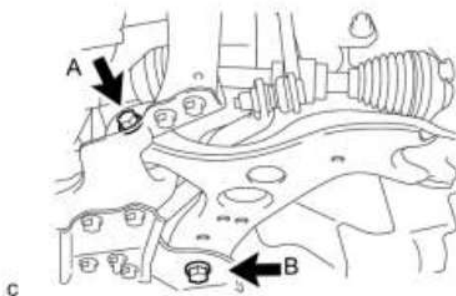
Torque: **103 N·m (1050 kgf·cm, 76ft·lbf)**

5. STABILIZE SUSPENSION

(a) Lower the vehicle.

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

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



(a) Fully tighten the bolt A and B.

Torque: **233 N·m (2376 kgf·cm, 172ft·lbf)**

NOTICE:

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

7. INSTALL NO. 1 ENGINE UNDER COVER

8. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

2010 Toyota Prius

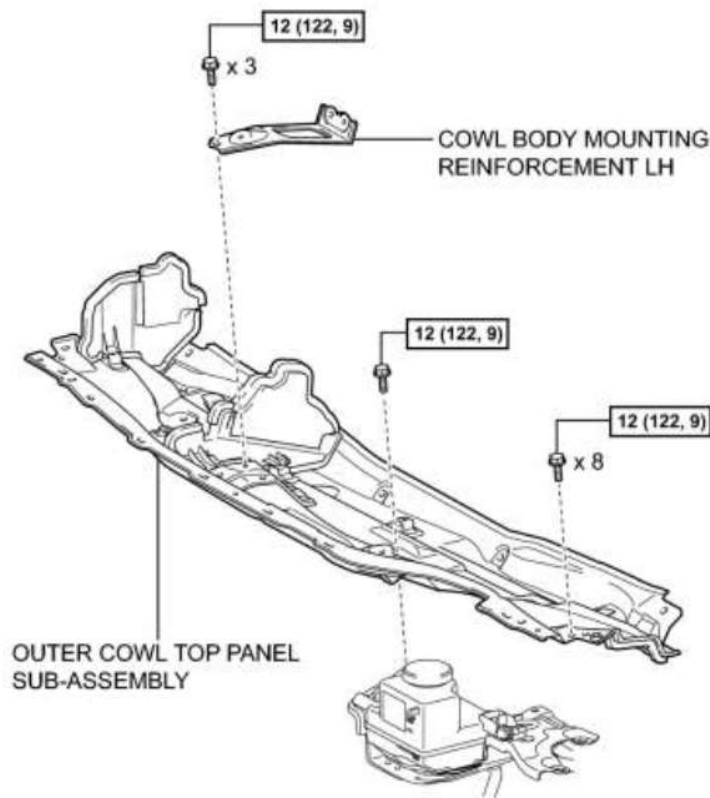
Repair Manual

HINT:

Inspect and adjust the front wheel alignment .

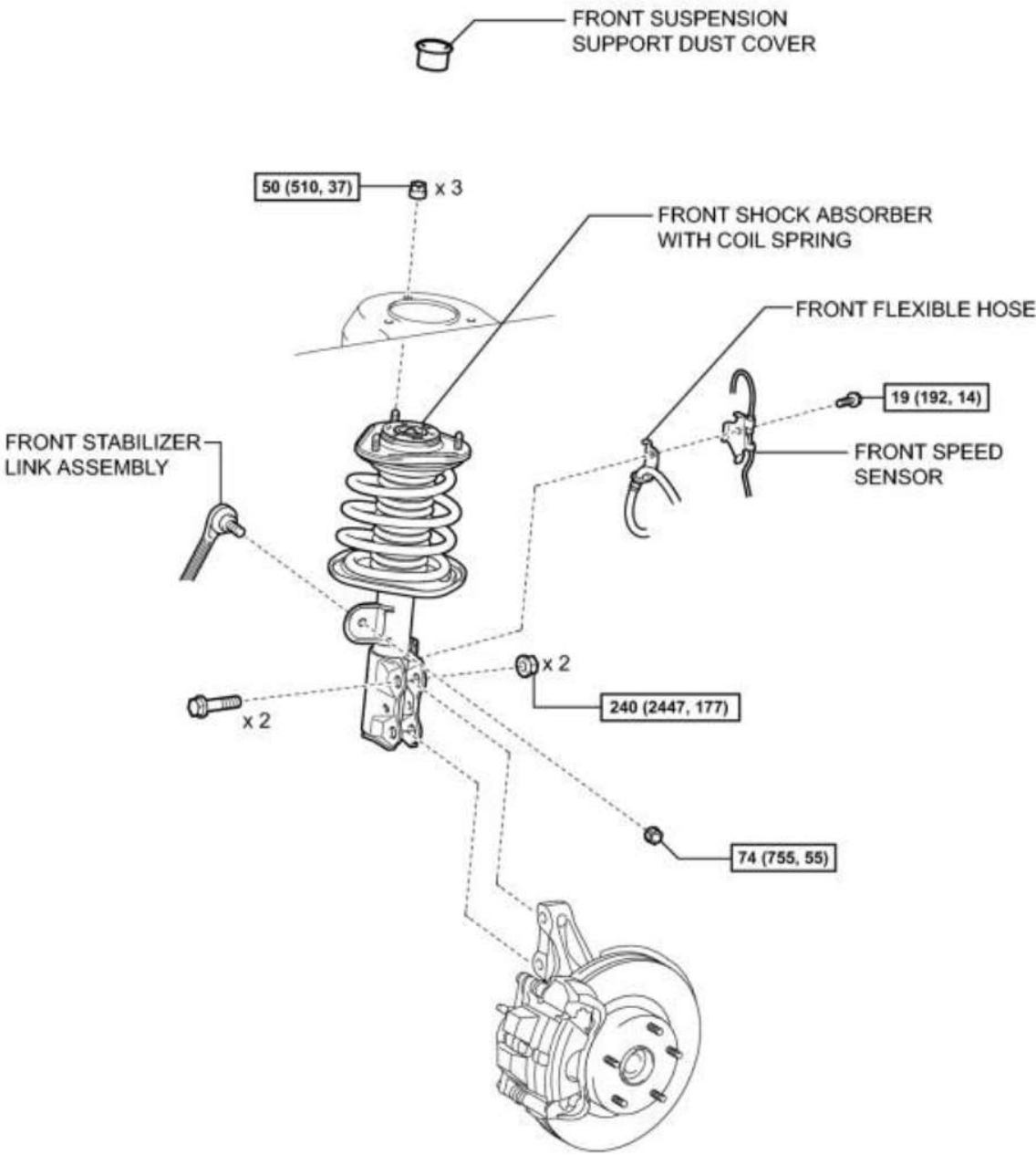
COMPONENTS

ILLUSTRATION



N*m (kgf*cm, ft.*lbf): Specified torque

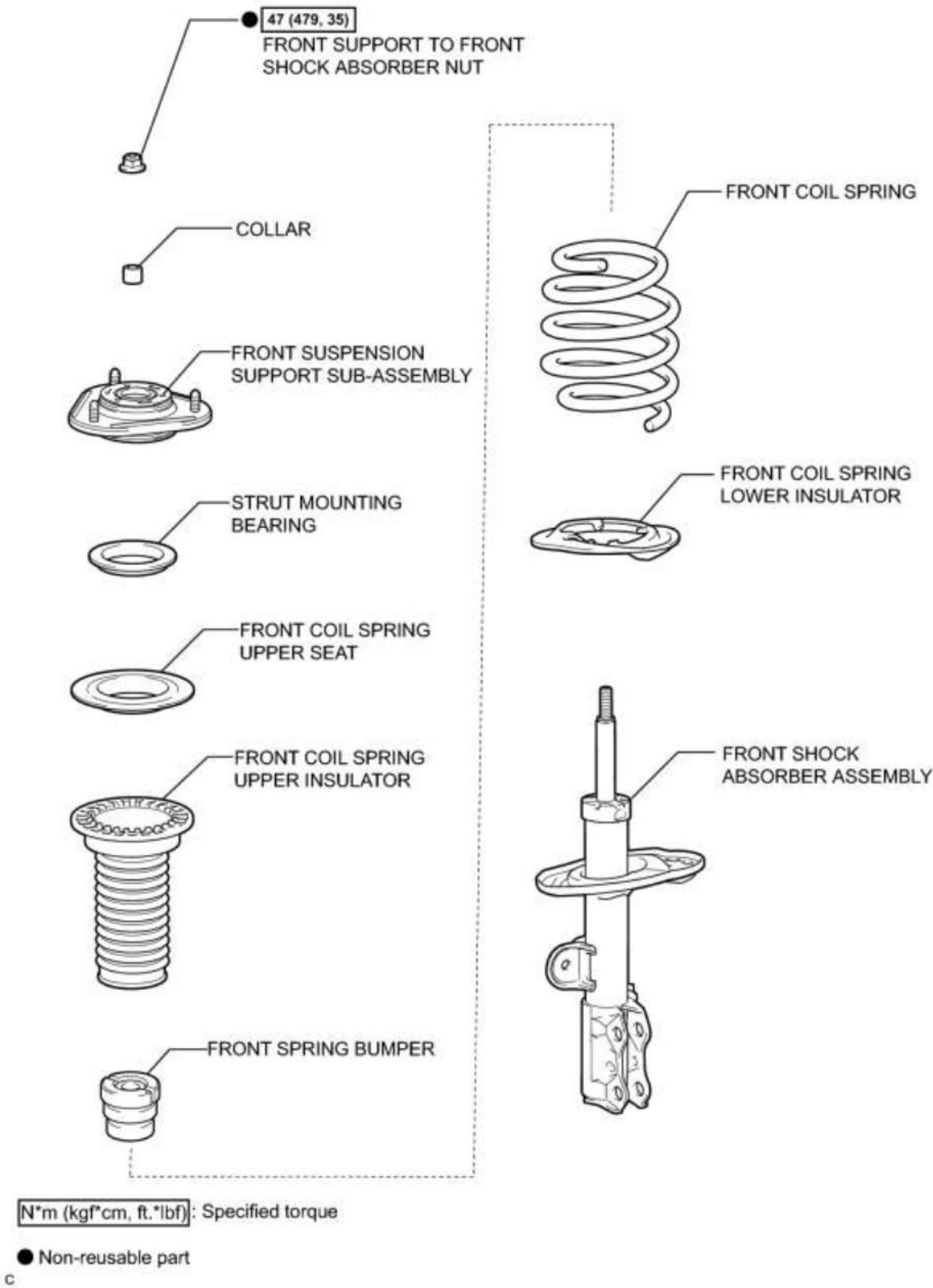
ILLUSTRATION



N*m (kgf*cm, ft.*lbf): Specified torque

c

ILLUSTRATION



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REMOVAL

HINT:

- Use the same procedure for the LH side and RH side.
- The procedure listed below is for the LH side.

1. REMOVE FRONT WHEEL

2. REMOVE WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY

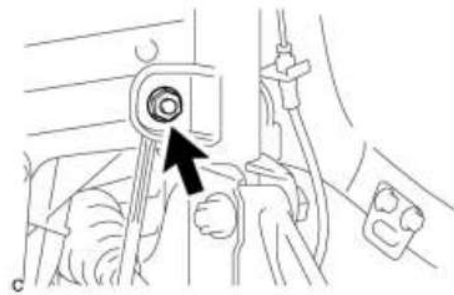
HINT:

Refer to the procedure up to Remove Windshield Wiper Motor and Link Assembly [INFO](#).

3. REMOVE COWL BODY MOUNTING REINFORCEMENT LH_ [INFO](#)

4. REMOVE OUTER COWL TOP PANEL SUB-ASSEMBLY_ [INFO](#)

5. SEPARATE FRONT STABILIZER LINK ASSEMBLY

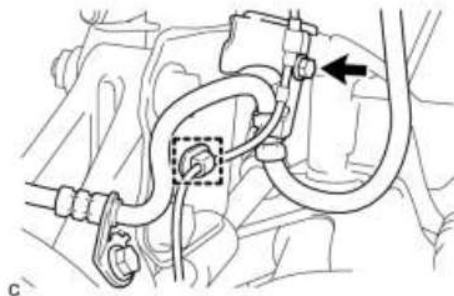


(a) Remove the nut and separate the stabilizer link assembly from the front shock absorber with coil spring.

HINT:

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

6. SEPARATE FRONT SPEED SENSOR



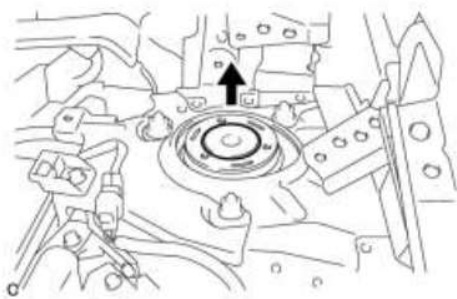
(a) Remove the bolt and clamp, and separate the front speed sensor and front flexible hose from the front shock absorber with coil spring.

NOTICE:

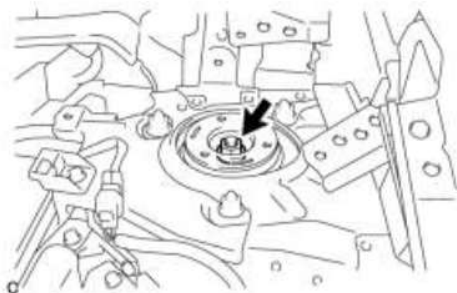
Be sure to separate the front speed sensor from the front shock absorber with coil spring completely.

7. REMOVE FRONT SUSPENSION SUPPORT DUST COVER

(a) Remove the front suspension support dust cover.

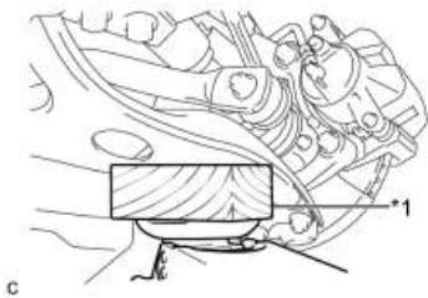


8. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING



(a) Loosen the front support to front shock absorber nut of the front shock absorber.

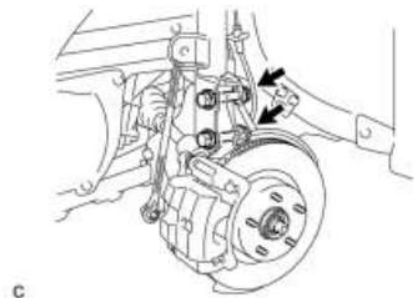
- Do not remove the front support to front shock absorber nut.
- Loosen the nut only when the front shock absorber with coil spring needs to be disassembled.



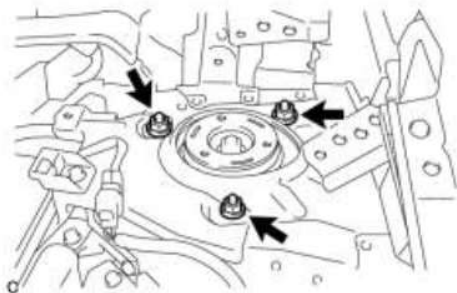
(b) Support the front axle using a jack and wooden block.

Text in Illustration

*1	Wooden Block
----	--------------



(c) Remove the 2 bolts and 2 nuts, and separate the front shock absorber with coil spring (lower side) from the steering knuckle.

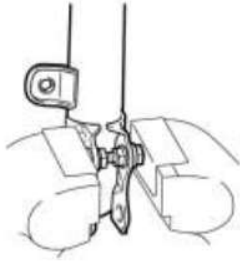
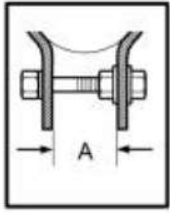


(d) Remove the 3 nuts and front shock absorber with coil spring.

NOTICE:

Make sure that the front speed sensor is completely separated from the front shock absorber with coil spring.

9. SECURE FRONT SHOCK ABSORBER WITH COIL SPRING



(a) Install a bolt and nut to the front shock absorber as shown in the illustration and secure the front shock absorber in a vise.

Standard length A:
40 mm (1.575 in.)

c

10. REMOVE FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT

(a) Using SST, compress the front coil spring.

SST: 09727-30021

09727-00010

09727-00021

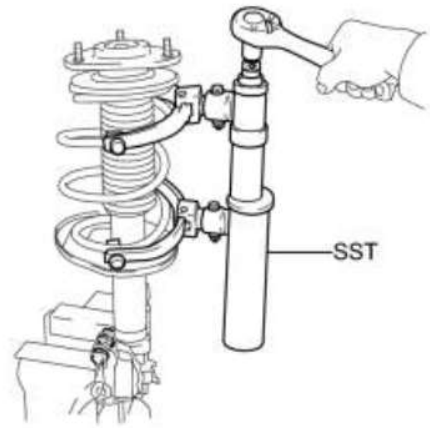
09727-00031

NOTICE:

Do not use an impact wrench. It will damage SST.

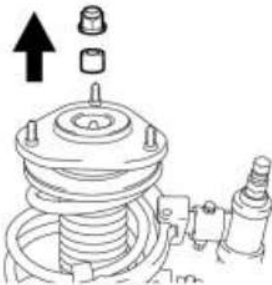
HINT:

If the front coil spring is compressed at an angle, using 2 SST will make the work easier.



c

(b) Check that the front coil spring is sufficiently compressed.



P

(c) Remove the front support to front shock absorber nut and collar.

11. REMOVE FRONT SUSPENSION SUPPORT SUB-ASSEMBLY

12. REMOVE STRUT MOUNTING BEARING

13. REMOVE FRONT COIL SPRING UPPER SEAT

2010 Toyota Prius

Repair Manual

14. REMOVE FRONT COIL SPRING UPPER INSULATOR
15. REMOVE FRONT COIL SPRING
16. REMOVE FRONT SPRING BUMPER
17. REMOVE FRONT COIL SPRING LOWER INSULATOR
18. REMOVE FRONT SHOCK ABSORBER ASSEMBLY

INSPECTION

1. INSPECT FRONT SHOCK ABSORBER ASSEMBLY



P

(a) Compress and extend the shock absorber rod 4 times or more.

Standard:

There is no abnormal resistance or sound.

HINT:

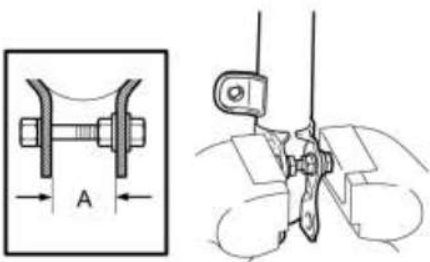
If there is any abnormality, replace the front shock absorber assembly with a new one.

INSTALLATION

HINT:

- Use the same procedure for the LH side and RH side.
- The procedure listed below is for the LH side.

1. SECURE FRONT SHOCK ABSORBER ASSEMBLY

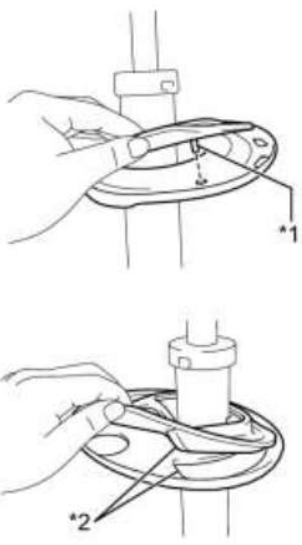


(a) Install the bolt and nut to the front shock absorber as shown in the illustration and secure the front shock absorber in a vise.

Standard length A:
40 mm (1.575 in.)

c

2. INSTALL FRONT COIL SPRING LOWER INSULATOR



(a) Install the front coil spring lower insulator to the front shock absorber assembly.

Text in Illustration

*1	Positioning Pin
*2	Depression

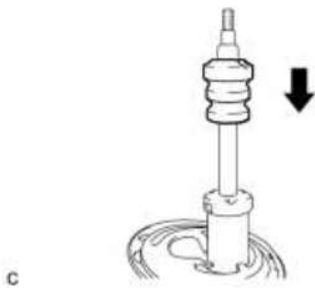
NOTICE:

When installing the insulator, fit the insulator to the depression of the spring seat and align the positioning pin into the hole.

c

3. INSTALL FRONT SPRING BUMPER

- (a) Install the front spring bumper to the front shock absorber assembly.
- NOTICE:
- Face the smaller diameter end of the front spring bumper downward.



4. INSTALL FRONT COIL SPRING

(a) Using SST, compress the front coil spring.

SST: 09727-30021

09727-00010

09727-00021

09727-00031

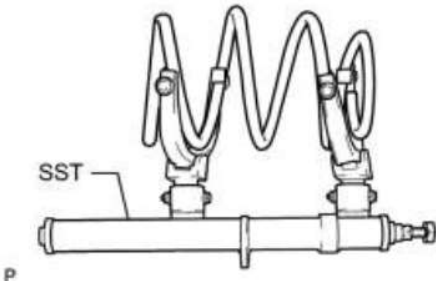
NOTICE:

Do not use an impact wrench. It will damage the SST.

HINT:

If the front coil spring is compressed at an angle, using 2 SST will make the work easier.

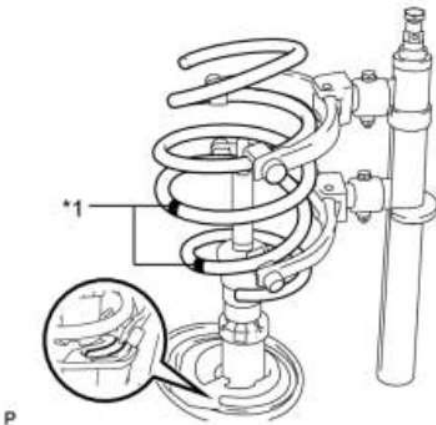
(b) Install the front coil spring.



Text in Illustration

*1	Paint Mark
----	------------

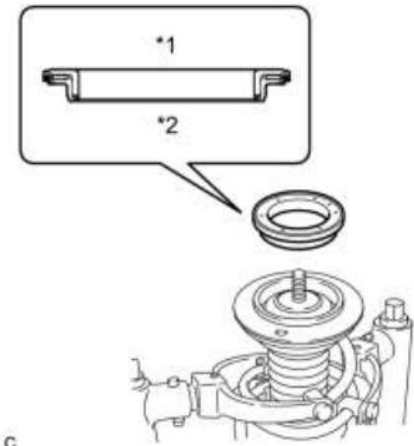
- Make sure that the end of the front coil spring is positioned in the depression of the lower spring seat.
- Make sure to install the coil spring with the paint mark facing downward.



5. INSTALL FRONT COIL SPRING UPPER INSULATOR

6. INSTALL FRONT COIL SPRING UPPER SEAT

7. INSTALL STRUT MOUNTING BEARING



(a) Install the strut mounting bearing.

Text in Illustration

*1	Upper Side
*2	Lower Side

NOTICE:

Do not install the bearing upside down.

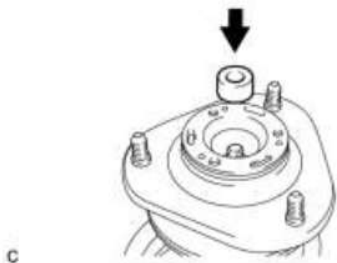
8. INSTALL FRONT SUSPENSION SUPPORT SUB-ASSEMBLY

(a) Install the front suspension support sub-assembly to the front shock absorber assembly.

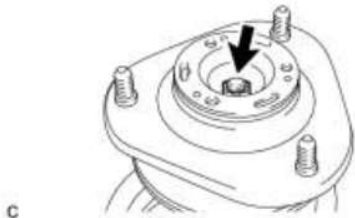
NOTICE:

When installing, align the cutout on the front suspension support sub-assembly and the shock absorber piston rod end.

9. TEMPORARILY TIGHTEN FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT



(a) Install the collar to the front shock absorber assembly.



(b) Temporarily tighten a new front support to front shock absorber nut.

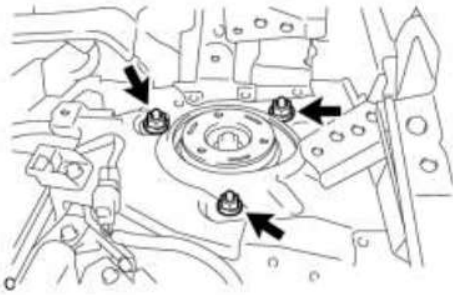
(c) Remove SST from the front coil spring.

NOTICE:

Do not use an impact wrench. It will damage SST.

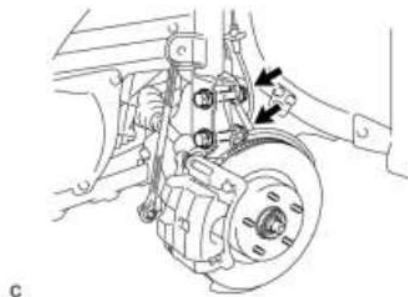
2010 Toyota Prius

10. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING



(a) Install the front shock absorber with coil spring (upper side) with the 3 nuts.

Torque: **50 N·m (510 kgf·cm, 37ft·lbf)**



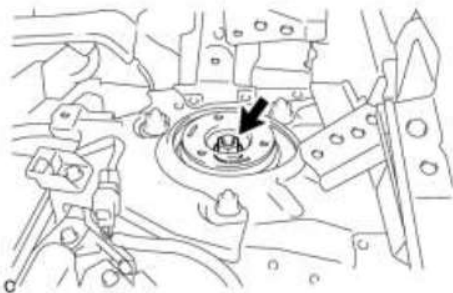
(b) Install the front shock absorber with coil spring (lower side) to the steering knuckle with the 2 bolts and 2 nuts.

Torque: **240 N·m (2447 kgf·cm, 177ft·lbf)**

NOTICE:

While keeping the bolts from rotating, tighten the nuts.

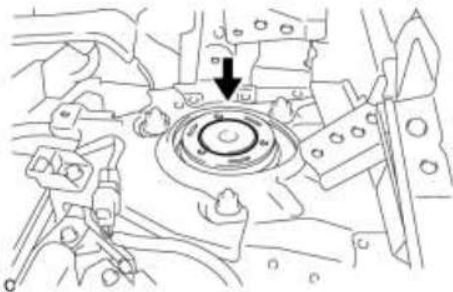
11. FULLY TIGHTEN FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT



(a) Fully tighten the front support to front shock absorber nut.

Torque: **47 N·m (479 kgf·cm, 35ft·lbf)**

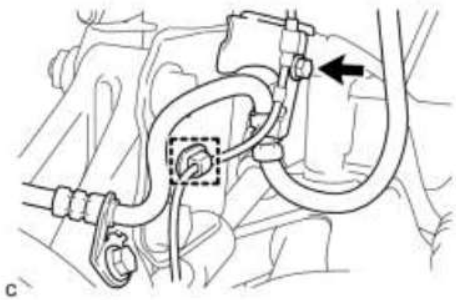
12. INSTALL FRONT SUSPENSION SUPPORT DUST COVER



(a) Install the front suspension support dust cover.

13. INSTALL FRONT SPEED SENSOR

(a) Install the front speed sensor and front flexible hose to the front shock



absorber with the bolt and clamp.

Torque: **19 N·m (192 kgf·cm, 14ft·lbf)**

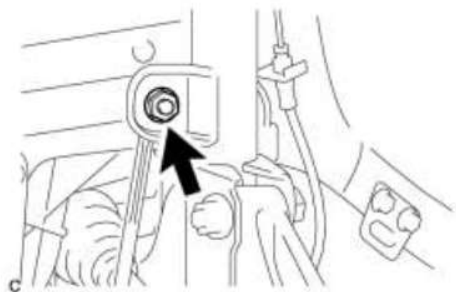
NOTICE:

Do not twist the front speed sensor when installing it.

HINT:

Install the front flexible hose first and then the speed sensor harness bracket.

14. INSTALL FRONT STABILIZER LINK ASSEMBLY



(a) Install the front stabilizer link assembly to the front shock absorber with coil spring with the nut.

Torque: **74 N·m (755 kgf·cm, 55ft·lbf)**

HINT:

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

15. INSTALL OUTER COWL TOP PANEL SUB-ASSEMBLY_ [INFO](#)

16. INSTALL COWL BODY MOUNTING REINFORCEMENT LH_ [INFO](#)

17. INSTALL WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY

HINT:

Refer to the procedure from Install Windshield Wiper Motor and Link Assembly [INFO](#).

18. INSTALL FRONT WHEEL

Torque: **103 N·m (1050 kgf·cm, 76ft·lbf)**

19. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

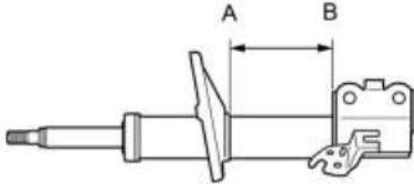
HINT:

Inspect and adjust the front wheel alignment [INFO](#).

DISPOSAL

1. DISPOSE OF FRONT SHOCK ABSORBER ASSEMBLY

(a) Position the front shock absorber assembly level with the piston rod fully extended. Using a drill, make a hole in the cylinder between A and B shown in the illustration to discharge the gas inside.



NOTICE:

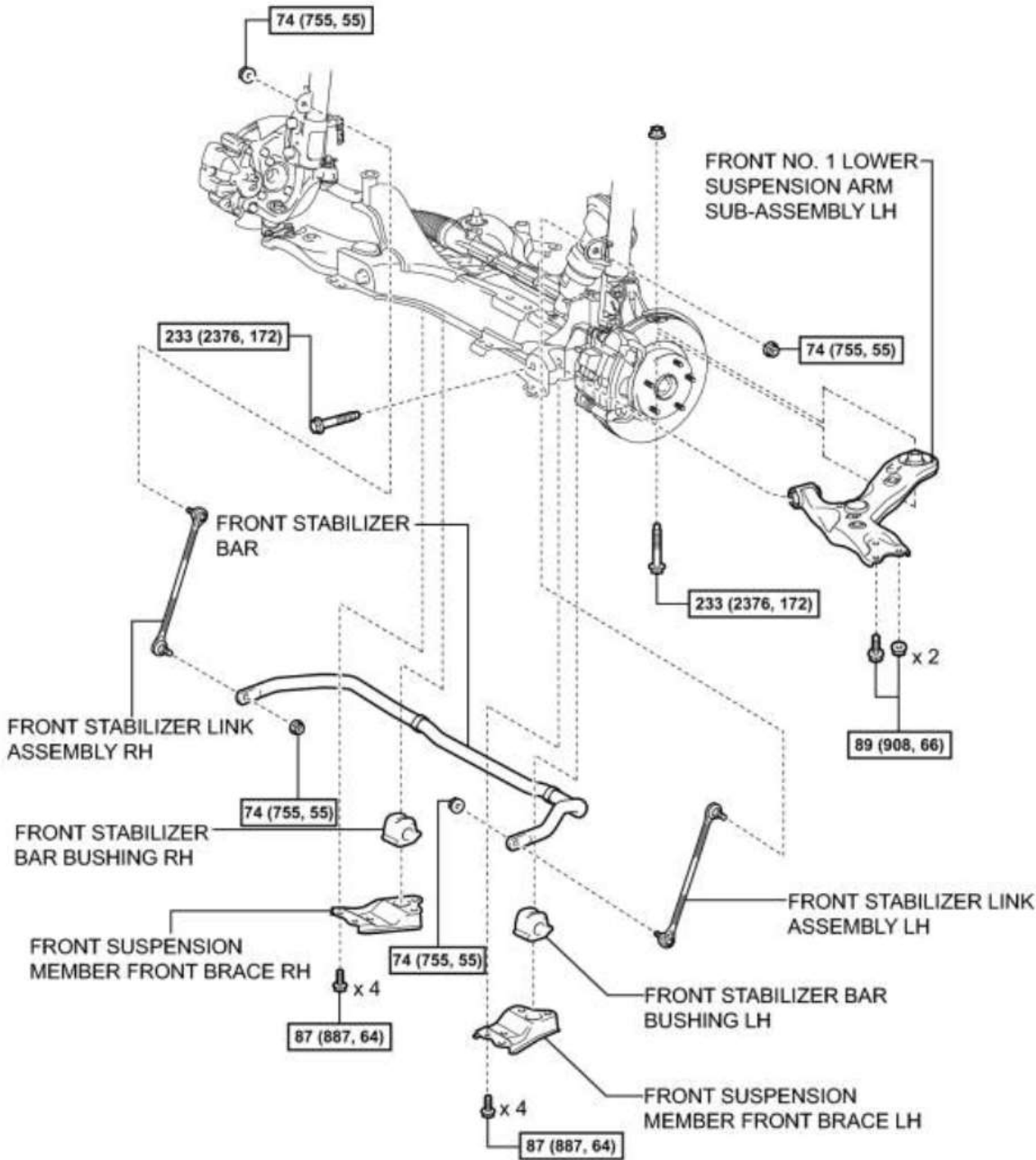
Always use proper safety equipment and be careful when drilling because shards of metal fly about.

HINT:

The gas is colorless, odorless and non-poisonous.

P

COMPONENTS
ILLUSTRATION

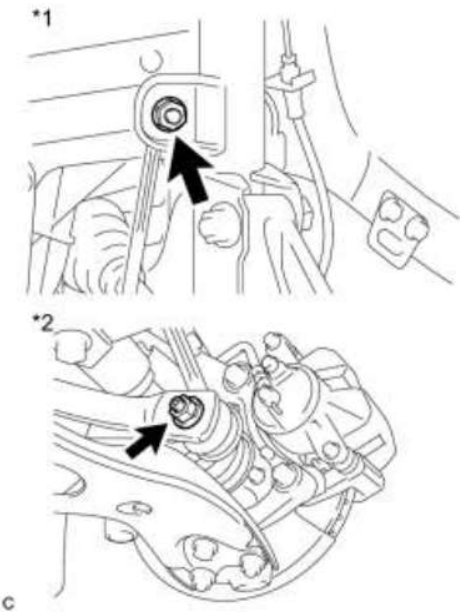


[N*m (kgf*cm, ft.*lbf)]: Specified torque

c

REMOVAL

- 1. REMOVE FRONT WHEELS
- 2. REMOVE NO. 1 ENGINE UNDER COVER
- 3. REMOVE NO. 2 ENGINE UNDER COVER
- 4. REMOVE FRONT STABILIZER LINK ASSEMBLY LH



(a) Remove the 2 nuts and front stabilizer link assembly LH.

Text in Illustration

*1	Upper Side
*2	Lower Side

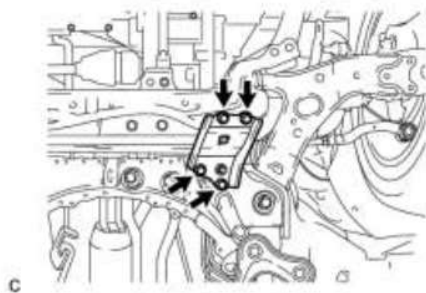
HINT:
If the ball joint turns together with the nut, use a hexagon wrench (6 mm) to hold the stud bolt.

- 5. REMOVE FRONT STABILIZER LINK ASSEMBLY RH

HINT:
Perform the same procedure as for the LH side.

- 6. SEPARATE FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY LH_ INFO
- 7. REMOVE FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY LH_ INFO
- 8. REMOVE FRONT SUSPENSION MEMBER FRONT BRACE LH

(a) Remove the 4 bolts and front suspension member front brace LH.

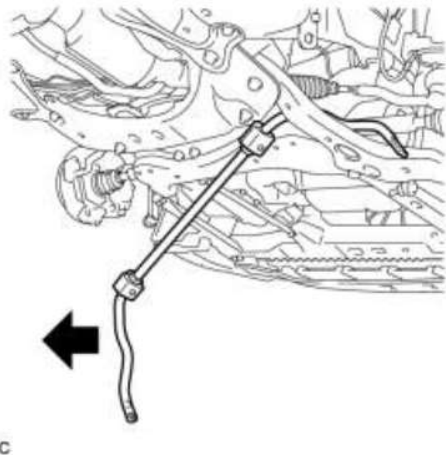


9. REMOVE FRONT SUSPENSION MEMBER FRONT BRACE RH

HINT:

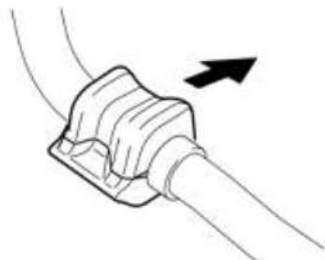
Perform the same procedure as for the LH side.

10. REMOVE FRONT STABILIZER BAR



(a) Remove the front stabilizer bar with front stabilizer bar bushing from the front suspension crossmember sub-assembly.

11. REMOVE FRONT STABILIZER BAR BUSHING LH



(a) Remove the front stabilizer bar bushing LH from the front stabilizer bar.

12. REMOVE FRONT STABILIZER BAR BUSHING RH

HINT:

2010 Toyota Prius

Repair Manual

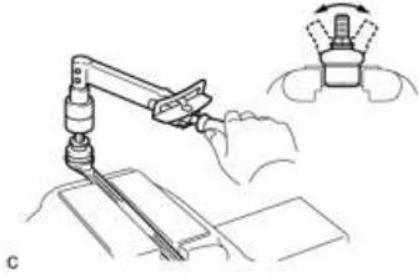
Perform the same procedure as for the LH side.

INSPECTION

1. INSPECT FRONT STABILIZER LINK ASSEMBLY

(a) Inspect the turning torque of the ball joint.

(1) Secure the front stabilizer link assembly in a vise using aluminum plates.



(2) Install the nut to the front stabilizer link assembly stud.

(3) Using a torque wrench, turn the nut continuously at a rate of 3 to 5 seconds per turn and take the torque reading on the 5th turn.

Torque: 0.05 to 1.96 N·m (0.5 to 20 kgf·cm, 0.4 to 17in·lbf)

HINT:

If the turning torque is not within the specified range, replace the front stabilizer link assembly with a new one.

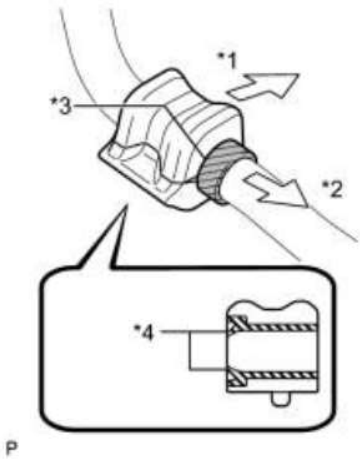
(b) Inspect the dust cover.

(1) Check that the dust cover is not cracked and that there is no grease on it.

INSTALLATION

1. INSTALL FRONT STABILIZER BAR BUSHING LH

(a) Install the front stabilizer bar bushing to the front stabilizer bar as shown in the illustration.



Text in Illustration

*1	Front of the Vehicle
*2	Inside of the Vehicle
*3	Stopper
*4	Dust Lip

- Install the front stabilizer bar bushing so that the dust lips face outward of the vehicle.
- Install the front stabilizer bar bushing so that the cutouts face rearward of the vehicle.

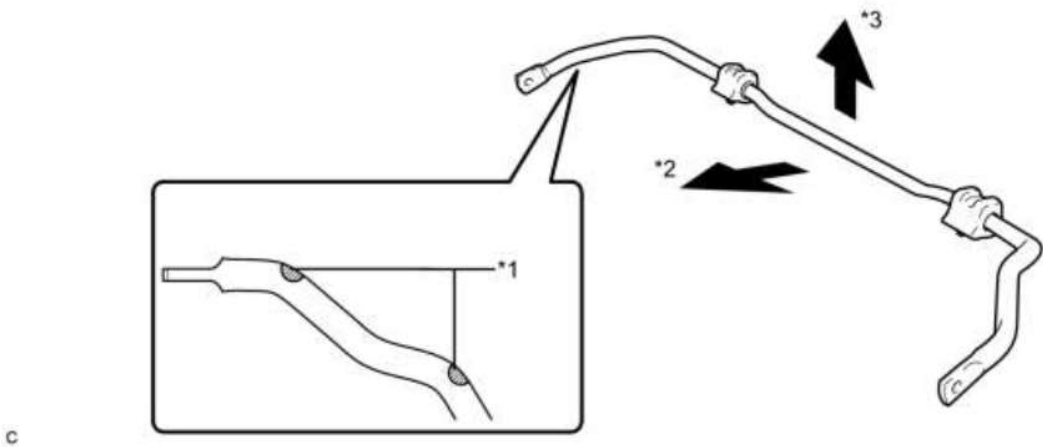
2. INSTALL FRONT STABILIZER BAR BUSHING RH

HINT:

Perform the same procedure as for the LH side.

3. INSTALL FRONT STABILIZER BAR

(a) Install the front stabilizer bar to the front suspension crossmember sub-assembly so that the identification mark is positioned on the right side of the vehicle.



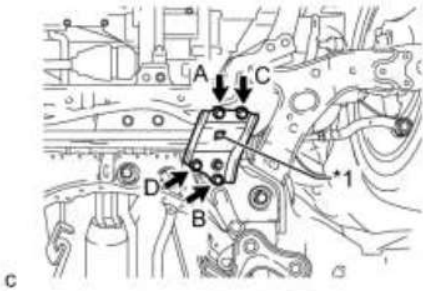
Text in Illustration

*1	Identification Mark	*2	Front of the Vehicle
*3	Top of the Vehicle	-	-

4. INSTALL FRONT SUSPENSION MEMBER FRONT BRACE LH

(a) Install the front suspension member front brace LH with the 4 bolts.

Text in Illustration



*1	Protrusion
----	------------

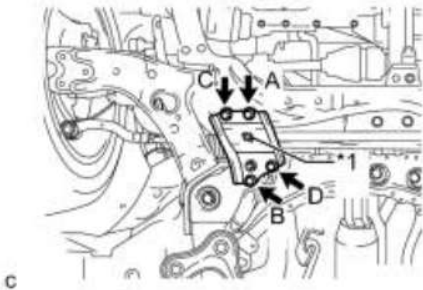
Torque: 87 N·m (887 kgf·cm, 64ft·lbf)

- Temporarily tighten bolt A, and then fully tighten the 4 bolts in the order of B, C, D, and A.
- After installing the front suspension member front brace LH, make sure that the protrusion of the No. 1 front stabilizer bar bushing comes out.

5. INSTALL FRONT SUSPENSION MEMBER FRONT BRACE RH

(a) Install the front suspension member front brace RH with the 4 bolts.

Text in Illustration



*1	Protrusion
----	------------

Torque: 87 N·m (887 kgf·cm, 64ft·lbf)

- Temporarily tighten bolt A, and then fully tighten the 4 bolts in the order of B, C, D, and A.
- After installing the front suspension member front brace RH, make sure that the protrusion of the No. 1 front stabilizer bar bushing comes out.

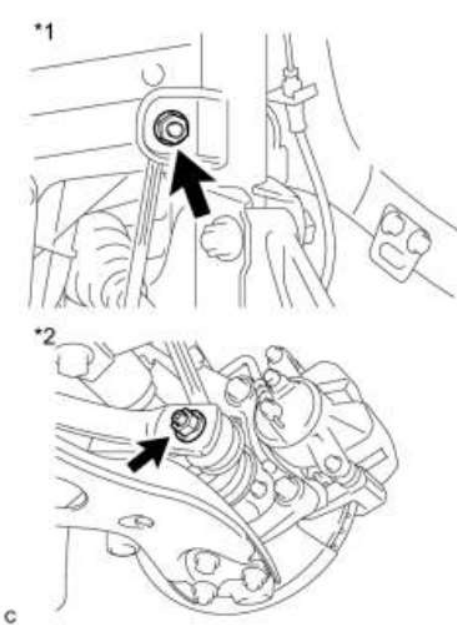
6. TEMPORARILY INSTALL FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY LH_ INFO

7. CONNECT FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY LH_ INFO

8. INSTALL FRONT STABILIZER LINK ASSEMBLY LH

(a) Install the front stabilizer link assembly LH with the 2 nuts.

Text in Illustration



*1	Upper Side
*2	Lower Side

Torque: **74 N·m (755 kgf·cm, 55ft·lbf)**

HINT:

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

9. INSTALL FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Perform the same procedure for as the LH side.

10. INSTALL FRONT WHEELS

Torque: **103 N·m (1050 kgf·cm, 76ft·lbf)**

11. STABILIZE SUSPENSION INFO

12. FULLY TIGHTEN FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY LH_ INFO

13. INSTALL NO. 2 ENGINE UNDER COVER

14. INSTALL NO. 1 ENGINE UNDER COVER

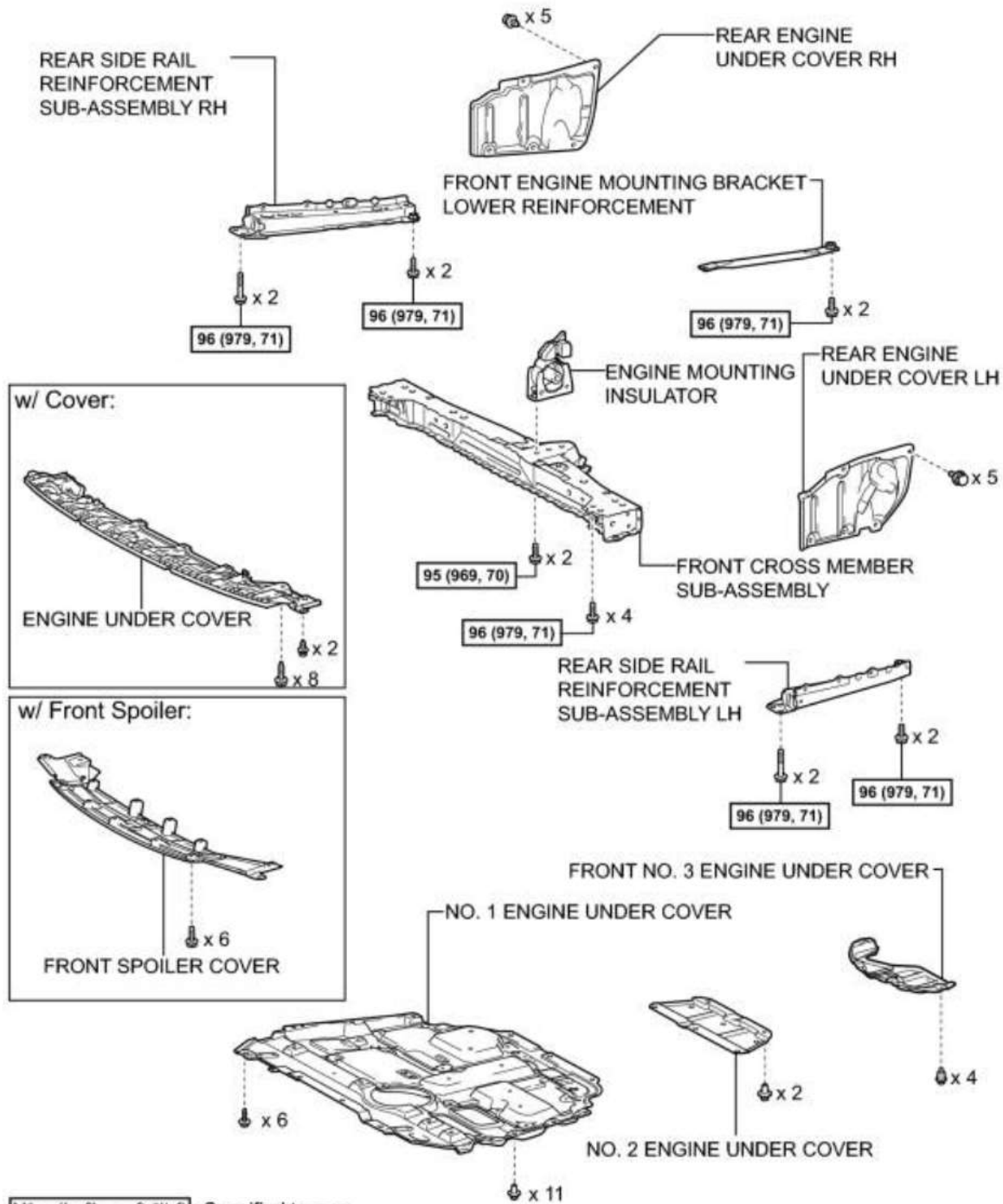
15. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

HINT:

Inspect and adjust the front wheel alignment INFO.

COMPONENTS

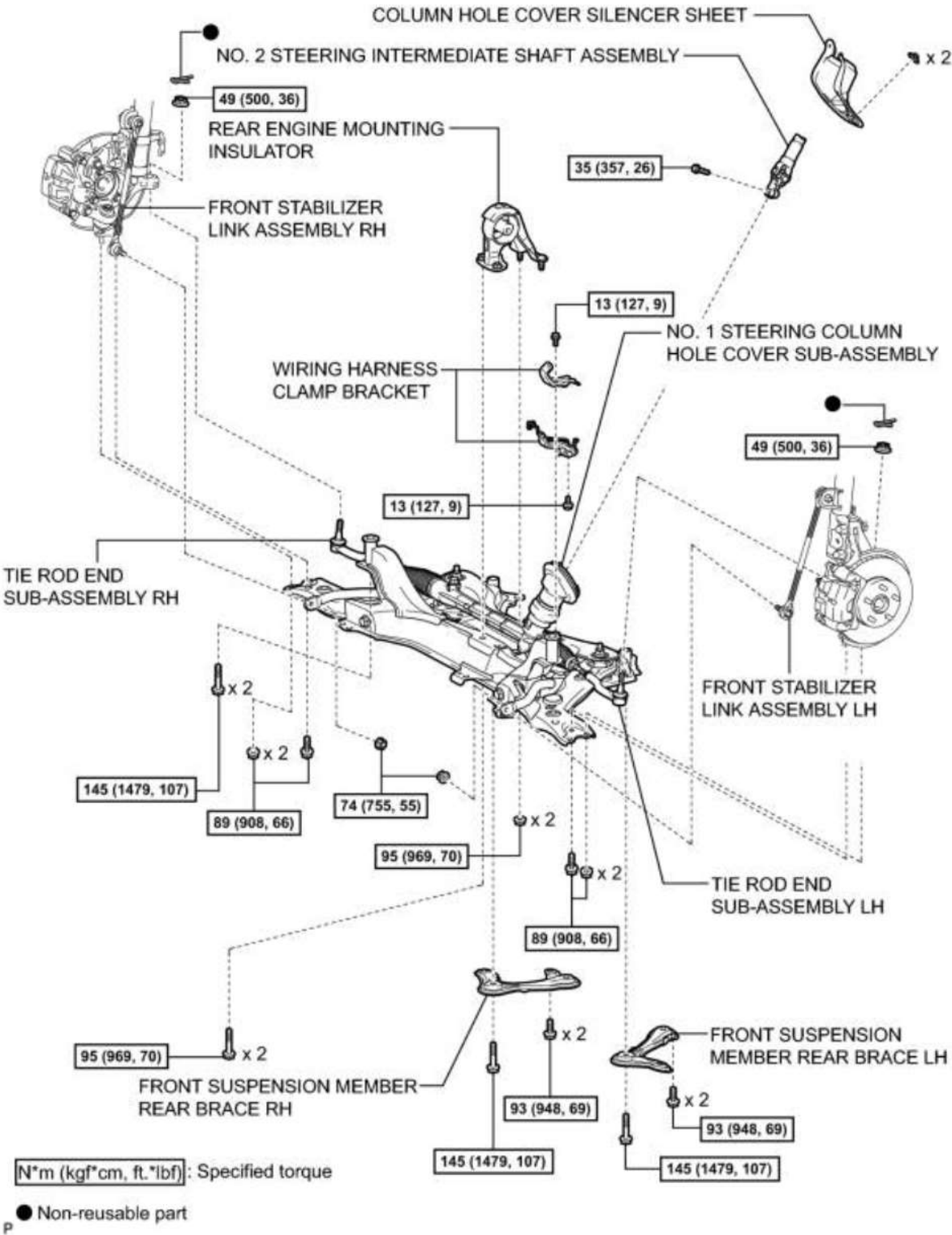
ILLUSTRATION



N*m (kgf*cm, ft.*lbf): Specified torque

P

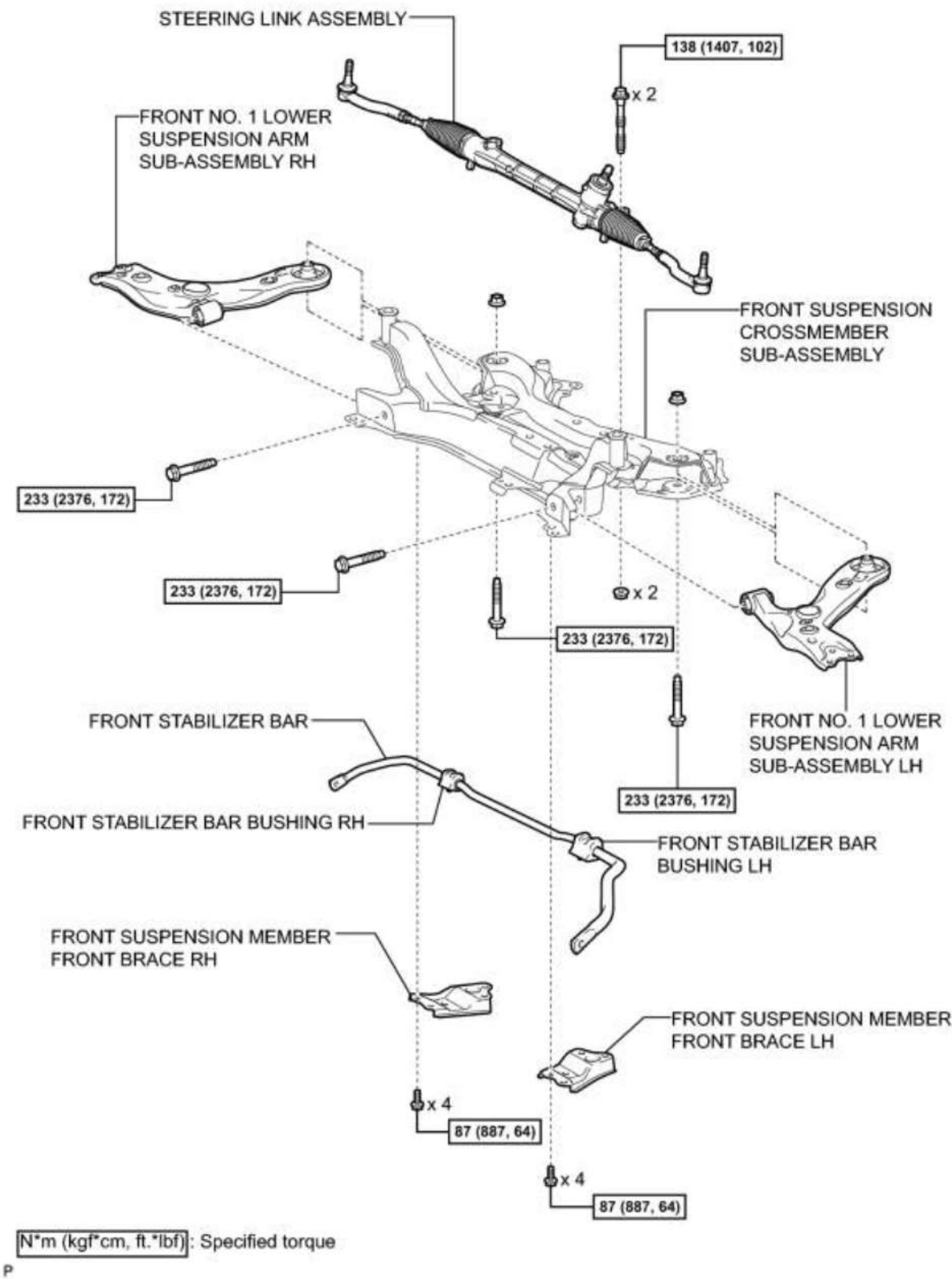
ILLUSTRATION



ILLUSTRATION

2010 Toyota Prius

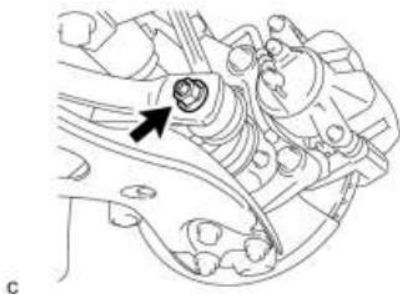
Repair Manual



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REMOVAL

1. PLACE FRONT WHEELS FACING STRAIGHT AHEAD
2. SECURE STEERING WHEEL_ INFO
3. REMOVE COLUMN HOLE COVER SILENCER SHEET_ INFO
4. SEPARATE NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY_ INFO
5. SEPARATE NO. 1 STEERING COLUMN HOLE COVER SUB-ASSEMBLY_ INFO
6. REMOVE FRONT WHEELS
7. REMOVE NO. 1 ENGINE UNDER COVER
8. REMOVE NO. 2 ENGINE UNDER COVER
9. REMOVE FRONT NO. 3 ENGINE UNDER COVER
10. REMOVE REAR ENGINE UNDER COVER LH
11. REMOVE REAR ENGINE UNDER COVER RH
12. REMOVE FRONT SPOILER COVER (w/ Front Spoiler)
13. REMOVE ENGINE UNDER COVER (w/ Cover)



14. SEPARATE FRONT STABILIZER LINK ASSEMBLY LH

(a) Remove the nut and separate the stabilizer link assembly LH from the front stabilizer bar.

HINT:

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

15. SEPARATE FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

16. SEPARATE TIE ROD END SUB-ASSEMBLY LH_ INFO

17. SEPARATE TIE ROD END SUB-ASSEMBLY RH

HINT:

2010 Toyota Prius

Repair Manual

Perform the same procedure as for the LH side.

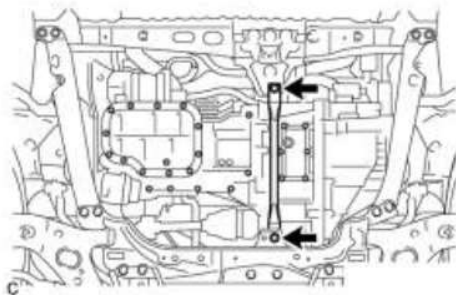
18. SEPARATE FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY LH INFO

19. SEPARATE FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY RH

HINT:

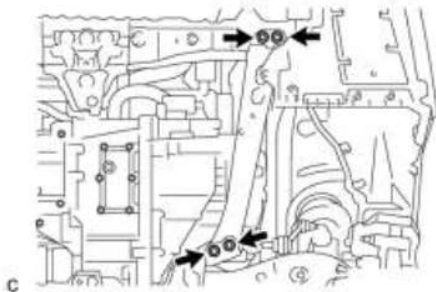
Perform the same procedure as for the LH side.

20. REMOVE FRONT ENGINE MOUNTING BRACKET LOWER REINFORCEMENT



(a) Remove the 2 bolts and front engine mounting bracket lower reinforcement.

21. REMOVE REAR SIDE RAIL REINFORCEMENT SUB-ASSEMBLY LH



(a) Remove the 4 bolts and rear side rail reinforcement sub-assembly LH.

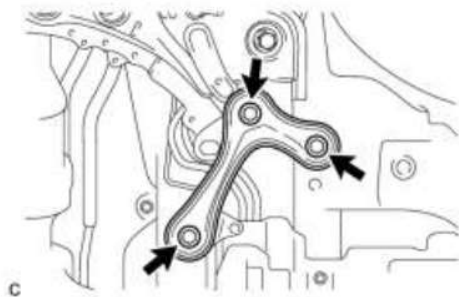
22. REMOVE REAR SIDE RAIL REINFORCEMENT SUB-ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

23. REMOVE FRONT SUSPENSION MEMBER REAR BRACE LH

(a) Remove the 3 bolts and front suspension member rear brace LH.

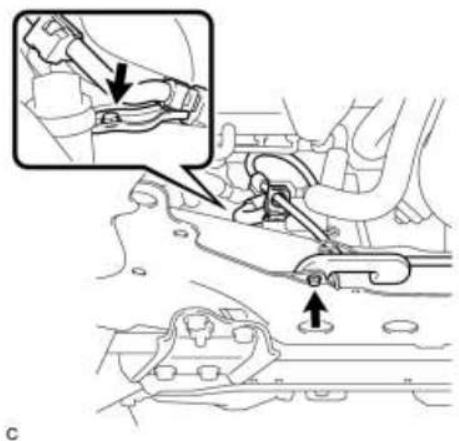


24. REMOVE FRONT SUSPENSION MEMBER REAR BRACE RH

HINT:

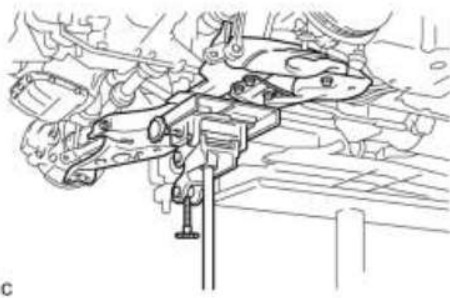
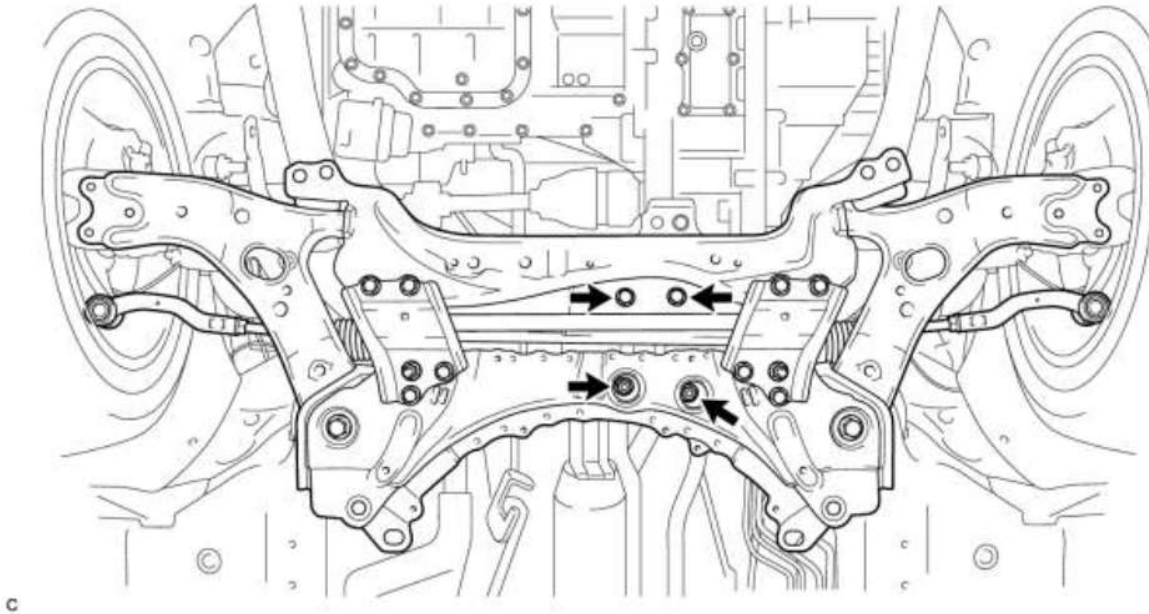
Perform the same procedure as for the LH side.

25. REMOVE FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY



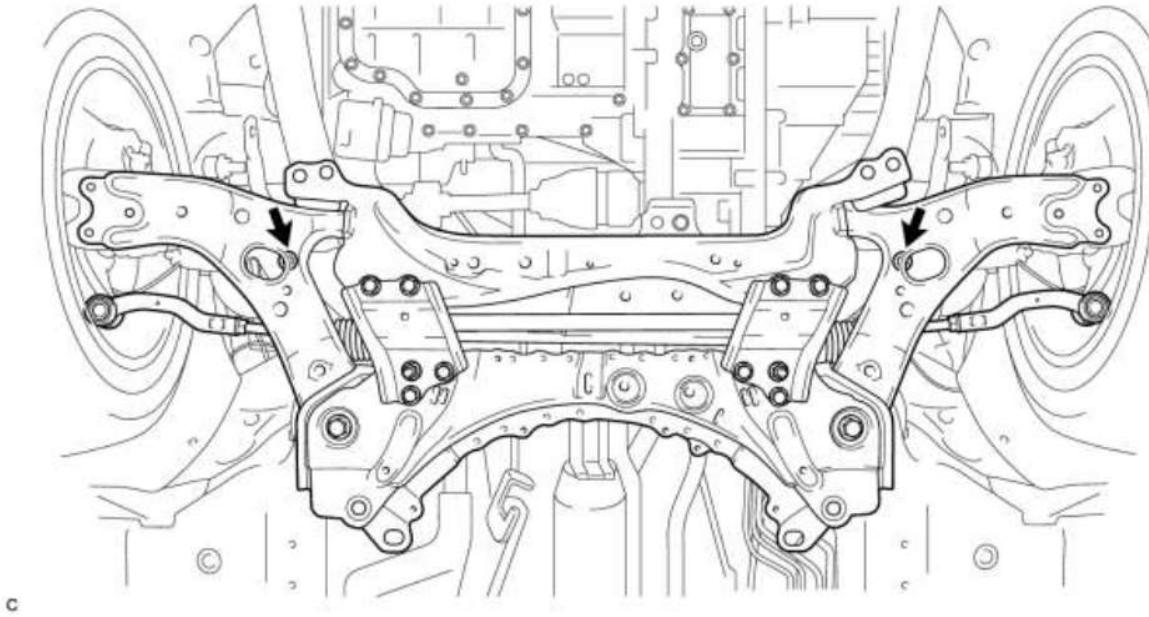
(a) Remove the 2 bolts and 2 wire harness clamp brackets from the front suspension crossmember sub-assembly.

(b) Remove the 2 bolts and 2 nuts, and separate the front suspension crossmember sub-assembly from the rear engine mounting insulator.



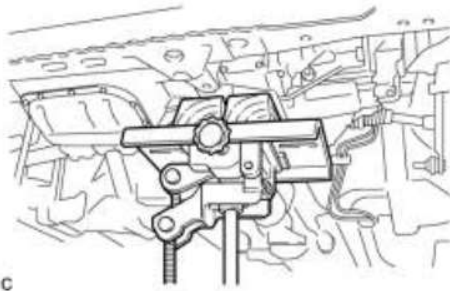
(c) Using a transmission jack, support the front suspension crossmember sub-assembly.

(d) Remove the 2 bolts and front suspension crossmember sub-assembly.



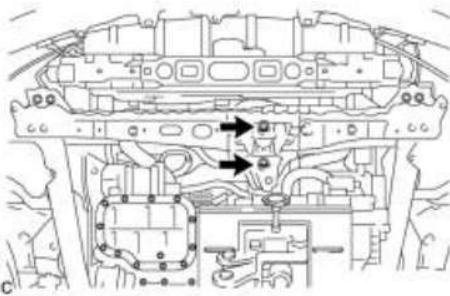
c

26. REMOVE FRONT CROSS MEMBER SUB-ASSEMBLY



c

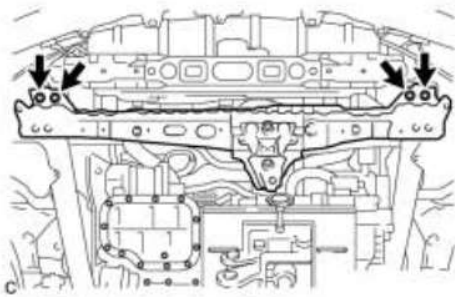
(a) Using a transmission jack, support the engine assembly with transaxle.



c

(b) Remove the 2 bolts and separate the front cross member sub-assembly from the engine mounting insulator.

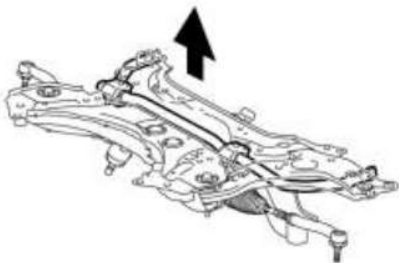
(c) Remove the 4 bolts and front cross member sub-assembly.



27. REMOVE FRONT SUSPENSION MEMBER FRONT BRACE LH_ INFO

28. REMOVE FRONT SUSPENSION MEMBER FRONT BRACE RH_ INFO

29. REMOVE FRONT STABILIZER BAR

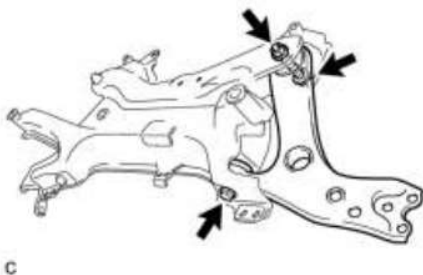


P

(a) Remove the front stabilizer bar with front stabilizer bar bushings from the front suspension crossmember sub-assembly.

30. REMOVE STEERING LINK ASSEMBLY_ INFO

31. REMOVE FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY LH



C

(a) Remove the 2 bolts, nut and front No. 1 lower suspension arm sub-assembly LH from the front suspension crossmember.

NOTICE:

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

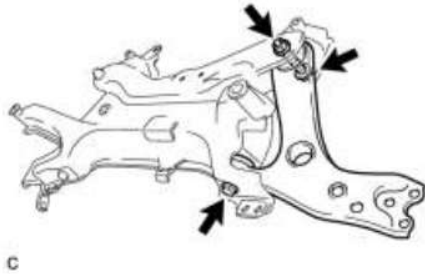
32. REMOVE FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

INSTALLATION

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



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

NOTICE:

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

2. TEMPORARILY TIGHTEN FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

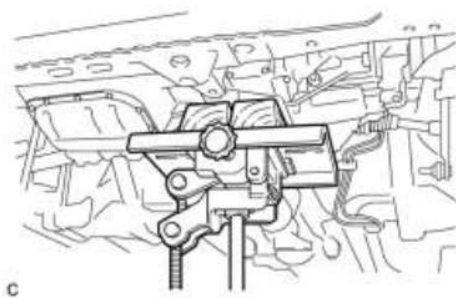
3. INSTALL STEERING LINK ASSEMBLY INFO

4. INSTALL FRONT STABILIZER BAR INFO

5. INSTALL FRONT SUSPENSION MEMBER FRONT BRACE LH INFO

6. INSTALL FRONT SUSPENSION MEMBER FRONT BRACE RH INFO

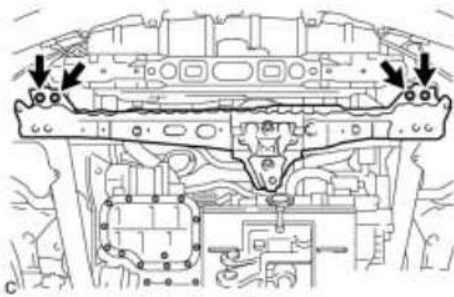
7. INSTALL FRONT CROSS MEMBER SUB-ASSEMBLY



(a) Using a transmission jack, support the engine assembly with transaxle.

(b) Install the front cross member sub-assembly with the 4 bolts.

Torque: **96 N·m (979 kgf·cm, 71ft·lbf)**

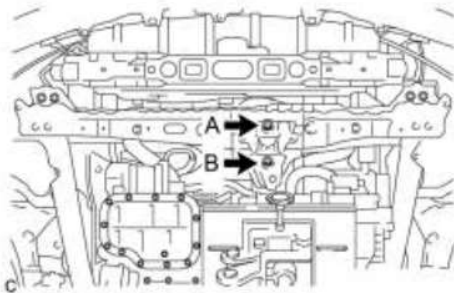


(c) Connect the engine mounting insulator with the 2 bolts.

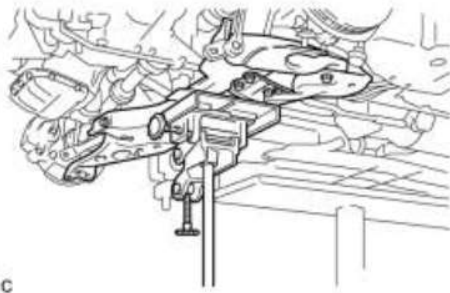
Torque: **95 N·m (969 kgf·cm, 70ft·lbf)**

NOTICE:

Temporarily tighten bolt B and then fully tighten the 2 bolts in the order of A and B.

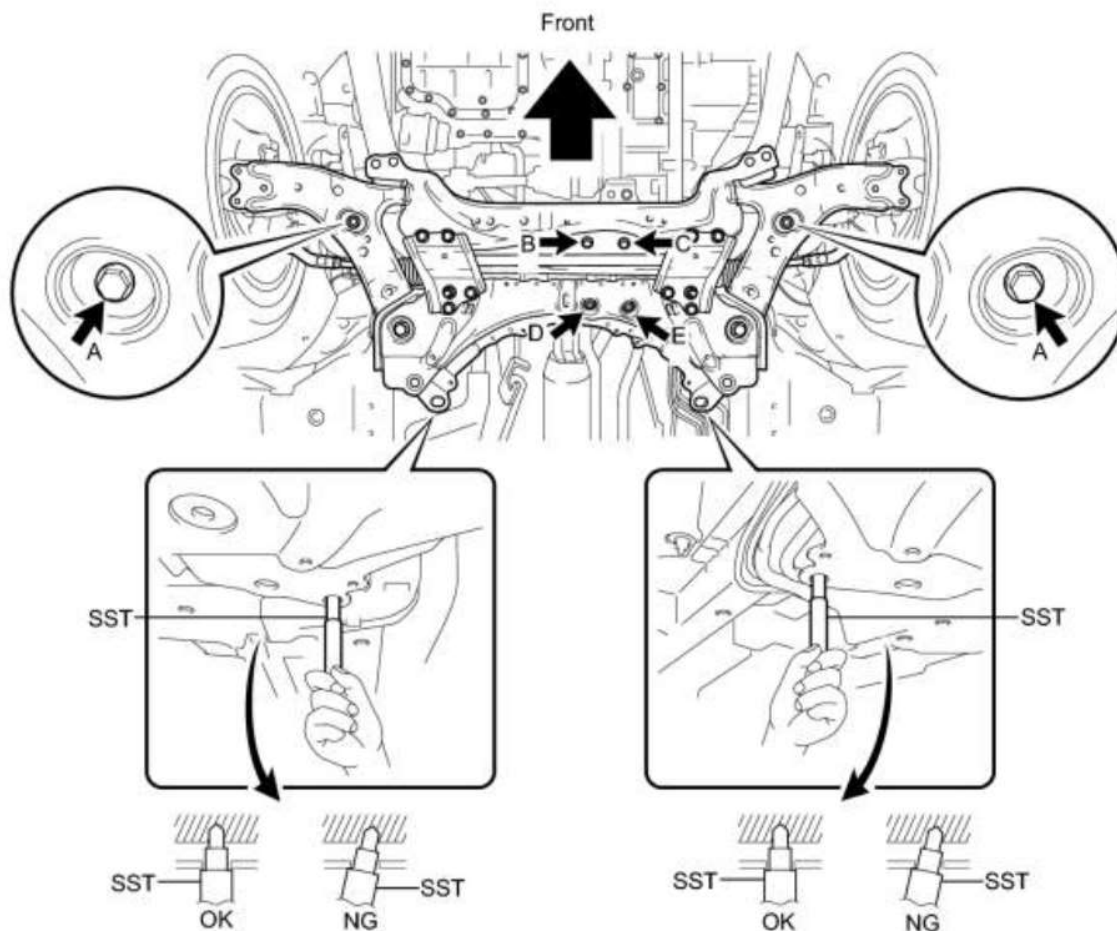


8. INSTALL FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY



(a) Support the front suspension crossmember with a transmission jack.

(b) While inserting SST into the reference holes on the front suspension crossmember RH and LH alternately, tighten 2 bolts A, 2 bolts B, C and 2 nuts on the RH and LH sides to the respective specified torque in several steps.



c

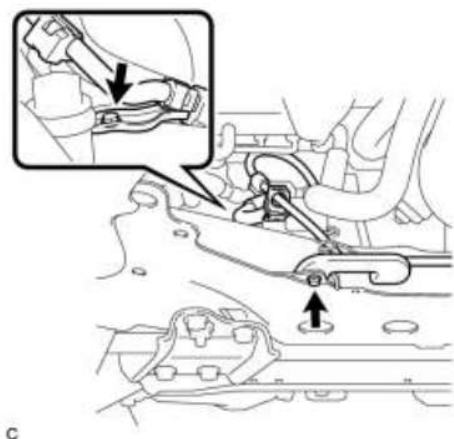
SST: 09670-00020

Bolt A - Torque: **145 N·m (1479 kgf·cm, 107ft·lbf)**Bolt B, C, Nut D, E - Torque: **95 N·m (969 kgf·cm, 70ft·lbf)****NOTICE:**

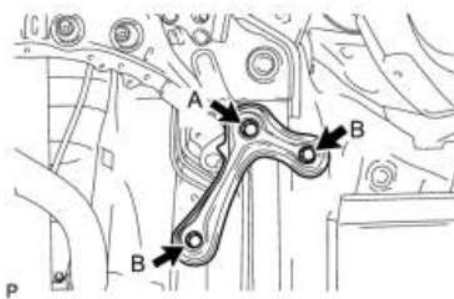
Temporarily tighten bolt B, and then fully tighten the 2 bolts and 2 nuts in the order of C, E, D, and B.

(c) Install the 2 wire harness clamp brackets with the 2 bolts.

Torque: **13 N·m (127 kgf·cm, 9ft·lbf)**



9. INSTALL FRONT SUSPENSION MEMBER REAR BRACE LH



(a) Install the front suspension member rear brace LH with the 3 bolts.

Bolt A - Torque: **145 N·m (1479 kgf·cm, 107ft·lbf)**

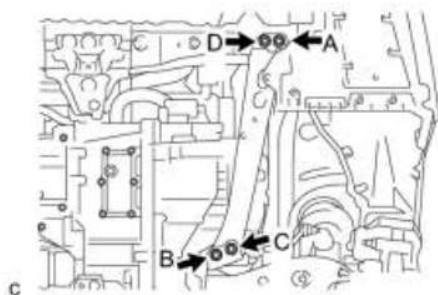
Bolt B - Torque: **93 N·m (948 kgf·cm, 69ft·lbf)**

10. INSTALL FRONT SUSPENSION MEMBER REAR BRACE RH

HINT:

Perform the same procedure as for the LH side.

11. INSTALL REAR SIDE RAIL REINFORCEMENT SUB-ASSEMBLY LH



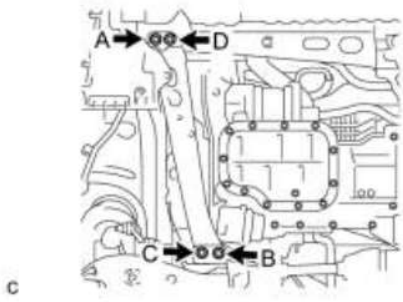
(a) Install the rear side rail reinforcement sub-assembly LH with the 4 bolts.

Torque: **96 N·m (979 kgf·cm, 71ft·lbf)**

NOTICE:

Temporarily tighten bolts A and B, and then fully tighten the 4 bolts in the order of C, B, D and A.

12. INSTALL REAR SIDE RAIL REINFORCEMENT SUB-ASSEMBLY RH



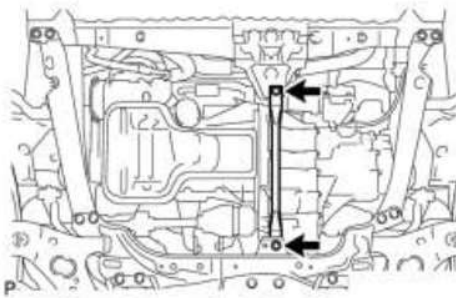
(a) Install the rear side rail reinforcement sub-assembly RH with the 4 bolts.

Torque: **96 N·m (979 kgf·cm, 71ft·lbf)**

NOTICE:

Temporarily tighten bolts A and B, and then fully tighten the 4 bolts in the order of C, B, D and A.

13. INSTALL FRONT ENGINE MOUNTING BRACKET LOWER REINFORCEMENT



(a) Install the front engine mounting bracket lower reinforcement with the 2 bolts.

Torque: **96 N·m (979 kgf·cm, 71ft·lbf)**

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

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

HINT:

Perform the same procedure as for the LH side.

16. CONNECT TIE ROD END SUB-ASSEMBLY LH INFO

17. CONNECT TIE ROD END SUB-ASSEMBLY RH

HINT:

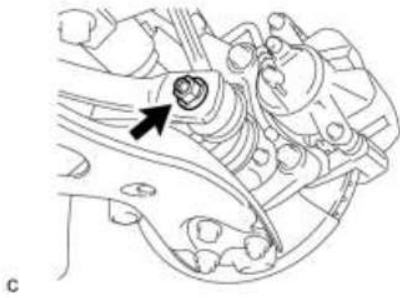
Perform the same procedure as for the LH side.

18. INSTALL FRONT STABILIZER LINK ASSEMBLY LH

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

Torque: **74 N·m (755 kgf·cm, 55ft·lbf)**

HINT:



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

19. INSTALL FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

20. CONNECT NO. 1 STEERING COLUMN HOLE COVER SUB-ASSEMBLY_ INFO

21. CONNECT NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY_ INFO

22. INSTALL COLUMN HOLE COVER SILENCER SHEET_ INFO

23. INSTALL FRONT WHEELS

Torque: **103 N·m (1050 kgf·cm, 76ft·lbf)**

24. STABILIZE SUSPENSION

(a) Lower the vehicle.

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

25. FULLY TIGHTEN FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY LH_ INFO

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

HINT:

Perform the same procedure as for the LH side.

27. INSTALL FRONT SPOILER COVER (w/ Front Spoiler)

28. INSTALL ENGINE UNDER COVER (w/ Cover)

29. INSTALL REAR ENGINE UNDER COVER LH

30. INSTALL REAR ENGINE UNDER COVER RH

31. INSTALL FRONT NO. 3 ENGINE UNDER COVER

32. INSTALL NO. 2 ENGINE UNDER COVER

33. INSTALL NO. 1 ENGINE UNDER COVER

34. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

HINT:

Inspect and adjust the front wheel alignment .

PROBLEM SYMPTOMS TABLE

HINT:

Use the table below to help determine the cause of problem symptoms. If multiple suspected areas are listed, the potential causes of the symptoms are listed in order of probability in the "Suspected Area" column of the table. Check each symptom by checking the suspected areas in the order they are listed. Replace parts as necessary.

Suspension System

Symptom	Suspected Area	See page
Vehicle pulls to one side while driving	Tire (worn or improperly inflated)	INFO
	Front wheel alignment (incorrect)	INFO
	Front hub bearing (worn)	INFO
	Front shock absorber (worn)	INFO
	Steering gear (out of adjustment or broken)	INFO
	Suspension parts (worn)	-
Bottoming	Vehicle (overloaded)	-
	Front coil spring (weak)	INFO
	Front shock absorber (worn)	INFO
Sways/pitches	Tire (worn or improperly inflated)	INFO
	Front stabilizer bar (bent or broken)	INFO
	Front coil spring (weak)	INFO
	Front shock absorber (worn)	INFO
Wheel shimmy	Tire (worn or improperly inflated)	INFO
	Wheel (out of balance)	INFO
	Front wheel alignment (incorrect)	INFO
	Front lower suspension arm (worn)	INFO
	Front shock absorber (worn)	INFO
	Front lower ball joint (worn)	INFO
	Front hub bearing (worn)	INFO
Abnormal tire wear	Tire (worn or improperly inflated)	INFO
	Wheel (out of balance)	INFO
	Front wheel alignment (incorrect)	INFO
	Suspension parts (worn)	-