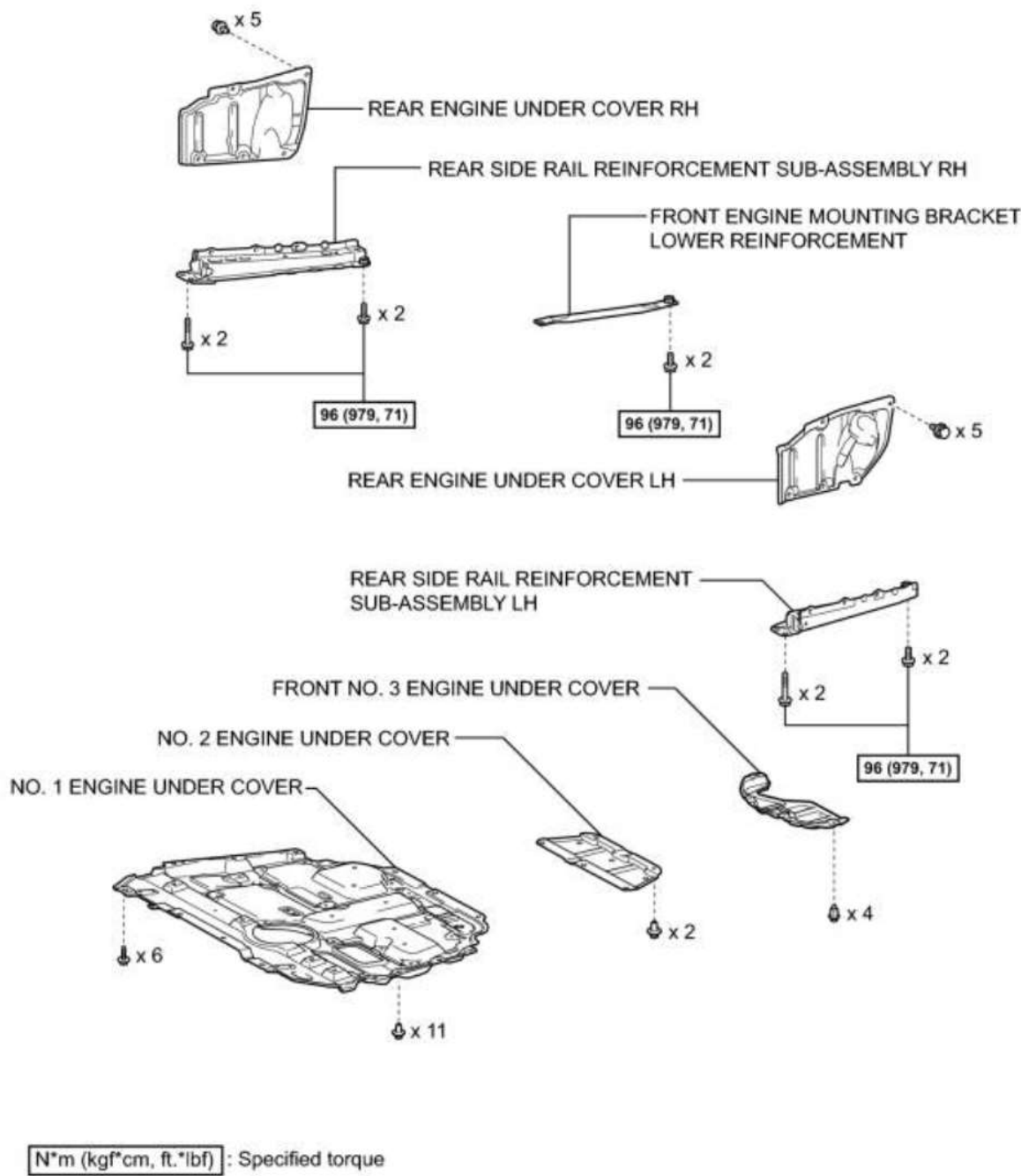


COMPONENTS

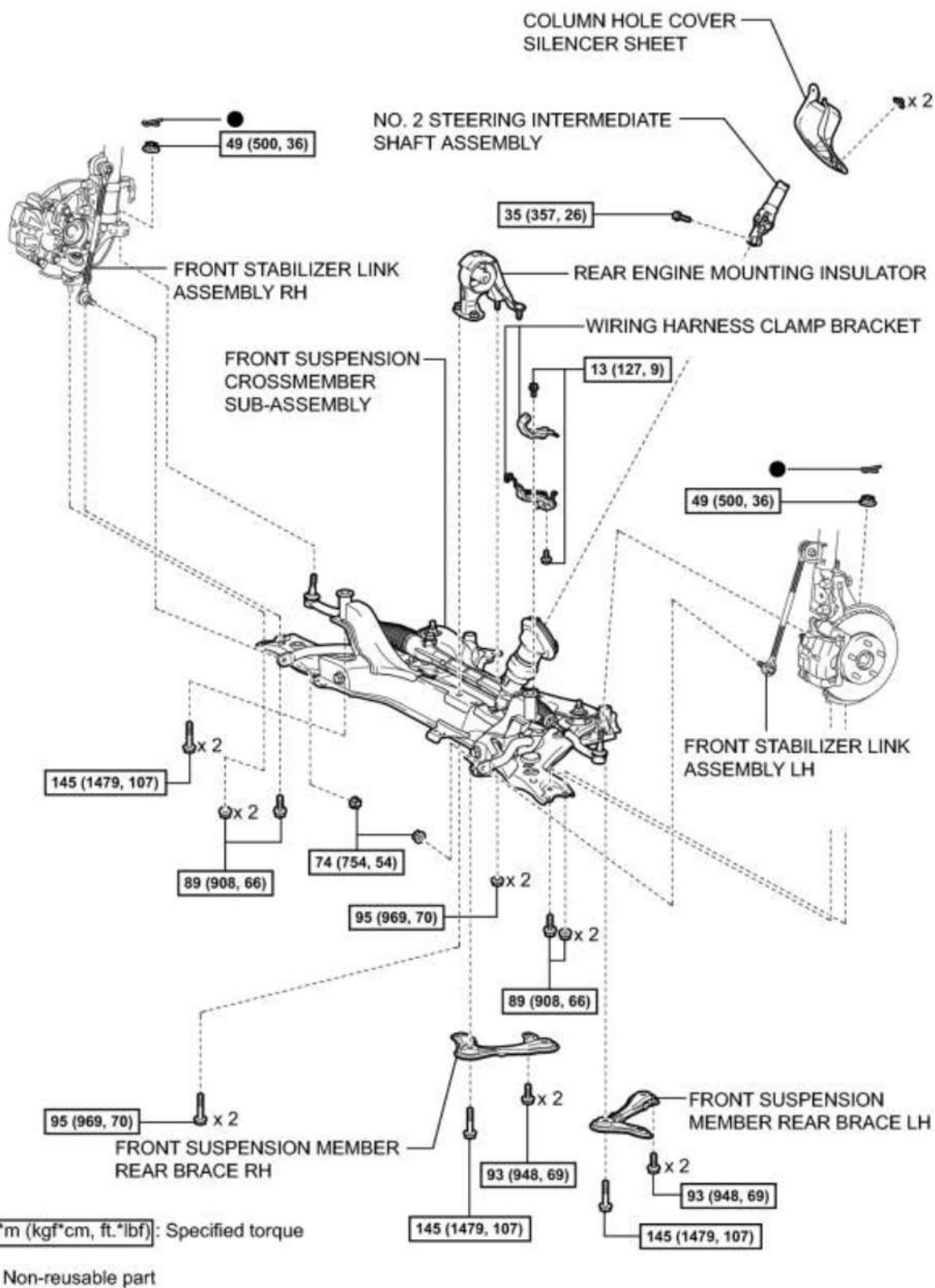
ILLUSTRATION



ILLUSTRATION

2010 Toyota Prius

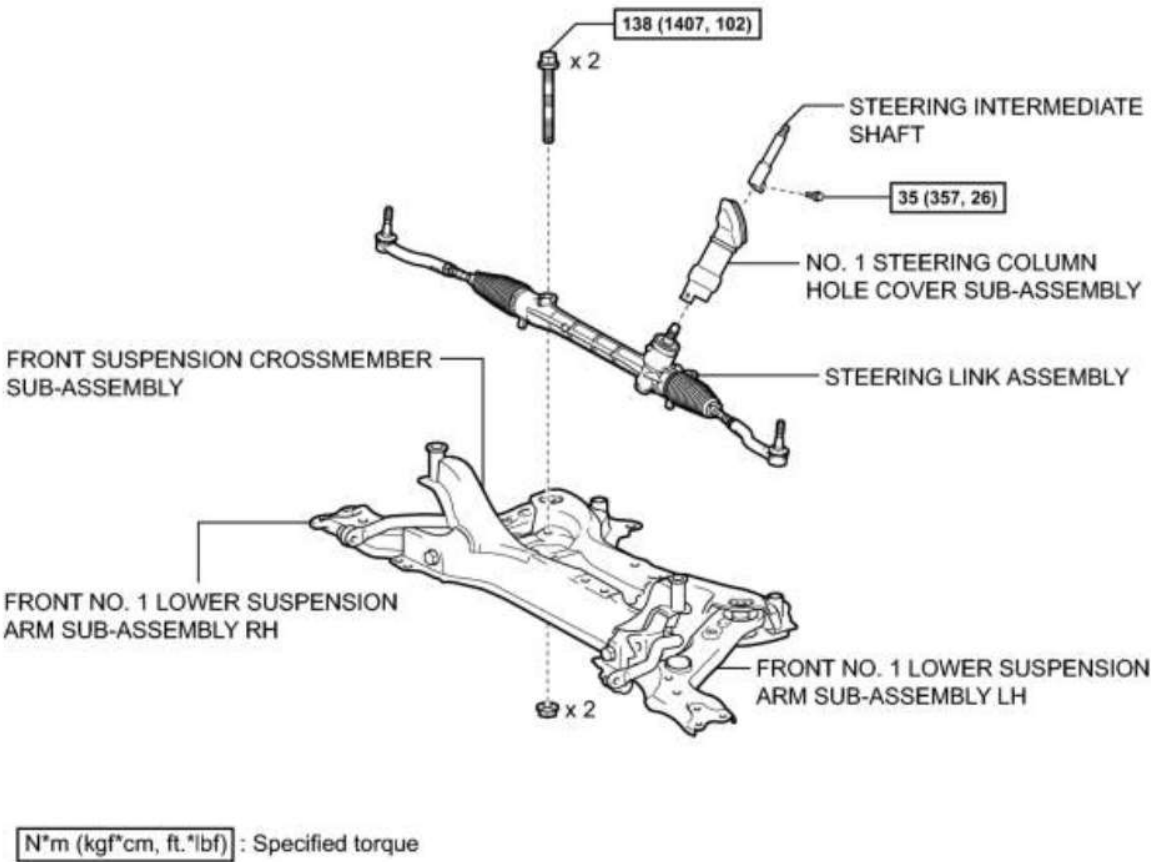
Repair Manual



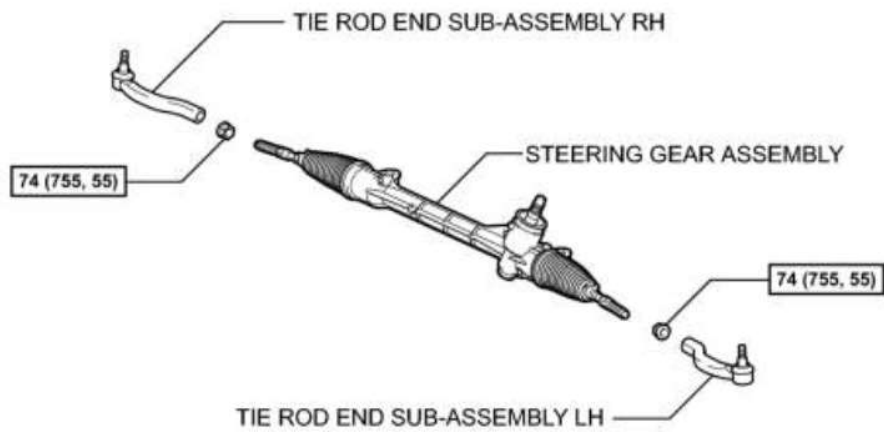
ILLUSTRATION

2010 Toyota Prius

Repair Manual

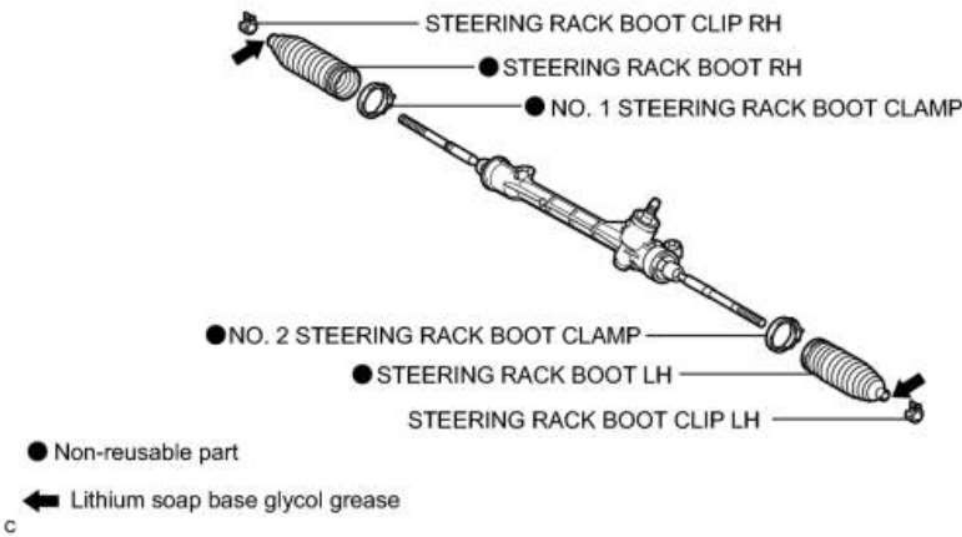


ILLUSTRATION



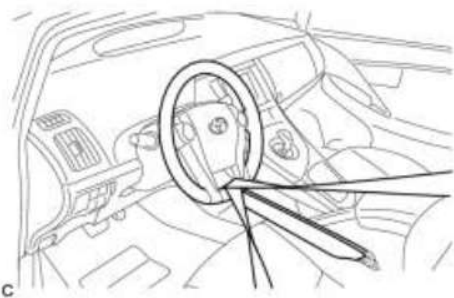
N*m (kgf*cm, ft.*lbf) : Specified torque

ILLUSTRATION



REMOVAL

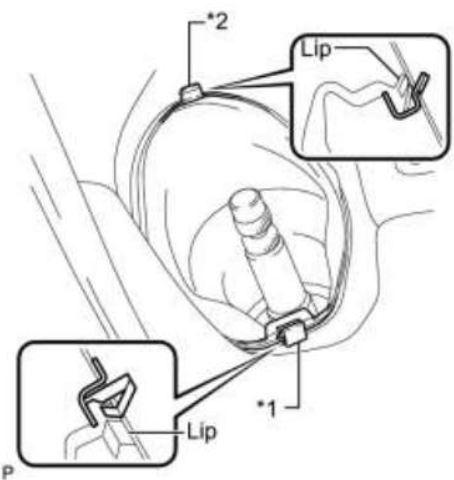
- 1. PLACE FRONT WHEELS FACING STRAIGHT AHEAD
- 2. SECURE STEERING WHEEL



(a) Secure the steering wheel with the seat belt in order to prevent rotation.

HINT:
This operation is useful to prevent damage to the spiral cable.

- 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



(a) Remove clip A, detach clip B from the body and disconnect the No. 1 steering column hole cover sub-assembly.

Text in Illustration

*1	Clip A
*2	Clip B

NOTICE:
Do not damage clips A and B.

- 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

HINT:

Perform the same procedure as for the LH side.

12. SEPARATE FRONT STABILIZER LINK ASSEMBLY LH_ INFO

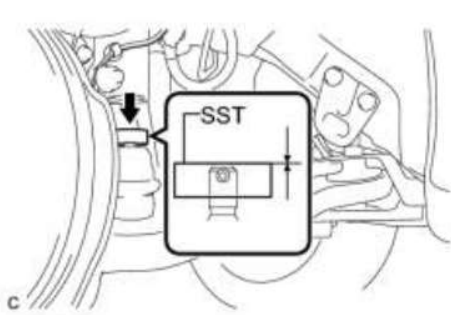
13. SEPARATE FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

14. SEPARATE TIE ROD END SUB-ASSEMBLY LH

(a) Remove the clip and nut.



(b) Install SST to the tie rod end.

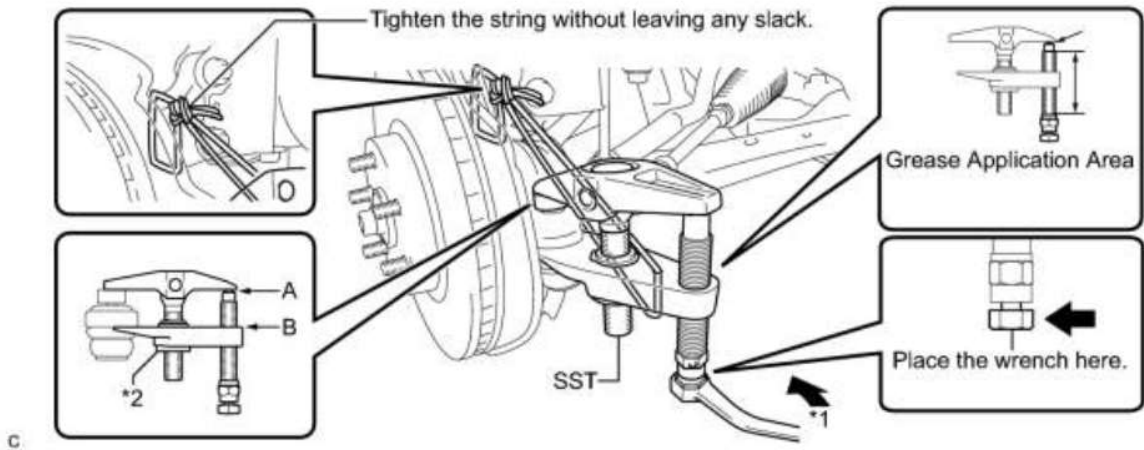
SST: 09960-20010

09961-02060

NOTICE:

Make sure that the upper ends of the tie rod end and SST are aligned.

(c) Using SST, separate the tie rod end from the steering knuckle.



Text in Illustration

*1	Turn	*2	Nut
----	------	----	-----

SST: 09960-20010

09961-02010

CAUTION:

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

NOTICE:

- Be sure to tighten the string firmly to secure SST to the steering knuckle to prevent SST from falling off.
- Install SST with the center nut so that A and B shown in the illustration are parallel. Otherwise, the dust cover may be damaged.
- Be sure to place the wrench on the part indicated in the illustration.
- Do not damage the front disc brake dust cover.
- Do not damage the ball joint dust cover.
- Do not damage the steering knuckle.

15. SEPARATE TIE ROD END SUB-ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

16. SEPARATE FRONT NO. 1 LOWER SUSPENSION ARM SUB-ASSEMBLY LH_ INFO

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

HINT:

Perform the same procedure as for the LH side.

18. REMOVE FRONT ENGINE MOUNTING BRACKET LOWER REINFORCEMENT_ INFO

19. REMOVE REAR SIDE RAIL REINFORCEMENT SUB-ASSEMBLY LH_ INFO

20. REMOVE REAR SIDE RAIL REINFORCEMENT SUB-ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

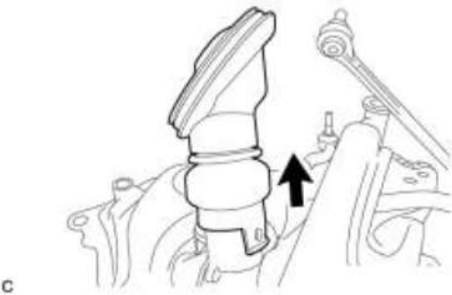
21. REMOVE FRONT SUSPENSION MEMBER REAR BRACE LH_ INFO

22. REMOVE FRONT SUSPENSION MEMBER REAR BRACE RH

HINT:

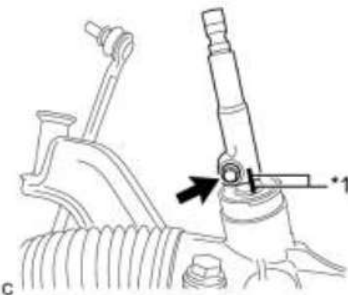
Perform the same procedure as for the LH side.

23. REMOVE FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY_
24. REMOVE NO. 1 STEERING COLUMN HOLE COVER SUB-ASSEMBLY



(a) Remove the No. 1 steering column hole cover sub-assembly from the steering link assembly.

25. REMOVE STEERING INTERMEDIATE SHAFT



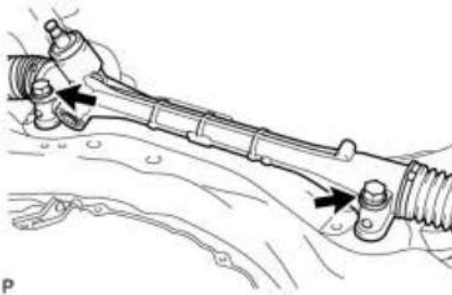
(a) Put matchmarks on the steering intermediate shaft and steering link assembly.

Text in Illustration

*1	Matchmark
----	-----------

(b) Remove the bolt and steering intermediate shaft from the steering link assembly.

26. REMOVE STEERING LINK ASSEMBLY



(a) Remove the 2 bolts, 2 nuts and steering link assembly from the front suspension crossmember sub-assembly.

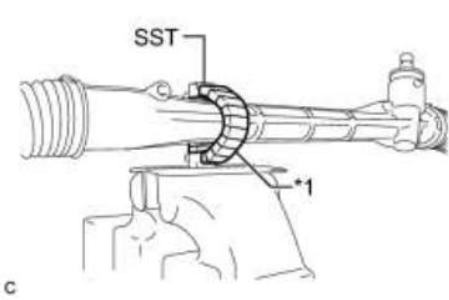
NOTICE:

Keep the nut from rotating while turning the bolt because the nut has its own stopper.

27. SECURE STEERING LINK ASSEMBLY

(a) Using SST, secure the steering link assembly in a vise.

Text in Illustration



*1	Protective Tape
----	-----------------

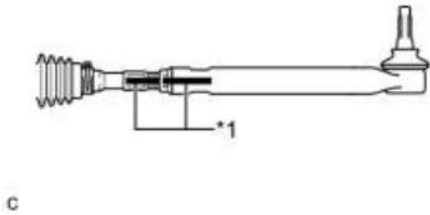
SST: 09612-00012

HINT:

Tape SST before use.

28. REMOVE TIE ROD END SUB-ASSEMBLY LH

Text in Illustration



*1	Matchmark
----	-----------

(a) Put matchmarks on the tie rod end sub-assembly LH and steering gear assembly.

(b) Remove the tie rod end sub-assembly LH and lock nut.

29. REMOVE TIE ROD END SUB-ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

DISASSEMBLY

1. REMOVE STEERING RACK BOOT CLIP LH

(a) Using pliers, remove the steering rack boot clip LH.

2. REMOVE STEERING RACK BOOT CLIP RH

HINT:

Perform the same procedure as for the LH side.

3. REMOVE NO. 2 STEERING RACK BOOT CLAMP



(a) Using a screwdriver, remove the No. 2 steering rack boot clamp.

NOTICE:

Be careful not to damage the steering rack boot.

4. REMOVE NO. 1 STEERING RACK BOOT CLAMP

HINT:

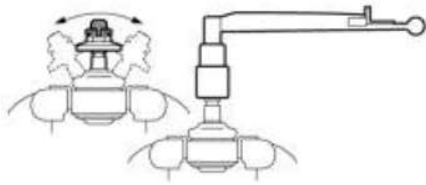
Perform the same procedure as for the No. 2 steering rack boot clamp.

5. REMOVE STEERING RACK BOOT LH

6. REMOVE STEERING RACK BOOT RH

INSPECTION

1. INSPECT TIE ROD END SUB-ASSEMBLY LH



(a) Secure the tie rod end sub-assembly LH in a vise.

NOTICE:

Do not overtighten the vise.

c

(b) Install the nut to the stud bolt.

(c) Flip the ball joint back and forth 5 times.

(d) Set a torque wrench to the nut, turn the ball joint continuously at a rate of 2 to 4 seconds per turn, and check the turning torque on the 5th turn.

Standard turning torque:

0.3 to 1.9 N*m (3 to 19 kgf*cm, 3 to 17 in.*lbf)

HINT:

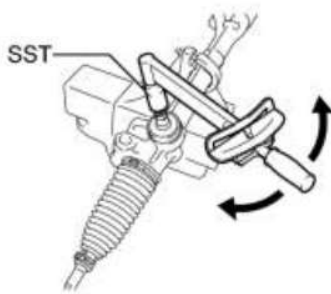
If the turning torque is not within the specified range, replace the tie rod end sub-assembly LH with a new one.

2. INSPECT TIE ROD END SUB-ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

3. INSPECT TOTAL PRELOAD



(a) Using SST and a torque wrench, inspect the total preload.

SST: 09616-00011

Standard preload:

0.7 to 1.1 N*m (7 to 11 kgf*cm, 6 to 9 in.*lbf)

NOTICE:

c

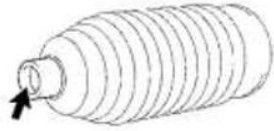
Inspect the total preload around the steering rack center position.

HINT:

If the total preload is not within the specified range, replace the steering gear assembly with a new one.

REASSEMBLY

1. INSTALL STEERING RACK BOOT LH



(a) Apply lithium soap base glycol grease to the inside of the small opening of a new steering rack boot LH.

P

CST755

(b) Install the steering rack boot LH to the groove on the rack housing.

NOTICE:

- Be careful not to damage or twist the boot.
- Make sure that the boot is free of rust and foreign matter.

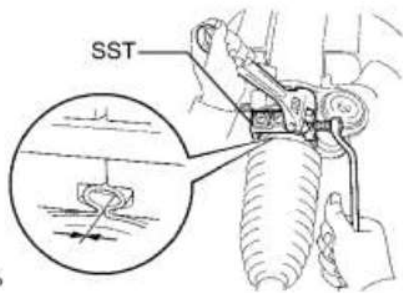
2. INSTALL STEERING RACK BOOT RH

HINT:

Perform the same procedure as for the LH side.

3. INSTALL NO. 2 STEERING RACK BOOT CLAMP

(a) Using SST, tighten a new No. 2 steering rack boot clamp, as shown in the illustration.



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SST: 09521-24010

Clearance:

3.0 mm (0.118 in.) or less

NOTICE:

Be careful not to damage the steering rack boot.

4. INSTALL NO. 1 STEERING RACK BOOT CLAMP

HINT:

Perform the same procedure as for the No. 2 steering rack boot clamp.

SST: 09521-24010

5. INSTALL STEERING RACK BOOT CLIP LH

(a) Using pliers, install the steering rack boot clip LH.

6. INSTALL STEERING RACK BOOT CLIP RH

HINT:

Perform the same procedure as for the LH side.

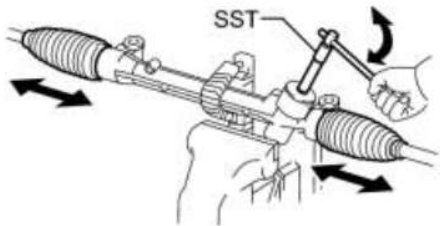
7. INSPECT STEERING GEAR ASSEMBLY

(a) Using SST, rotate the pinion shaft to see if both the left and the right steering rack boots expand and contract smoothly.

SST: 09616-00011

HINT:

If the operation cannot be done as specified, use a new steering rack boot clamp and reinstall the steering rack boots.

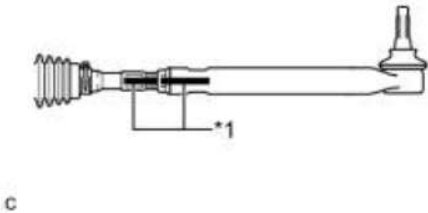


INSTALLATION

1. INSTALL TIE ROD END SUB-ASSEMBLY LH

(a) Install the lock nut and tie rod end sub-assembly LH to the steering gear assembly until the matchmarks are aligned.

Text in Illustration



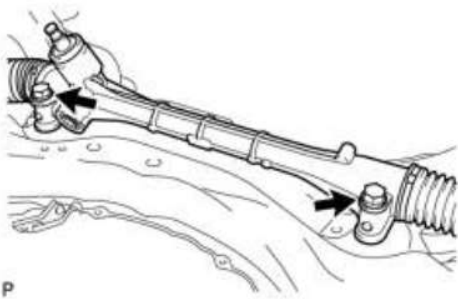
*1	Matchmark
----	-----------

HINT:
After adjusting the toe-in, tighten the lock nut.

2. INSTALL TIE ROD END SUB-ASSEMBLY RH

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

3. INSTALL STEERING LINK ASSEMBLY

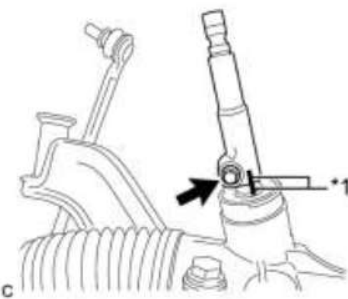


(a) Install the steering link assembly to the front suspension crossmember sub-assembly with the 2 bolts and 2 nuts.

- Keep the nut from rotating while turning the bolt because the nut has its own stopper.
- Make sure to tighten the bolts starting from the left side of the vehicle.

Torque: 138 N·m (1407 kgf·cm, 102ft·lbf)

4. INSTALL STEERING INTERMEDIATE SHAFT



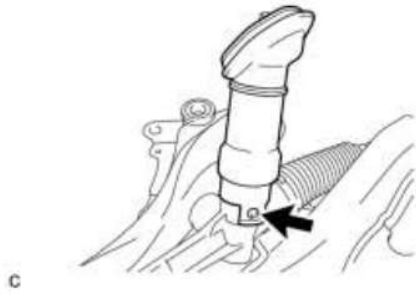
(a) Align the matchmarks and install the steering intermediate shaft to the steering link assembly.

Text in Illustration

*1	Matchmark
----	-----------

(b) Install the bolt.
Torque: 35 N·m (357 kgf·cm, 26ft·lbf)
2010 Toyota Prius

5. INSTALL NO. 1 STEERING COLUMN HOLE COVER SUB-ASSEMBLY



(a) Align the round hole in the No. 1 steering column hole cover sub-assembly with the protrusion of the steering link assembly to install the cover.

6. INSTALL FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY_

INFO

7. INSTALL FRONT SUSPENSION MEMBER REAR BRACE LH_

INFO

8. INSTALL FRONT SUSPENSION MEMBER REAR BRACE RH

HINT:

Perform the same procedure as for the LH side.

9. INSTALL REAR SIDE RAIL REINFORCEMENT SUB-ASSEMBLY LH_

INFO

10. INSTALL REAR SIDE RAIL REINFORCEMENT SUB-ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

11. INSTALL FRONT ENGINE MOUNTING BRACKET LOWER REINFORCEMENT_

INFO

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

INFO

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

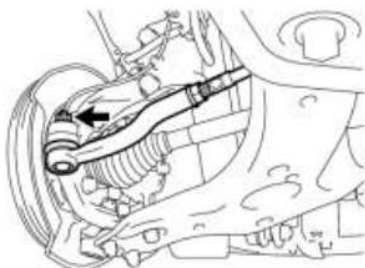
HINT:

Perform the same procedure as for the LH side.

14. CONNECT TIE ROD END SUB-ASSEMBLY LH

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

Torque: **49 N·m (500 kgf·cm, 36ft·lbf)**



NOTICE:

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

(b) Install a new clip.

15. CONNECT TIE ROD END SUB-ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

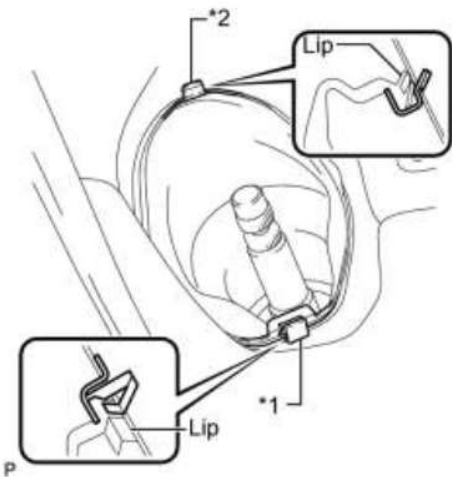
16. CONNECT FRONT STABILIZER LINK ASSEMBLY LH INFO

17. CONNECT FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Perform the same procedure as for the LH side.

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



(a) Place clip A as shown in the illustration and engage clip B to the body to connect the No. 1 steering column hole cover sub-assembly.

Text in Illustration

*1	Clip A
*2	Clip B

NOTICE:

Make sure that the lips of the No. 1 steering column hole cover sub-assembly are not damaged.

19. CONNECT NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY INFO

20. PLACE FRONT WHEELS FACING STRAIGHT AHEAD

21. INSTALL COLUMN HOLE COVER SILENCER SHEET INFO

22. INSTALL REAR ENGINE UNDER COVER LH

23. INSTALL REAR ENGINE UNDER COVER RH

HINT:

Perform the same procedure as for the LH side.

24. INSTALL FRONT NO. 3 ENGINE UNDER COVER

25. INSTALL NO. 2 ENGINE UNDER COVER

26. INSTALL NO. 1 ENGINE UNDER COVER

27. INSTALL FRONT WHEELS

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

28. STABILIZE SUSPENSION_

29. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

(a) Inspect and adjust the front wheel alignment .