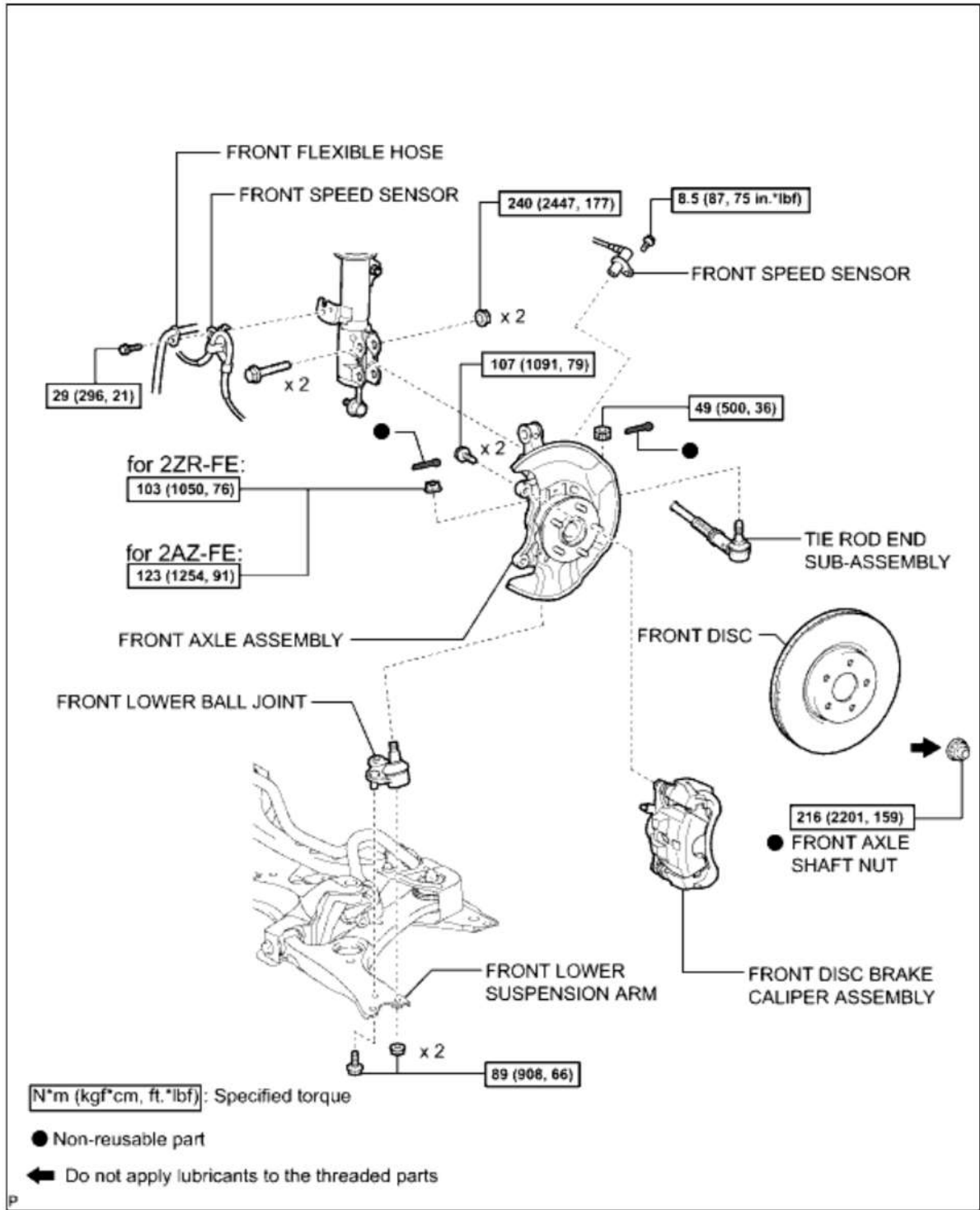


Last Modified: 3-10-2010	6.4 K	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM000002PCF00RX
Title: FRONT SUSPENSION: FRONT LOWER BALL JOINT: COMPONENTS (2010 Corolla)		

COMPONENTS

ILLUSTRATION





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Last Modified: 3-10-2010	6.4 A	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000003H3014X
Title: FRONT SUSPENSION: FRONT LOWER BALL JOINT: REMOVAL (2010 Corolla)		

REMOVAL

HINT:

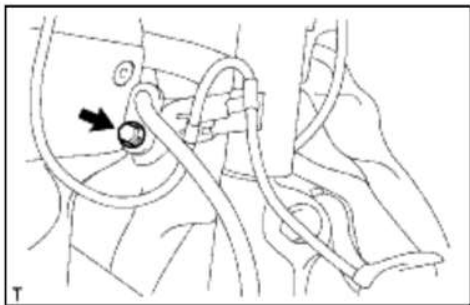
- Use the same procedure for the LH side and RH side.
- The following procedure listed is for the LH side.

1. REMOVE FRONT WHEEL

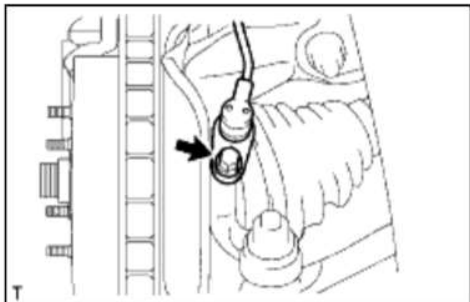
2. REMOVE FRONT AXLE SHAFT NUT (for 2AZ-FE)

3. REMOVE FRONT AXLE SHAFT NUT (for 2ZR-FE)

4. SEPARATE FRONT SPEED SENSOR



- (a) Remove the bolt and separate the front speed sensor and flexible hose from the front shock absorber bracket.



- (b) Remove the bolt and separate the front speed sensor from the steering knuckle.

NOTICE:

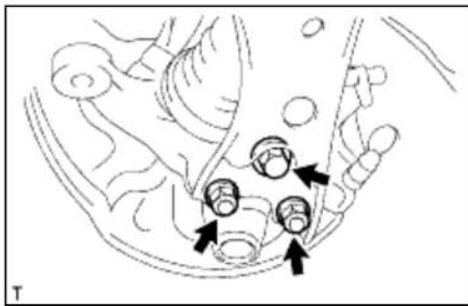
- Keep the front speed sensor tip and installation surfaces free of foreign matter.
- Remove the front speed sensor without turning it from its original installation angle.

5. SEPARATE FRONT DISC BRAKE CALIPER ASSEMBLY

6. REMOVE FRONT DISC

7. SEPARATE TIE ROD END SUB-ASSEMBLY

8. SEPARATE FRONT LOWER SUSPENSION ARM



- (a) Remove the bolt and 2 nuts, and separate the front lower suspension arm from the lower ball joint.

9. REMOVE FRONT AXLE ASSEMBLY INFO

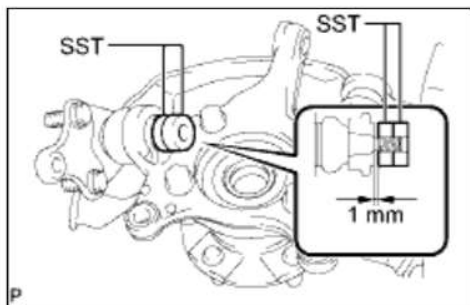
10. REMOVE FRONT LOWER BALL JOINT

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

NOTICE:

When using a vise, do not overtighten it.

- (b) Remove the cotter pin and nut.



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

SST: 09960-20010

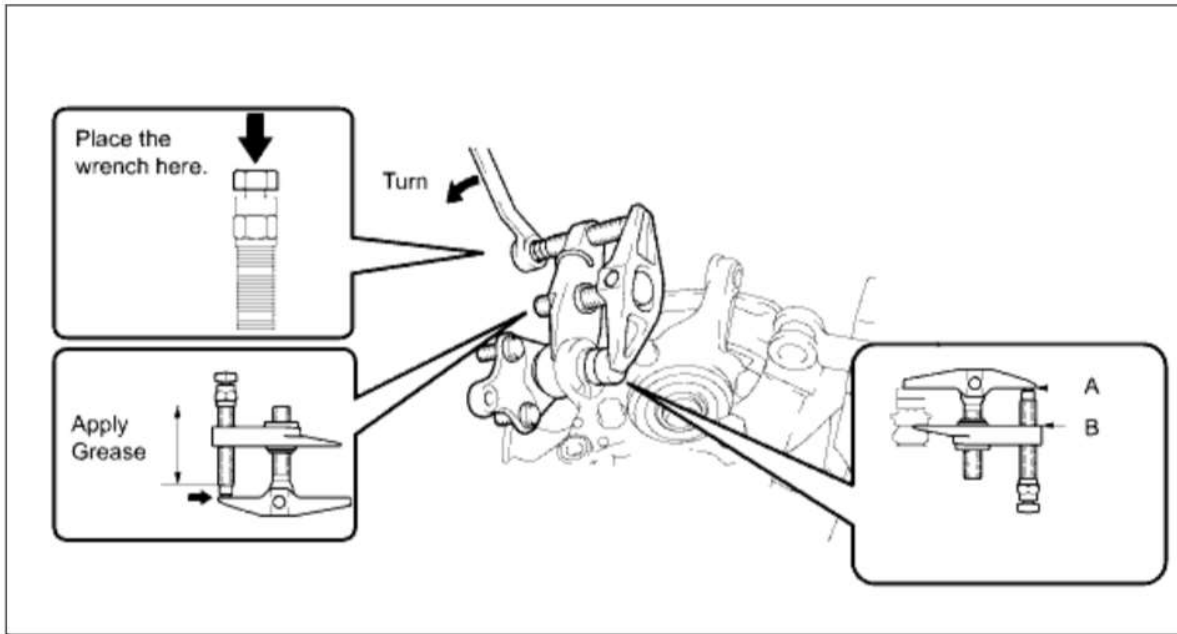
09961-02050

09961-02050

NOTICE:

Check that the clearance measurement between SST and the front axle assembly is 1 mm (0.04 in.).

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

**SST: 09960-20010**

09961-02010

09961-02050

09961-02050

CAUTION:

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

NOTICE:

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

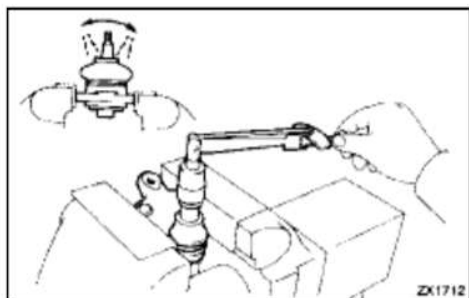


TOYOTA

Last Modified: 3-10-2010	6.4 G	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000011DL01QX
Title: FRONT SUSPENSION: FRONT LOWER BALL JOINT: INSPECTION (2010 Corolla)		

INSPECTION

1. INSPECT FRONT LOWER BALL JOINT



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

(1) Secure the front lower ball joint 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.

Turning Torque (for 2AZ-FE) - Torque: 1.0 to 3.4 N·m (10 to 35 kgf·cm, 9 to 30in·lbf)

Turning Torque (for 2ZR-FE) - Torque: 1.0 to 4.9 N·m (10 to 50 kgf·cm, 9 to 43in·lbf)

If the turning torque is not within the specified range, replace the front lower ball joint 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.



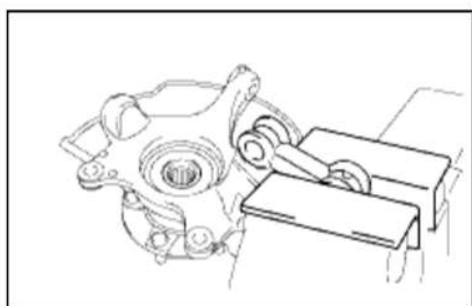
Last Modified: 3-10-2010	6.4 A	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000003H2014X
Title: FRONT SUSPENSION: FRONT LOWER BALL JOINT: INSTALLATION (2010 Corolla)		

INSTALLATION

HINT:

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

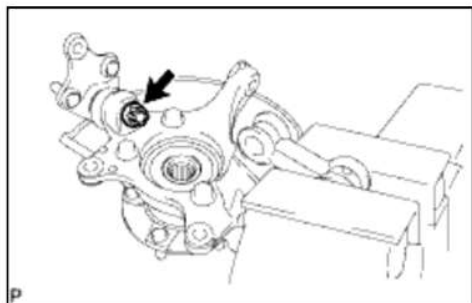
1. INSTALL FRONT LOWER BALL JOINT



- (a) Secure the front axle assembly in a vise using aluminum plates.

NOTICE:

When using a vise, do not overtighten it.



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

2ZR-FE - Torque: 103 N·m (1050 kgf·cm, 76ft·lbf)

2AZ-FE - Torque: 123 N·m (1254 kgf·cm, 91ft·lbf)

- (c) Install a new cotter pin.

NOTICE:

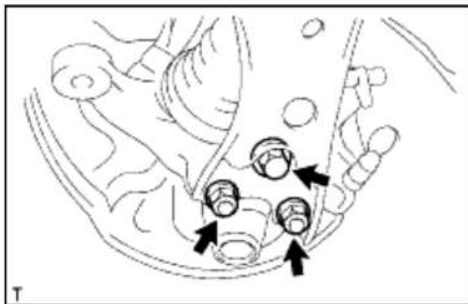
Further tighten the nut up to 60° if the holes for the cotter pin are not aligned.

2. INSTALL FRONT AXLE ASSEMBLY INFO

3. CONNECT FRONT LOWER SUSPENSION ARM

- (a) Install the front lower suspension arm to the lower ball joint with the bolt and 2 nuts.

Torque: 89 N·m (908 kgf·cm, 66ft·lbf)



4. CONNECT TIE ROD END SUB-ASSEMBLY

INFO

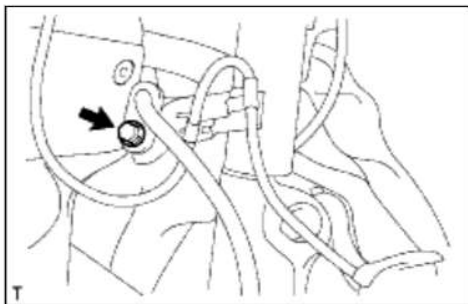
5. INSTALL FRONT DISC

INFO

6. INSTALL FRONT DISC BRAKE CALIPER ASSEMBLY

INFO

7. INSTALL FRONT SPEED SENSOR

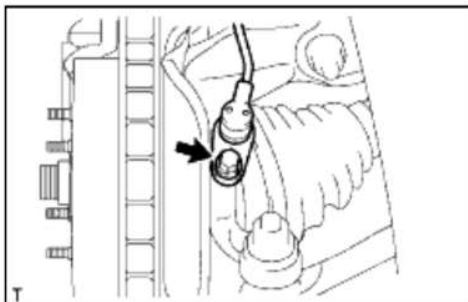


- (a) Install the front flexible hose and front speed sensor with the bolt.

Torque: 29 N·m (296 kgf·cm, 21ft·lbf)

NOTICE:

Install the flexible hose and speed sensor without twisting them.



- (b) Install the front speed sensor onto the steering knuckle with the bolt.

Torque: 8.5 N·m (87 kgf·cm, 75in·lbf)

8. INSTALL FRONT AXLE SHAFT NUT (for 2AZ-FE)

INFO

9. INSTALL FRONT AXLE SHAFT NUT (for 2ZR-FE)

INFO

10. INSTALL FRONT WHEEL

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

11. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

HINT:

Inspect and adjust front wheel alignment  .

12. CHECK FOR SPEED SENSOR SIGNAL**HINT:**

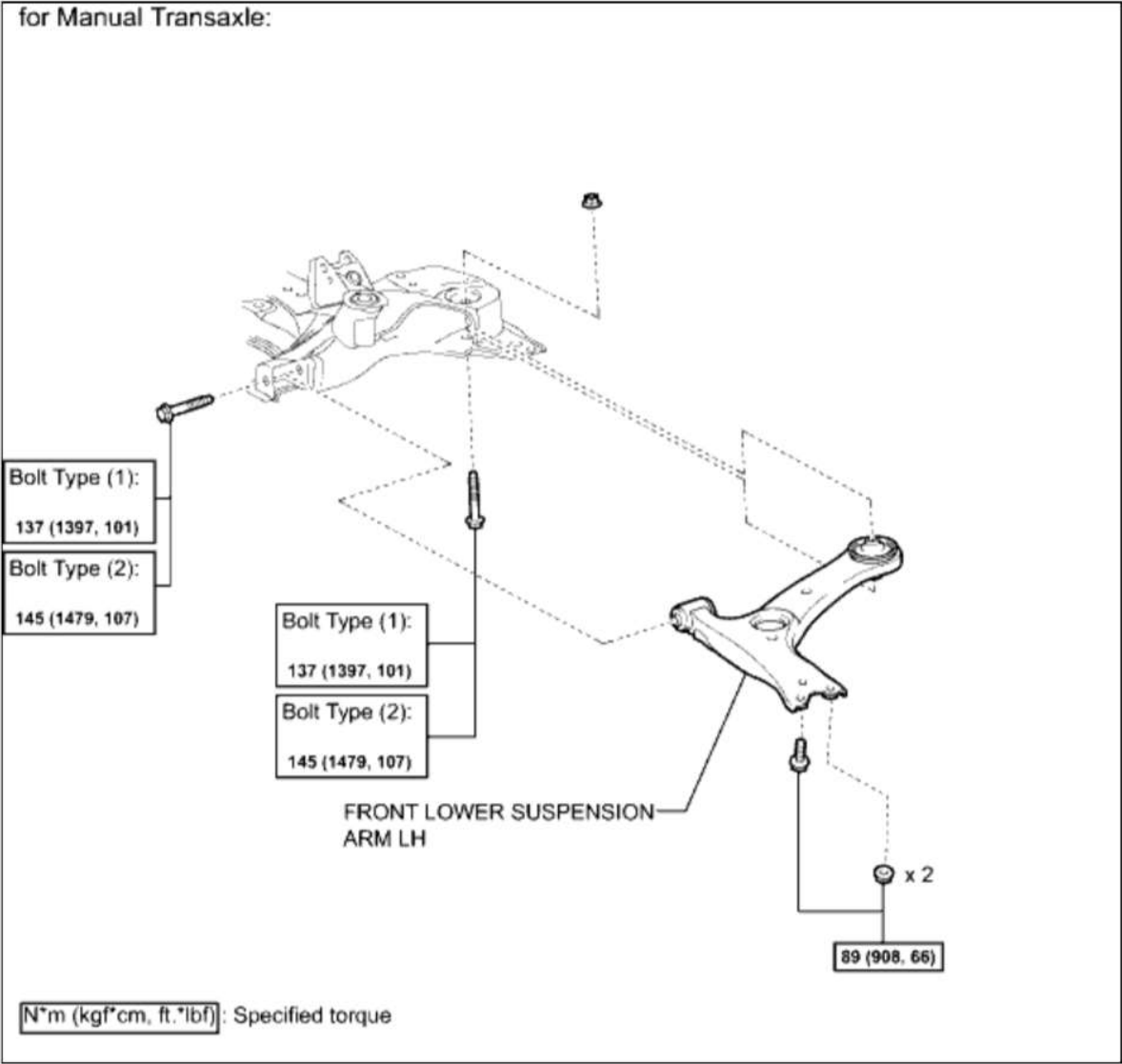
Check for speed sensor signal  .



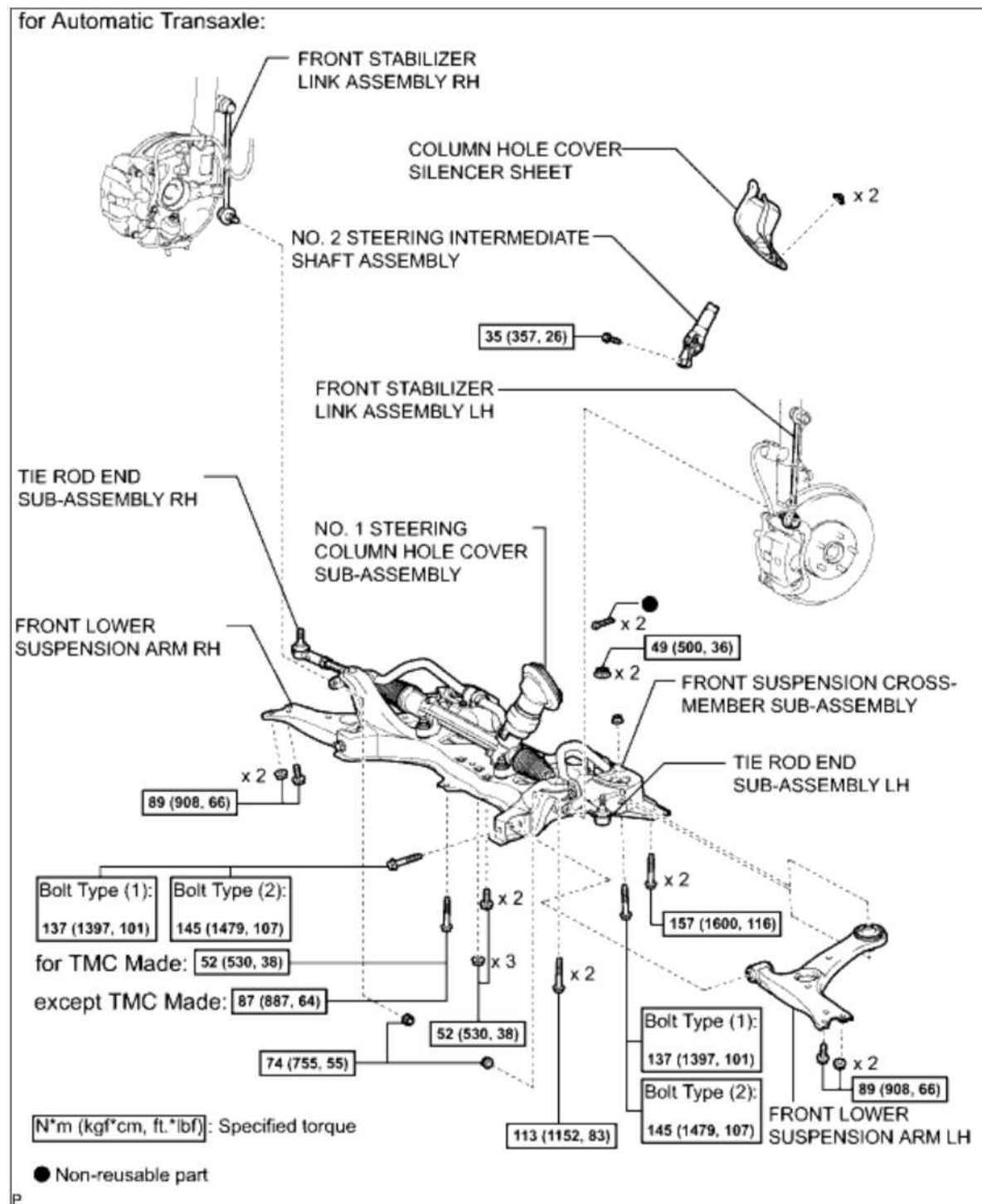
Last Modified: 3-10-2010	6.4 K	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM000002PCE00UX
Title: FRONT SUSPENSION: FRONT LOWER SUSPENSION ARM: COMPONENTS (2010 Corolla)		

COMPONENTS

ILLUSTRATION



ILLUSTRATION



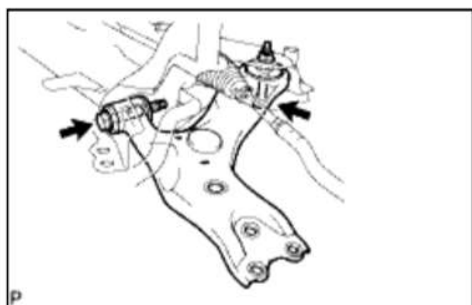
Last Modified: 3-10-2010	6.4 A	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000029T401UX
Title: FRONT SUSPENSION: FRONT LOWER SUSPENSION ARM: INSTALLATION (2010 Corolla)		

INSTALLATION

HINT:

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

1. TEMPORARILY INSTALL FRONT LOWER SUSPENSION ARM LH



- (a) Temporarily install the front lower suspension arm LH to the front suspension crossmember with the 2 bolts and nut.

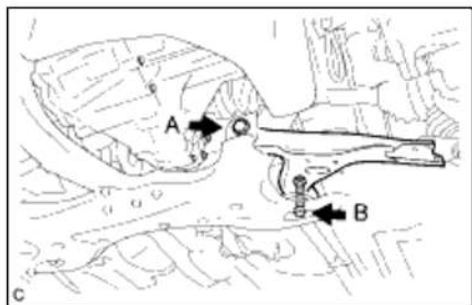
NOTICE:

Because the nut has its own stopper, do not turn the nut. While securing the nut, tighten the bolt.

HINT:

Fully tighten the 2 bolts after stabilizing the suspension.

2. TEMPORARILY INSTALL FRONT LOWER SUSPENSION ARM LH (for Manual Transaxle)



- (a) Temporarily install the front lower suspension arm LH to the front suspension crossmember sub-assembly with the 2 bolts and nut.

NOTICE:

Because the nut has its own stopper, do not turn the nut. While securing the nut, tighten the bolt B.

HINT:

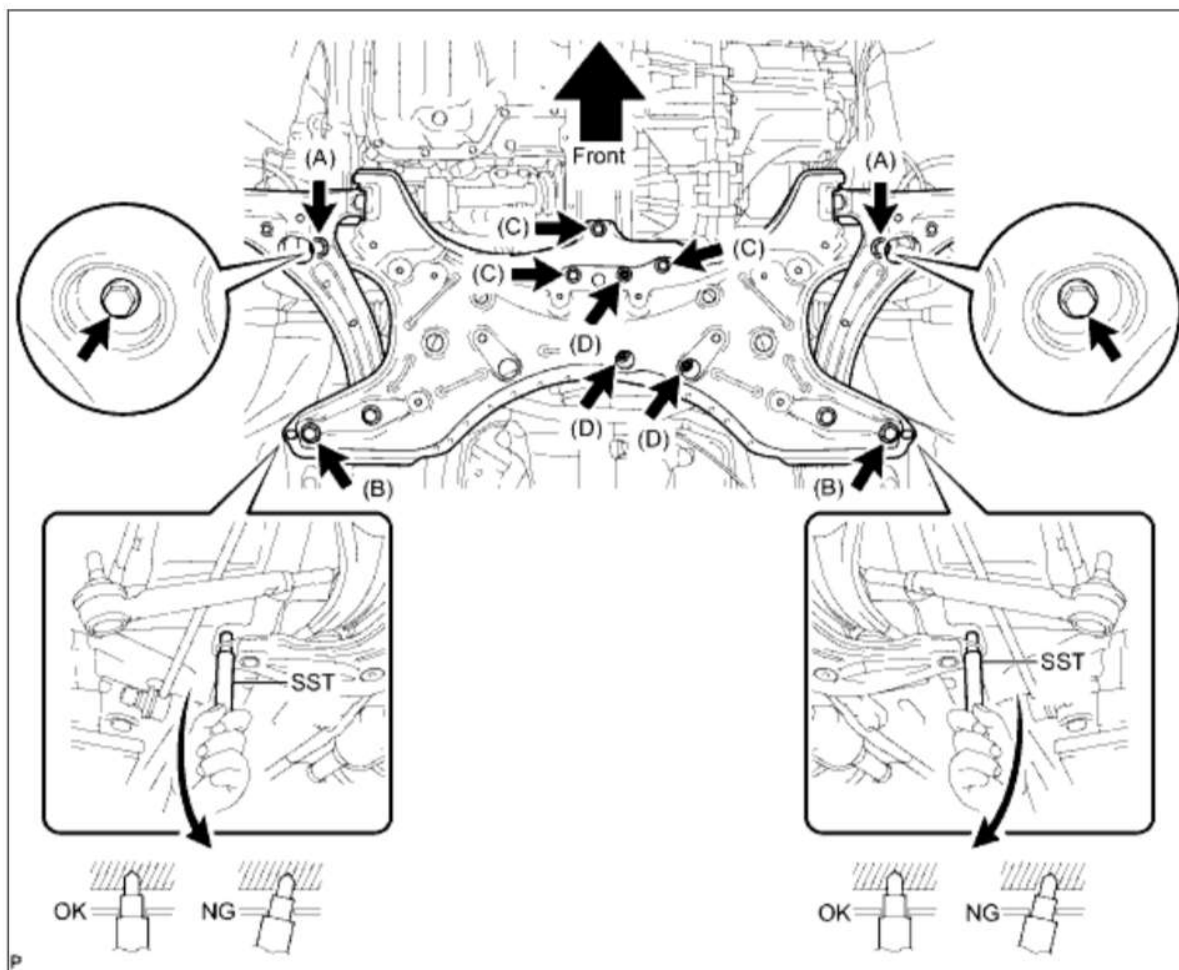
Fully tighten the 2 bolts after stabilizing the suspension.

3. INSTALL FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY

- (a) for TMC Made:

- (1) While alternately inserting SST into the guide holes on both sides of the front suspension crossmember RH and LH, tighten 2 bolts (A), 2 bolts (B), 3 bolts (C), and 3 nuts (D) on the RH and LH sides to the respective specified torque in several steps.

SST: 09670-00010



Bolt (A) - Torque: 113 N·m (1152 kgf·cm, 83ft·lbf)

Bolt (B) - Torque: 157 N·m (1600 kgf·cm, 116ft·lbf)

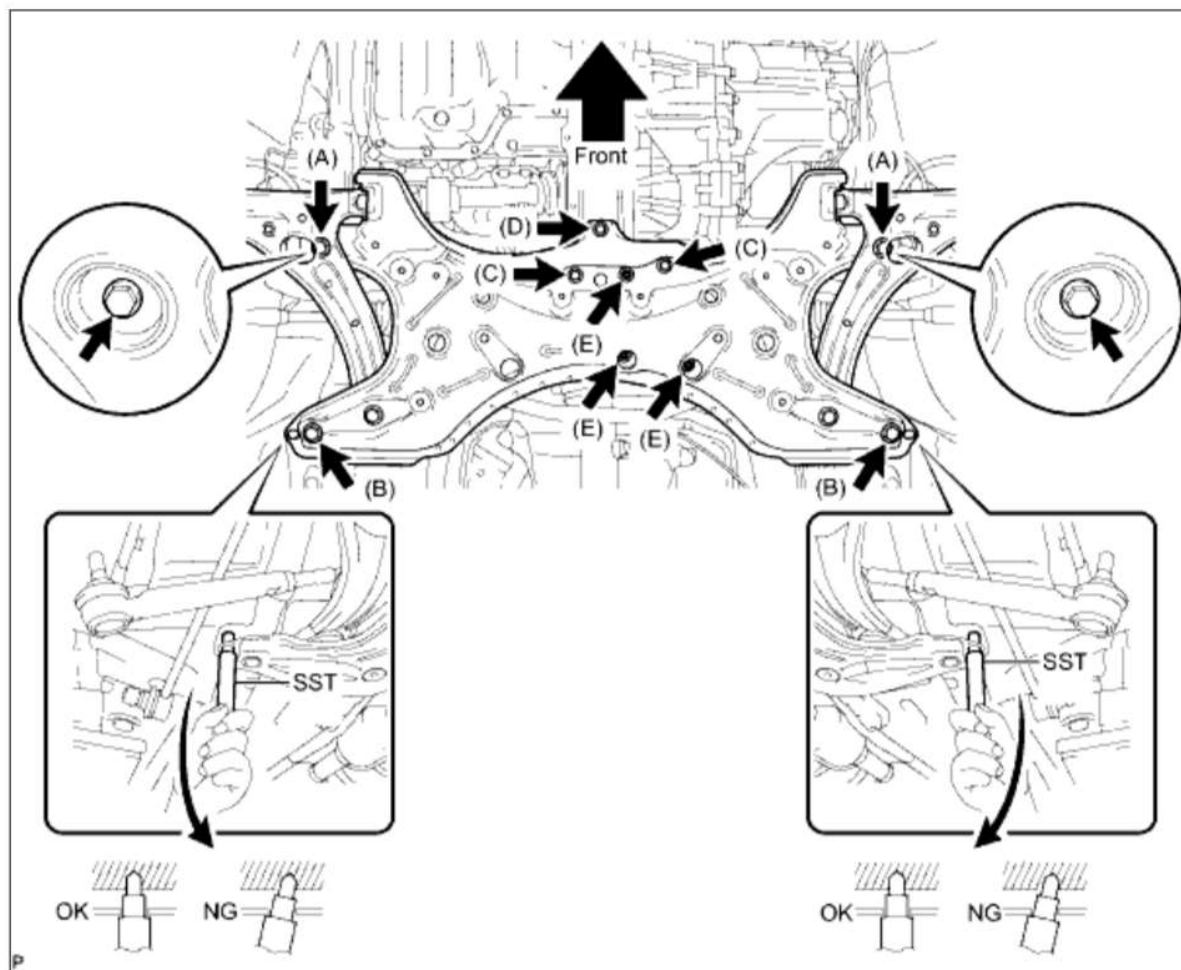
Bolt (C) - Torque: 52 N·m (530 kgf·cm, 38ft·lbf)

Nut (D) - Torque: 52 N·m (530 kgf·cm, 38ft·lbf)

(b) except TMC Made:

- (1) While alternately inserting SST into the guide holes on both sides of the front suspension crossmember RH and LH, tighten 2 bolts (A), 2 bolts (B), 2 bolts (C), bolt (D) and 3 nuts (E) on the RH and LH sides to the respective specified torque in several steps.

SST: 09670-00010



- Bolt (A) - Torque: 113 N·m (1152 kgf·cm, 83ft·lbf)**
Bolt (B) - Torque: 157 N·m (1600 kgf·cm, 116ft·lbf)
Bolt (C) - Torque: 52 N·m (530 kgf·cm, 38ft·lbf)
Bolt (D) - Torque: 87 N·m (887 kgf·cm, 64ft·lbf)
Nut (E) - Torque: 52 N·m (530 kgf·cm, 38ft·lbf)

4. CONNECT FRONT LOWER SUSPENSION ARM LH

INFO

5. CONNECT FRONT LOWER SUSPENSION ARM RH

HINT:

Perform the same procedure as the LH side.

6. CONNECT FRONT STABILIZER LINK ASSEMBLY LH

INFO

7. CONNECT FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Perform the same procedure as the LH side.

8. CONNECT TIE ROD END SUB-ASSEMBLY LH

INFO

9. CONNECT TIE ROD END SUB-ASSEMBLY RH

HINT:

Perform the same procedure as the LH side.

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

INFO

11. CONNECT NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY

INFO

12. PLACE FRONT WHEELS FACING STRAIGHT AHEAD

13. INSTALL COLUMN HOLE COVER SILENCER SHEET

INFO

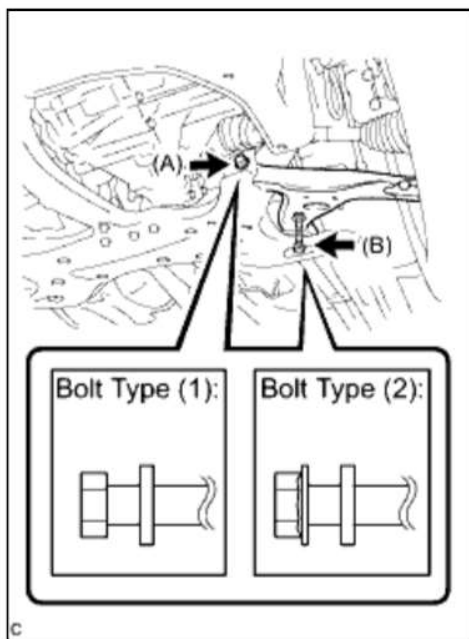
14. INSTALL FRONT WHEELS

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

15. STABILIZE SUSPENSION

- (a) Lower the vehicle and bounce it up and down several times to stabilize the front suspension.
Raise the vehicle.

16. FULLY TIGHTEN FRONT LOWER SUSPENSION ARM LH



- (a) Fully tighten the bolt (A).

Bolt type (1) - Torque: 137 N·m (1397 kgf·cm, 101ft·lbf)

Bolt type (2) - Torque: 145 N·m (1479 kgf·cm, 107ft·lbf)

NOTICE:

The final torque must be applied under standard vehicle height conditions.

- (b) Fully tighten the bolt (B).

Bolt type (1) - Torque: 137 N·m (1397 kgf·cm, 101ft·lbf)

Bolt type (2) - Torque: 145 N·m (1479 kgf·cm, 107ft·lbf)

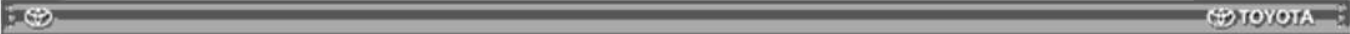
NOTICE:

- The final torque must be applied under standard vehicle height conditions.
- Because the nut has its own stopper, do not turn the nut. While securing the nut, tighten the bolt B.

17. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

HINT:

Inspect and adjust front wheel alignment INFO .



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Last Modified: 3-10-2010	6.4 A	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000029T701UX
Title: FRONT SUSPENSION: FRONT LOWER SUSPENSION ARM: REMOVAL (2010 Corolla)		

REMOVAL

HINT:

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

1. PLACE FRONT WHEELS FACING STRAIGHT AHEAD

2. SECURE STEERING WHEEL

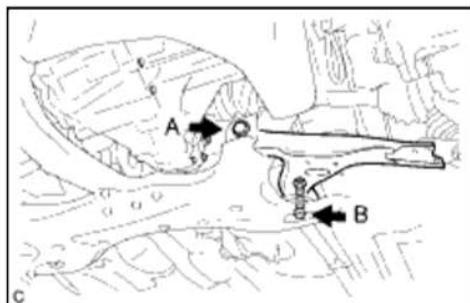
[INFO](#)

3. REMOVE FRONT WHEELS

4. SEPARATE FRONT LOWER SUSPENSION ARM LH (for Manual Transaxle)

[INFO](#)

5. REMOVE FRONT LOWER SUSPENSION ARM LH (for Manual Transaxle)



- (a) Remove the 2 bolts, nut, and front lower suspension arm LH from the front suspension crossmember sub-assembly.

NOTICE:

Because the nut has its own stopper, do not turn the nut. While securing the nut, loosen bolt B.

6. REMOVE COLUMN HOLE COVER SILENCER SHEET

[INFO](#)

7. SEPARATE NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY

[INFO](#)

8. SEPARATE NO. 1 STEERING COLUMN HOLE COVER SUB-ASSEMBLY

[INFO](#)

9. SEPARATE TIE ROD END SUB-ASSEMBLY LH

[INFO](#)

10. SEPARATE TIE ROD END SUB-ASSEMBLY RH

HINT:

Perform the same procedure as the LH side.

11. SEPARATE FRONT STABILIZER LINK ASSEMBLY LH

[INFO](#)

12. SEPARATE FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Perform the same procedure as the LH side.

13. SEPARATE FRONT LOWER SUSPENSION ARM LH

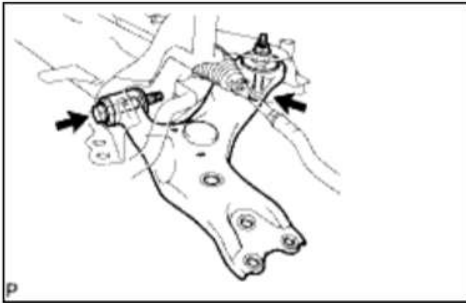
INFO

14. SEPARATE FRONT LOWER SUSPENSION ARM RH**HINT:**

Perform the same procedure as the LH side.

15. REMOVE FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY

INFO

16. REMOVE FRONT LOWER SUSPENSION ARM LH

(a) Remove the 2 bolts, nut, and front lower suspension arm LH from the front suspension crossmember.

CAUTION:

Because the nut has its own stopper, do not turn the nut.
While securing the nut, loosen bolt.

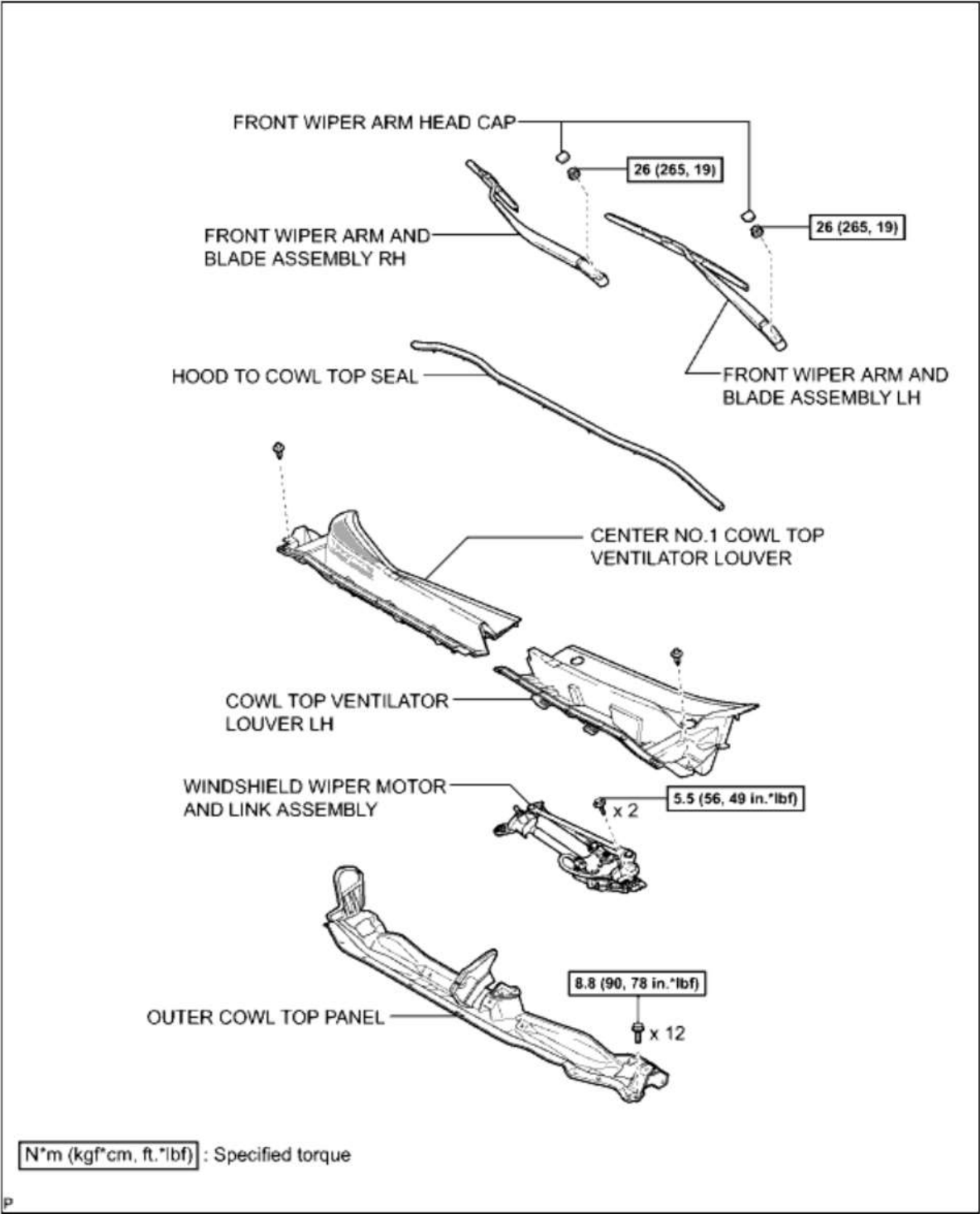


TOYOTA

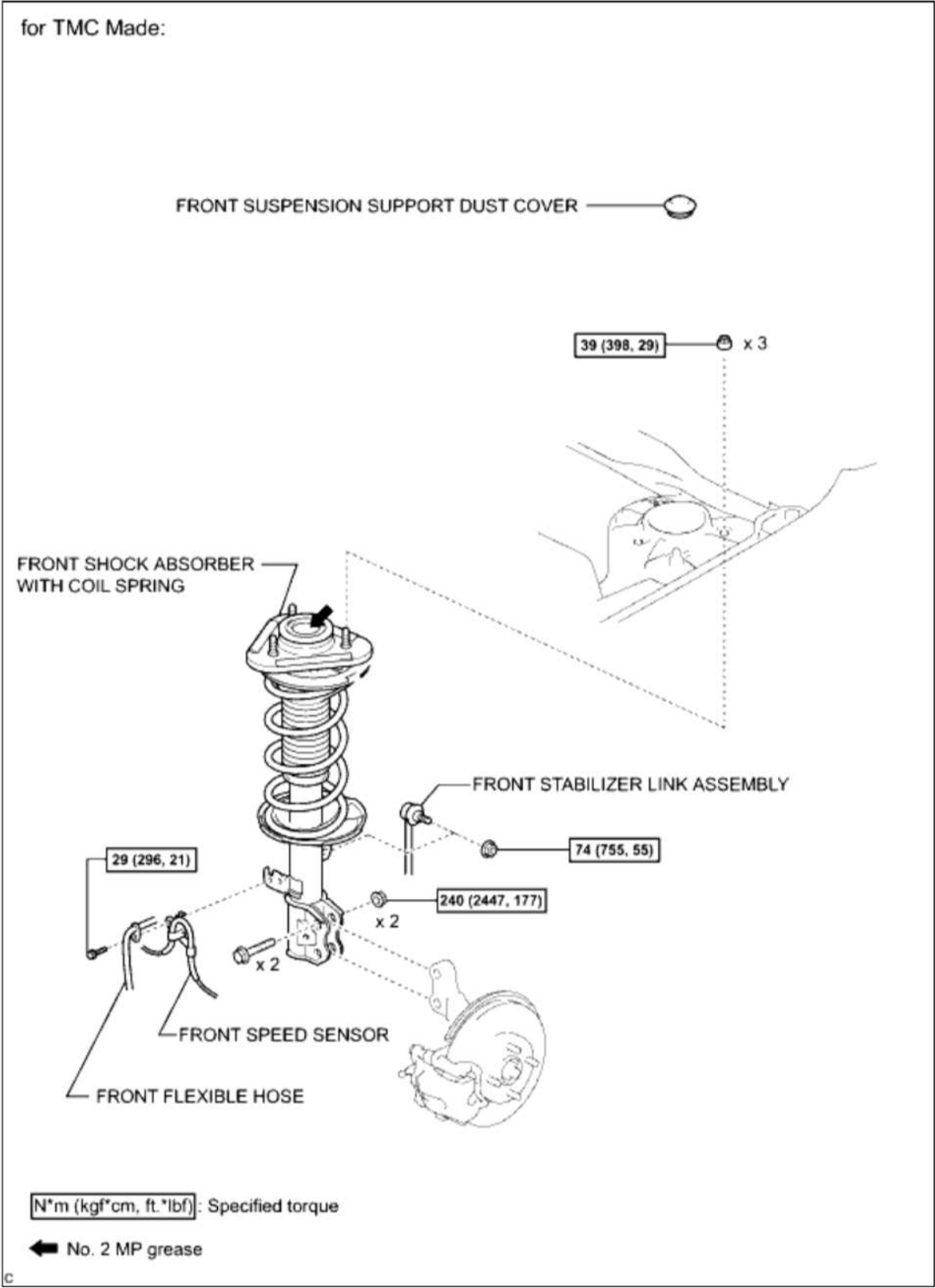
Last Modified: 3-10-2010	6.4 K	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM000002PCD00SX
Title: FRONT SUSPENSION: FRONT SHOCK ABSORBER: COMPONENTS (2010 Corolla)		

COMPONENTS

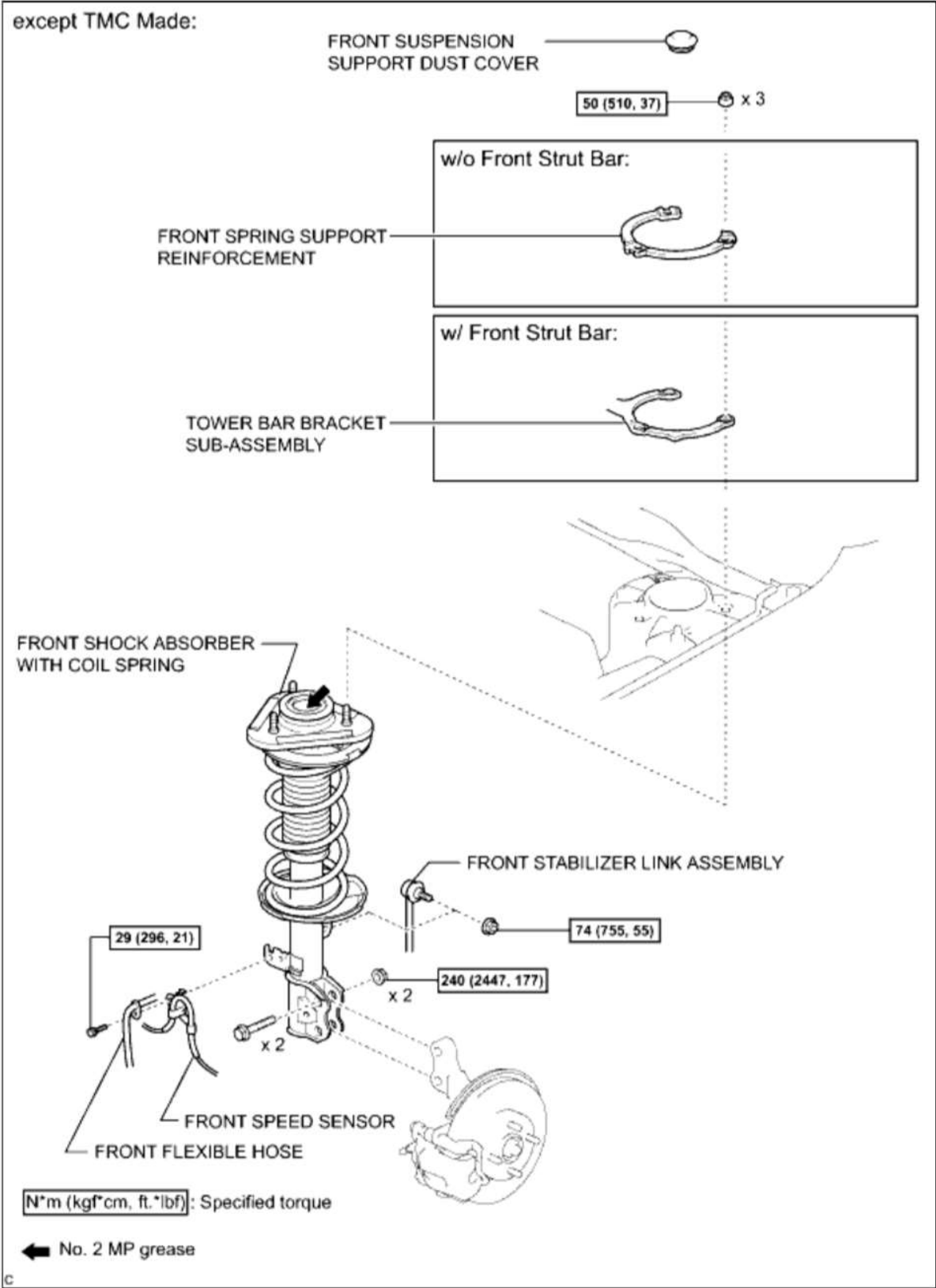
ILLUSTRATION



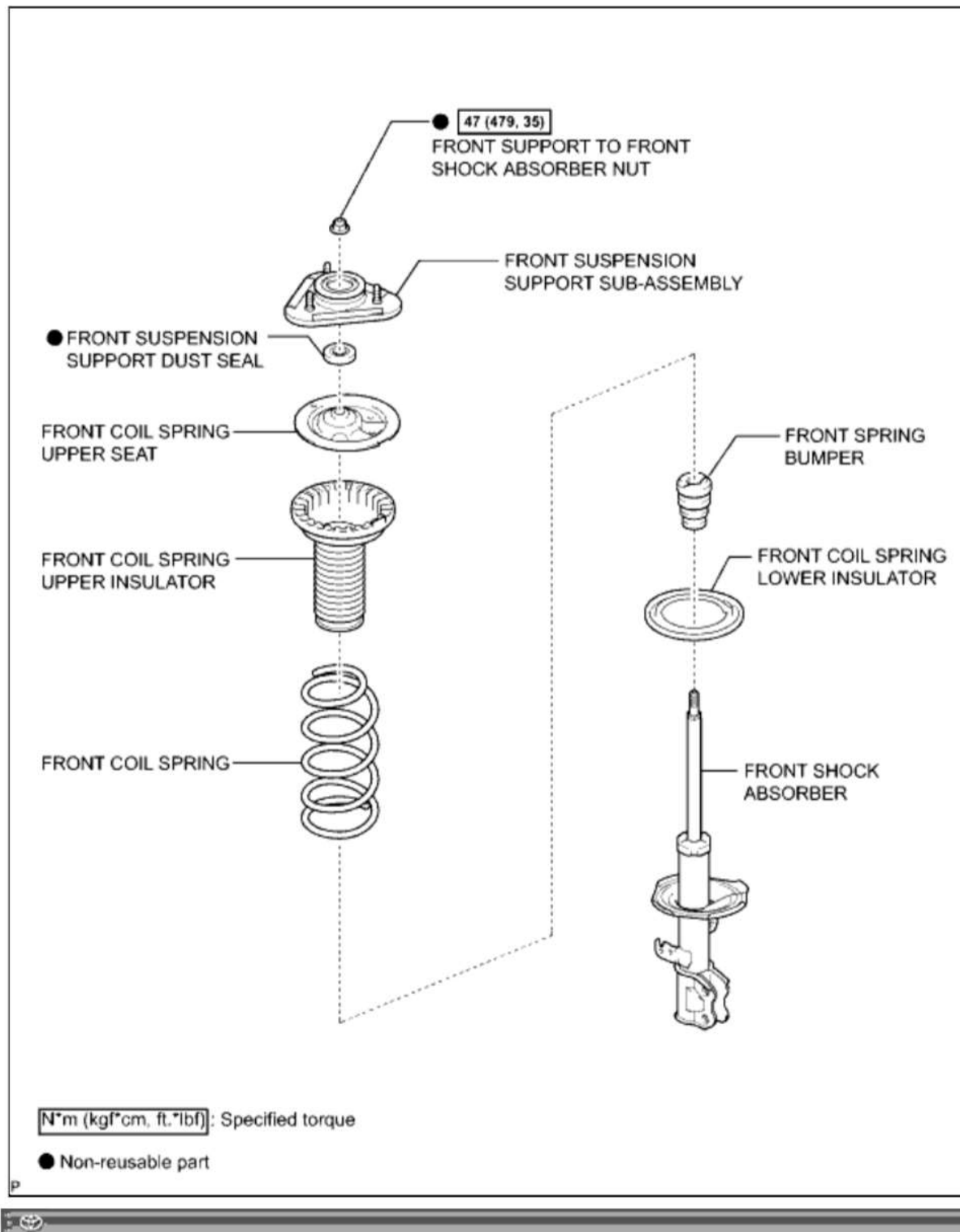
ILLUSTRATION



ILLUSTRATION



ILLUSTRATION



Last Modified: 3-10-2010	6.4 A	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000003GY010X
Title: FRONT SUSPENSION: FRONT SHOCK ABSORBER: REMOVAL (2010 Corolla)		

REMOVAL

HINT:

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

1. REMOVE FRONT WHEEL

2. REMOVE FRONT WIPER ARM HEAD CAP INFO

3. REMOVE FRONT WIPER ARM AND BLADE ASSEMBLY LH INFO

4. REMOVE FRONT WIPER ARM AND BLADE ASSEMBLY RH INFO

5. REMOVE HOOD TO COWL TOP SEAL INFO

6. REMOVE CENTER NO.1 COWL TOP VENTILATOR LOUVER INFO

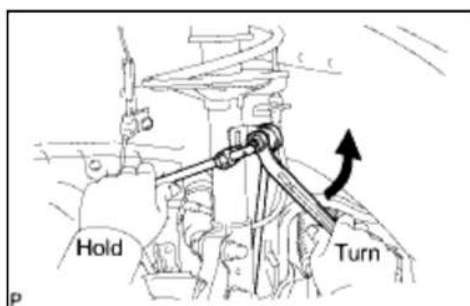
7. REMOVE COWL TOP VENTILATOR LOUVER LH INFO

8. REMOVE WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY INFO

9. REMOVE OUTER COWL TOP PANEL (for TMC Made) INFO

10. REMOVE OUTER COWL TOP PANEL (except TMC Made) INFO

11. SEPARATE FRONT STABILIZER LINK ASSEMBLY



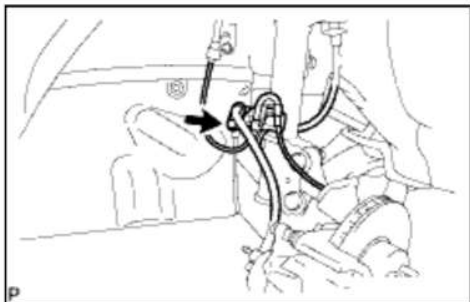
- (a) Remove the nut and separate the stabilizer link assembly from the front shock absorber with coil spring.

NOTICE:

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

12. SEPARATE FRONT SPEED SENSOR (for TMC Made)

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

**NOTICE:**

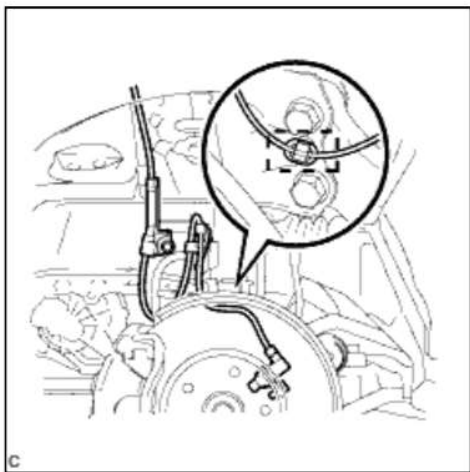
Be sure to separate the front speed sensor from the front shock absorber with coil spring completely.

13. SEPARATE FRONT SPEED SENSOR (except TMC Made)

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

NOTICE:

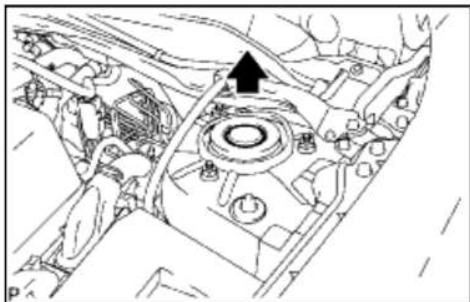
Be sure to separate the front speed sensor from the front shock absorber with coil spring completely.



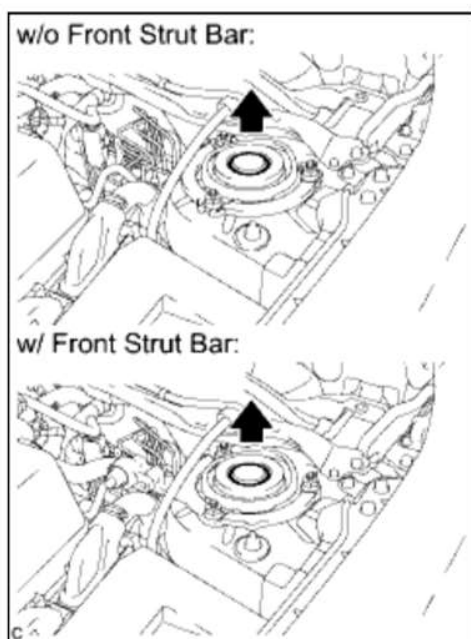
- (b) Remove the clamp and separate the front speed sensor from the front shock absorber.

14. REMOVE FRONT SUSPENSION SUPPORT DUST COVER (for TMC Made)

- (a) Remove the front suspension support dust cover.

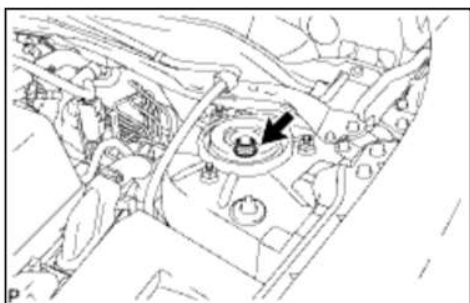


15. REMOVE FRONT SUSPENSION SUPPORT DUST COVER (except TMC Made)



(a) Remove the front suspension support dust cover.

16. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING (for TMC Made)

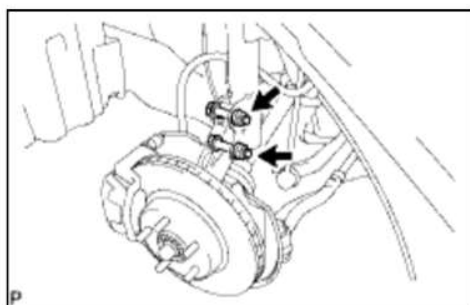
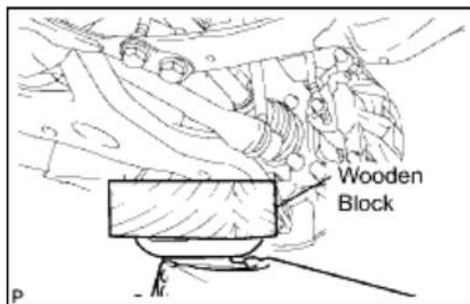


(a) Loosen the front support to front shock absorber nut of the front shock absorber.

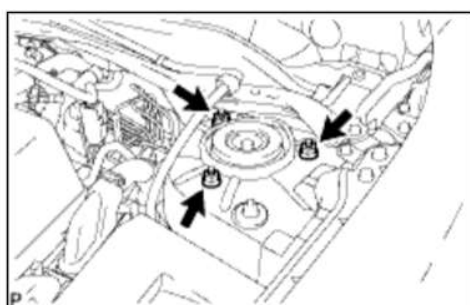
NOTICE:

- 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.



- (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:

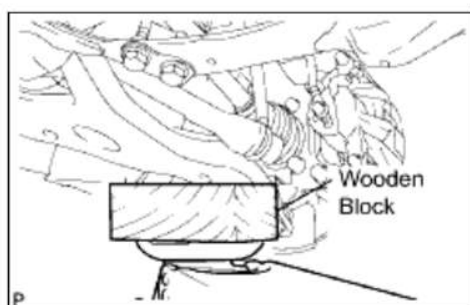
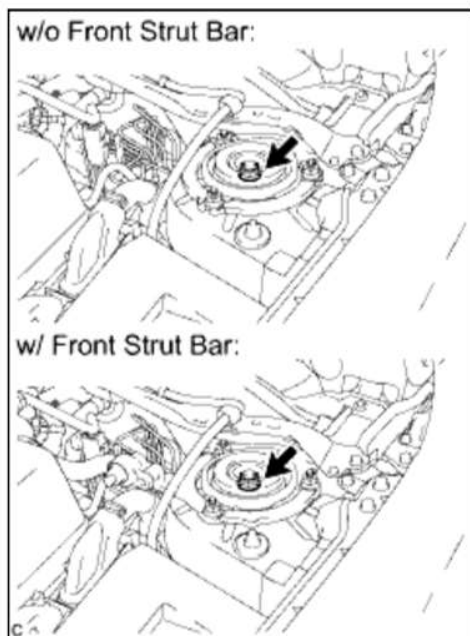
Make sure that the front speed sensor is completely separated from the front shock absorber with coil spring.

17. REMOVE FRONT SHOCK ABSORBER WITH COIL SPRING (except TMC Made)

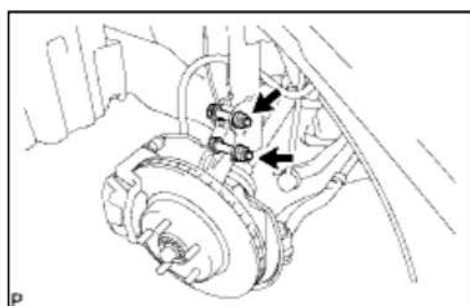
- (a) Loosen the front support to front shock absorber nut of the front shock absorber.

NOTICE:

- 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.

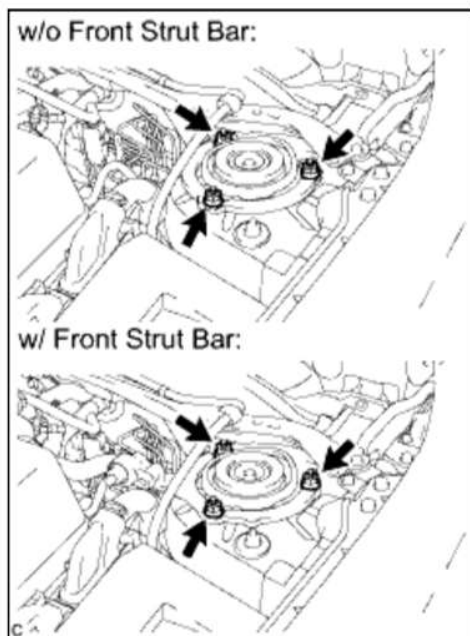


(c) Remove the 2 bolts and 2 nuts, and separate the front shock absorber with coil spring (lower side) from the steering knuckle.

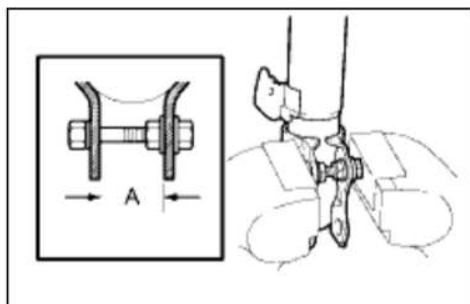
(d) Remove the 3 nuts and front shock absorber with coil spring.

NOTICE:

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



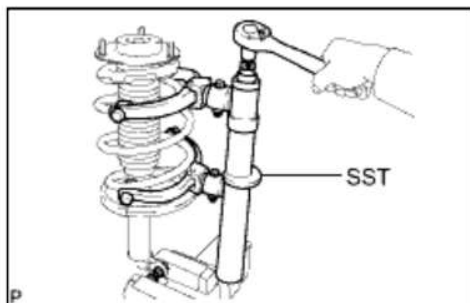
18. SECURE FRONT SHOCK ABSORBER WITH COIL SPRING



- (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.

A:
28 mm (1.102 in.)

19. 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

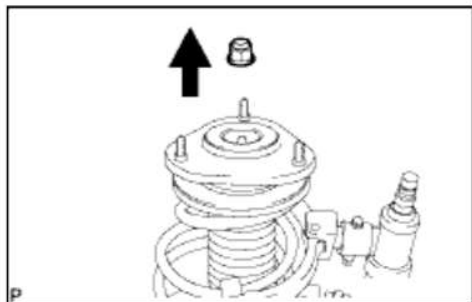
HINT:

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

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

NOTICE:

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



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

20. REMOVE FRONT SUSPENSION SUPPORT SUB-ASSEMBLY

21. REMOVE FRONT SUSPENSION SUPPORT DUST SEAL

22. REMOVE FRONT COIL SPRING UPPER SEAT

23. REMOVE FRONT COIL SPRING UPPER INSULATOR

24. REMOVE FRONT COIL SPRING

25. REMOVE FRONT SPRING BUMPER

26. REMOVE FRONT COIL SPRING LOWER INSULATOR

27. REMOVE FRONT SHOCK ABSORBER



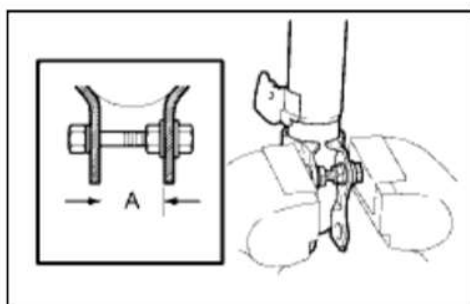
Last Modified: 3-10-2010	6.4 A	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000003GX010X
Title: FRONT SUSPENSION: FRONT SHOCK ABSORBER: INSTALLATION (2010 Corolla)		

INSTALLATION

HINT:

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

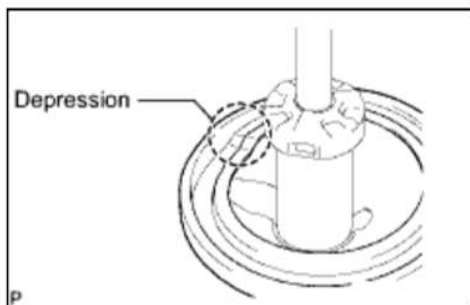
1. SECURE FRONT SHOCK ABSORBER



(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.

A:
28 mm (1.102 in.)

2. INSTALL FRONT COIL SPRING LOWER INSULATOR



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

NOTICE:

Make sure that the front coil spring lower insulator is positioned in the depression of the lower spring seat.

3. INSTALL FRONT SPRING BUMPER

4. INSTALL FRONT COIL SPRING

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

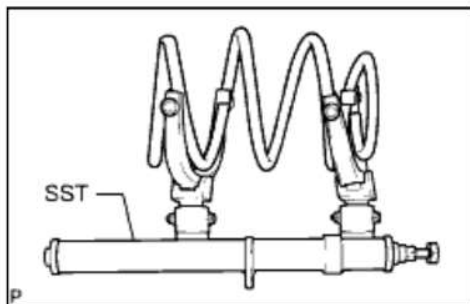
SST: 09727-30021

09727-00010

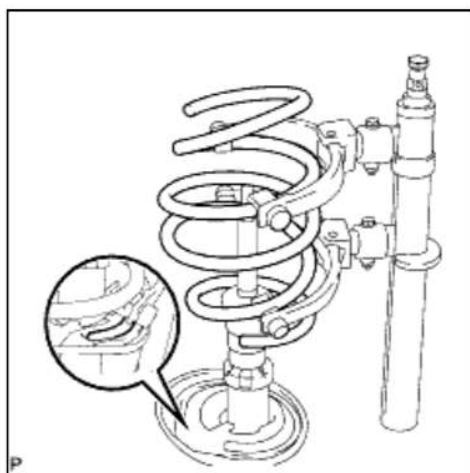
09727-00021

09727-00031

NOTICE:



- Do not use an impact wrench. It will damage SST.
- Do not make a damage on the spring surface. The spring has soft coating.

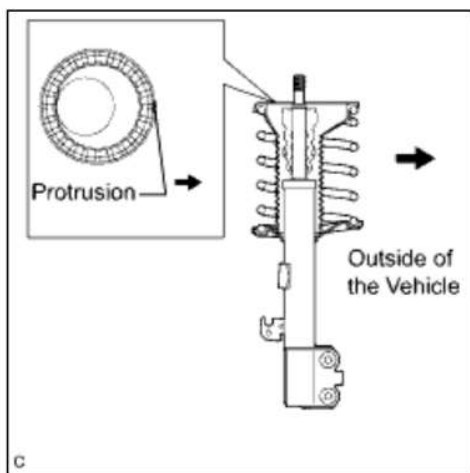


(b) Install the front coil spring.

NOTICE:

Fit the lower end of the front coil spring into the gap of the spring lower seat.

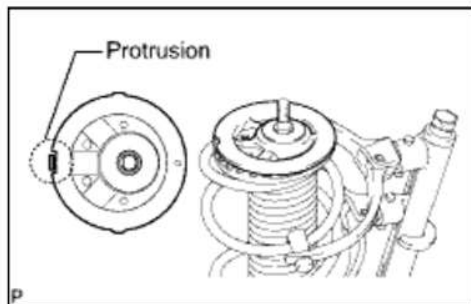
5. INSTALL FRONT COIL SPRING UPPER INSULATOR



- (a) Install the front coil spring upper insulator to the front shock absorber with the protrusion on the insulator facing the outside of the vehicle.

6. INSTALL FRONT COIL SPRING UPPER SEAT

- (a) Install the front coil spring upper seat to the front shock



absorber assembly with the mark facing the outside of the vehicle.

NOTICE:

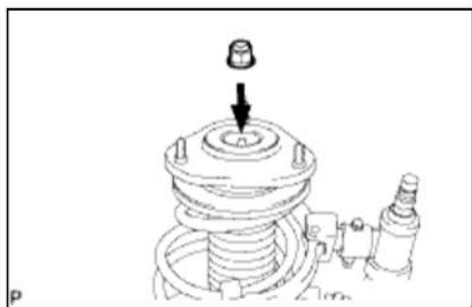
- Align the cutout of the front coil spring upper seat with the protrusion on the front coil spring upper insulator.
- Check that the slot on the piston rod and the slot on the front coil spring upper seat are aligned.

7. INSTALL FRONT SUSPENSION SUPPORT DUST SEAL

- (a) Install a new front suspension support dust seal.

8. INSTALL FRONT SUSPENSION SUPPORT SUB-ASSEMBLY

9. TEMPORARILY TIGHTEN FRONT SUPPORT TO FRONT SHOCK ABSORBER NUT



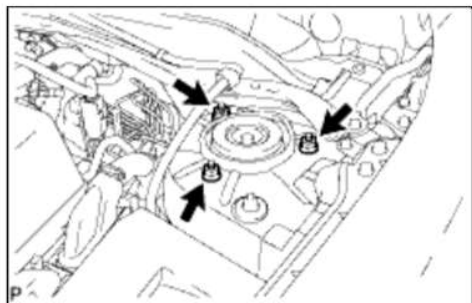
- (a) Temporarily tighten a new front support to front shock absorber nut.

- (b) Remove SST from the front coil spring.

NOTICE:

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

10. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING (for TMC Made)



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

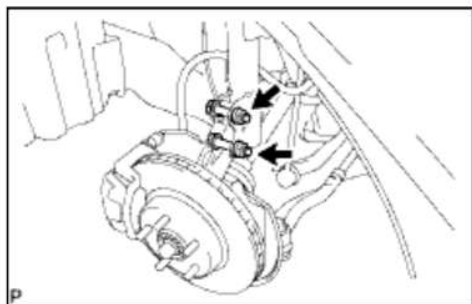
Torque: 39 N·m (398 kgf·cm, 29ft·lbf)

NOTICE:

Check the nut size before installing.

for TMC Made	M8
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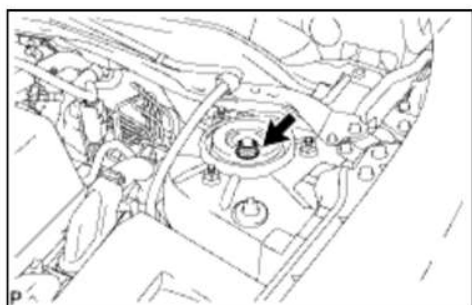
- (b) Install the front shock absorber with coil spring (lower side) to the steering knuckle with the 2 bolts and 2 nuts.



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

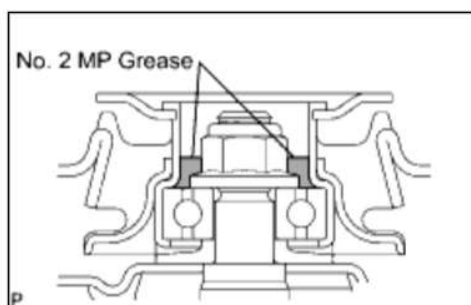
NOTICE:

Keep the bolts from rotating while tightening the nuts.



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

Torque: 47 N·m (479 kgf·cm, 35ft·lbf)



(d) Apply No. 2 MP grease into the suspension support sub-assembly.

NOTICE:

Do not apply any grease to the rubber surface of the front suspension support sub-assembly.

11. INSTALL FRONT SHOCK ABSORBER WITH COIL SPRING (except TMC Made)

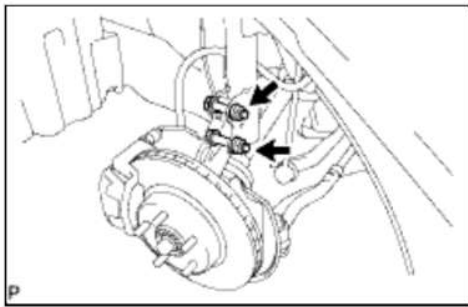
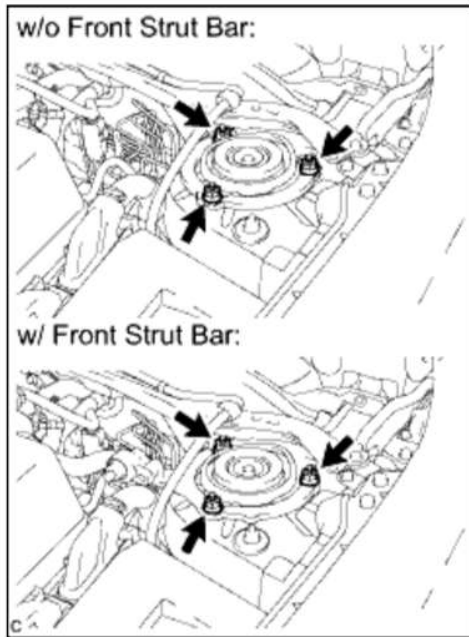
(a) Install the front shock absorber with coil spring (upper side) with the 3 nuts.

Torque: 50 N·m (510 kgf·cm, 37ft·lbf)

NOTICE:

Check the nut size before installing.

except TMC Made	M10
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- (b) Install the front shock absorber with coil spring (lower side) to the steering knuckle with the 2 bolts and 2 nuts.

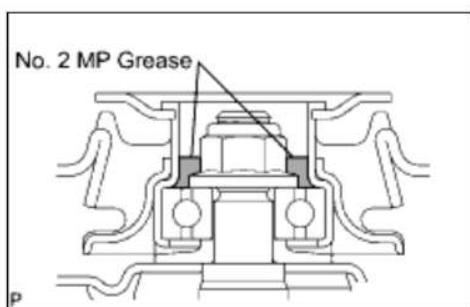
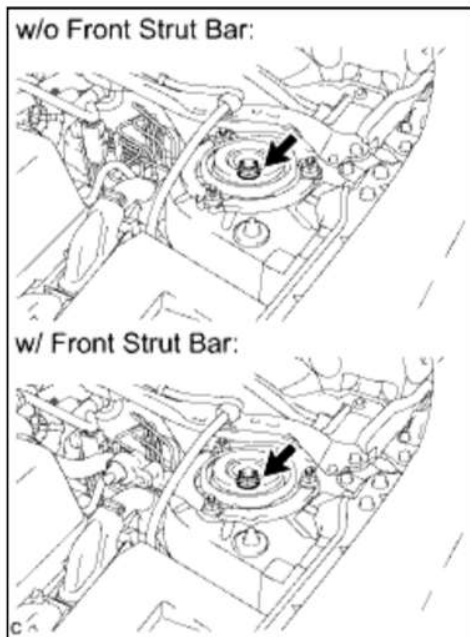
Torque: 240 N·m (2447 kgf·cm, 177ft·lbf)

NOTICE:

Keep the bolts from rotating while tightening the nuts.

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

Torque: 47 N·m (479 kgf·cm, 35ft·lbf)

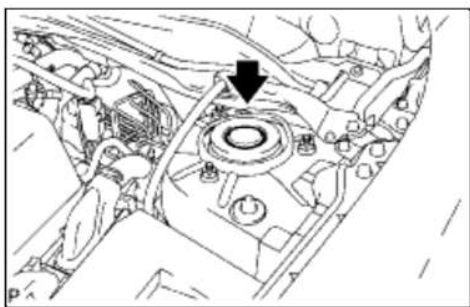


- (d) Apply No. 2 MP grease into the suspension support sub-assembly.

NOTICE:

Do not apply any grease to the rubber surface of the front suspension support sub-assembly.

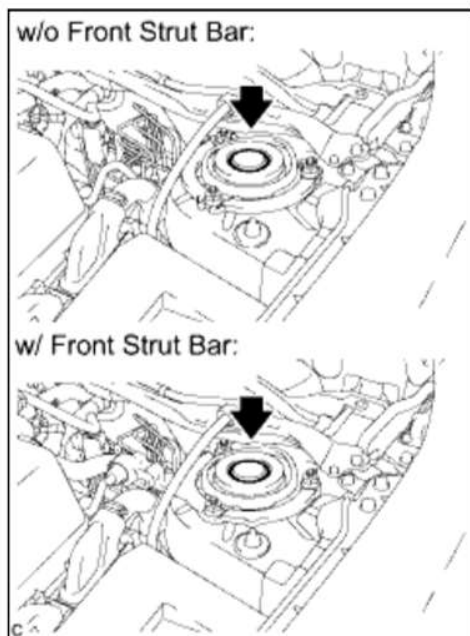
12. INSTALL FRONT SUSPENSION SUPPORT DUST COVER (for TMC Made)



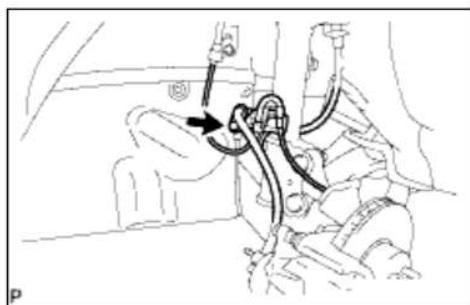
- (a) Install the front suspension support dust cover.

13. INSTALL FRONT SUSPENSION SUPPORT DUST COVER (except TMC Made)

- (a) Install the front suspension support dust cover.



14. INSTALL FRONT SPEED SENSOR (for TMC Made)



- (a) Install the front speed sensor and front flexible hose to the front shock absorber with the bolt.

Torque: 29 N·m (296 kgf·cm, 21ft·lbf)

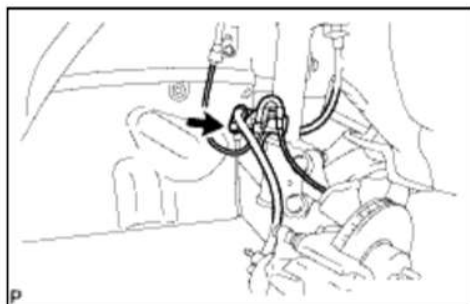
NOTICE:

Do not twist the front speed sensor when installing it.

HINT:

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

15. INSTALL FRONT SPEED SENSOR (except TMC Made)



- (a) Install the front speed sensor and front flexible hose to the front shock absorber with the bolt.

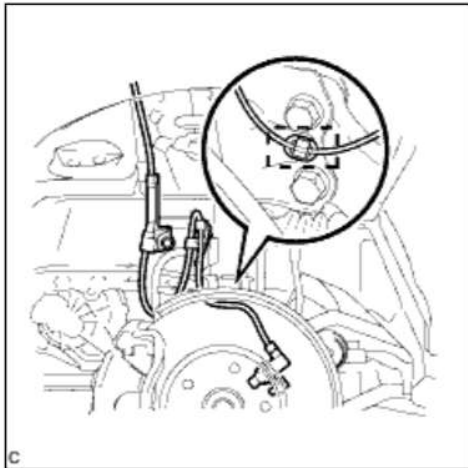
Torque: 29 N·m (296 kgf·cm, 21ft·lbf)

NOTICE:

Do not twist the front speed sensor when installing it.

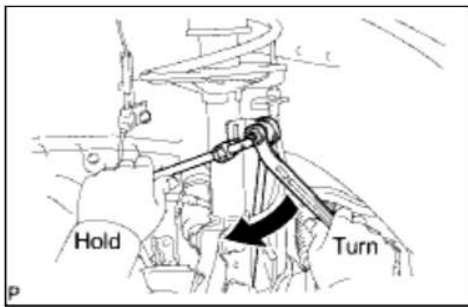
HINT:

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



(b) Install the front speed sensor with the clamp to the front shock absorber.

16. 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)

NOTICE:

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

17. INSTALL OUTER COWL TOP PANEL (for TMC Made) INFO

18. INSTALL OUTER COWL TOP PANEL (except TMC Made) INFO

19. INSTALL WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY INFO

20. INSTALL COWL TOP VENTILATOR LOUVER LH INFO

21. INSTALL CENTER NO.1 COWL TOP VENTILATOR LOUVER INFO

22. INSTALL HOOD TO COWL TOP SEAL INFO

23. INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY RH INFO

24. INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY LH INFO

25. INSTALL FRONT WIPER ARM HEAD CAP INFO

26. INSTALL FRONT WHEEL

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

27. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

HINT:

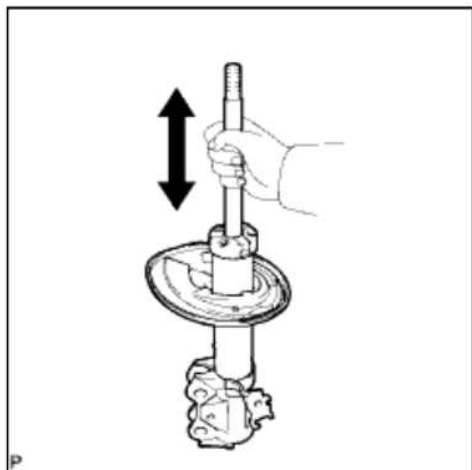
Inspect and adjust front wheel alignment  .



Last Modified: 3-10-2010	6.4 G	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM000002YJ500PX
Title: FRONT SUSPENSION: FRONT SHOCK ABSORBER: INSPECTION (2010 Corolla)		

INSPECTION

1. INSPECT FRONT SHOCK ABSORBER



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

Standard:

The operational sound and resistance are normal.

HINT:

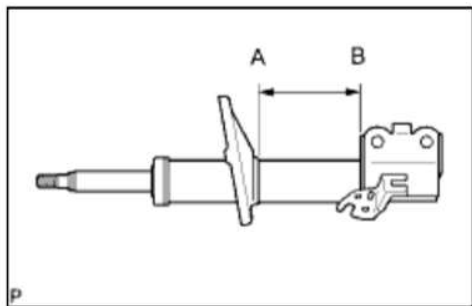
If there is any abnormality, replace the front shock absorber with a new one.



Last Modified: 3-10-2010	6.4 N	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000003GW00XX
Title: FRONT SUSPENSION: FRONT SHOCK ABSORBER: DISPOSAL (2010 Corolla)		

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:

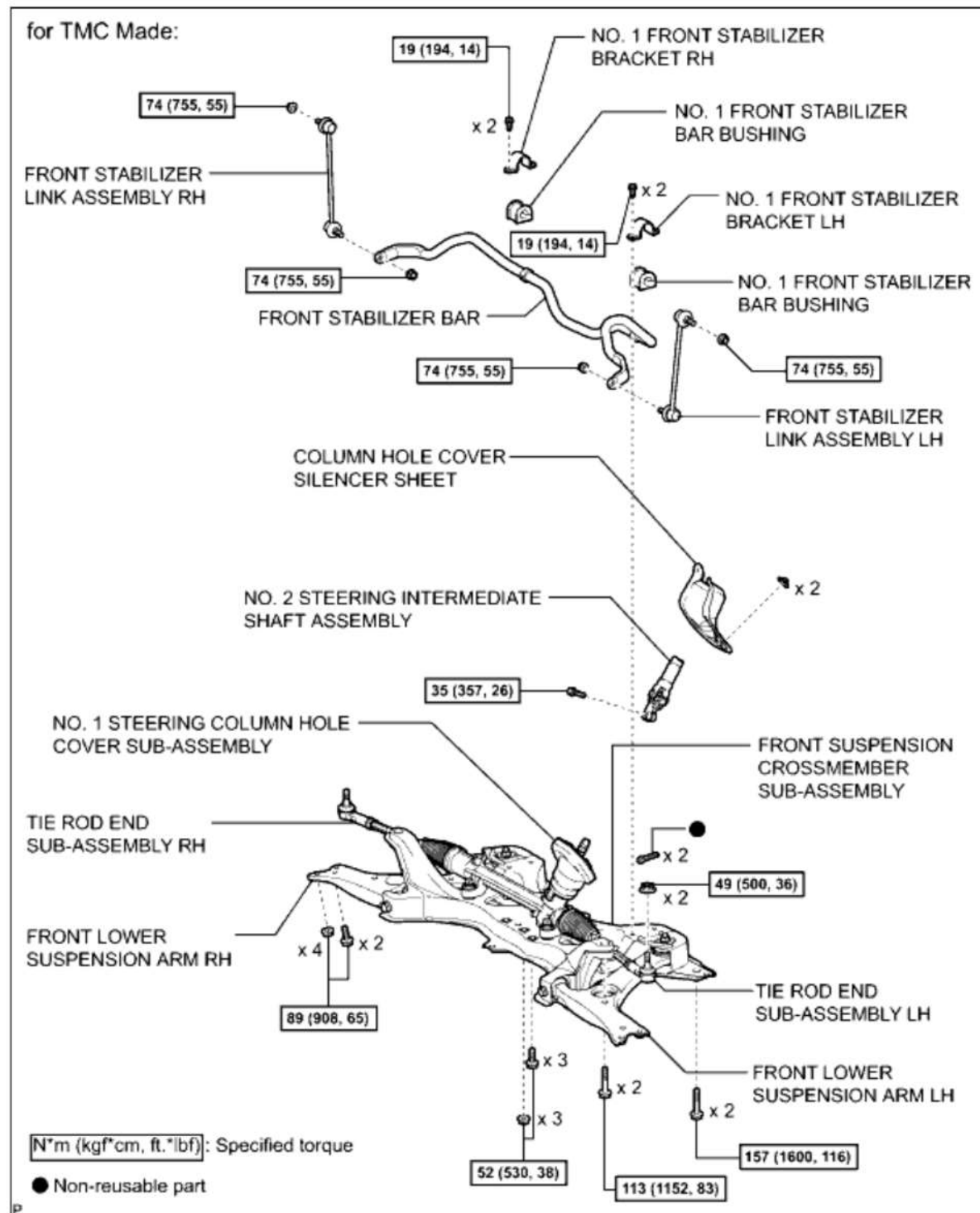
- The gas is colorless, odorless, and non-poisonous.
- Always use proper safety equipment and be careful when drilling because sharde of metal fly about.



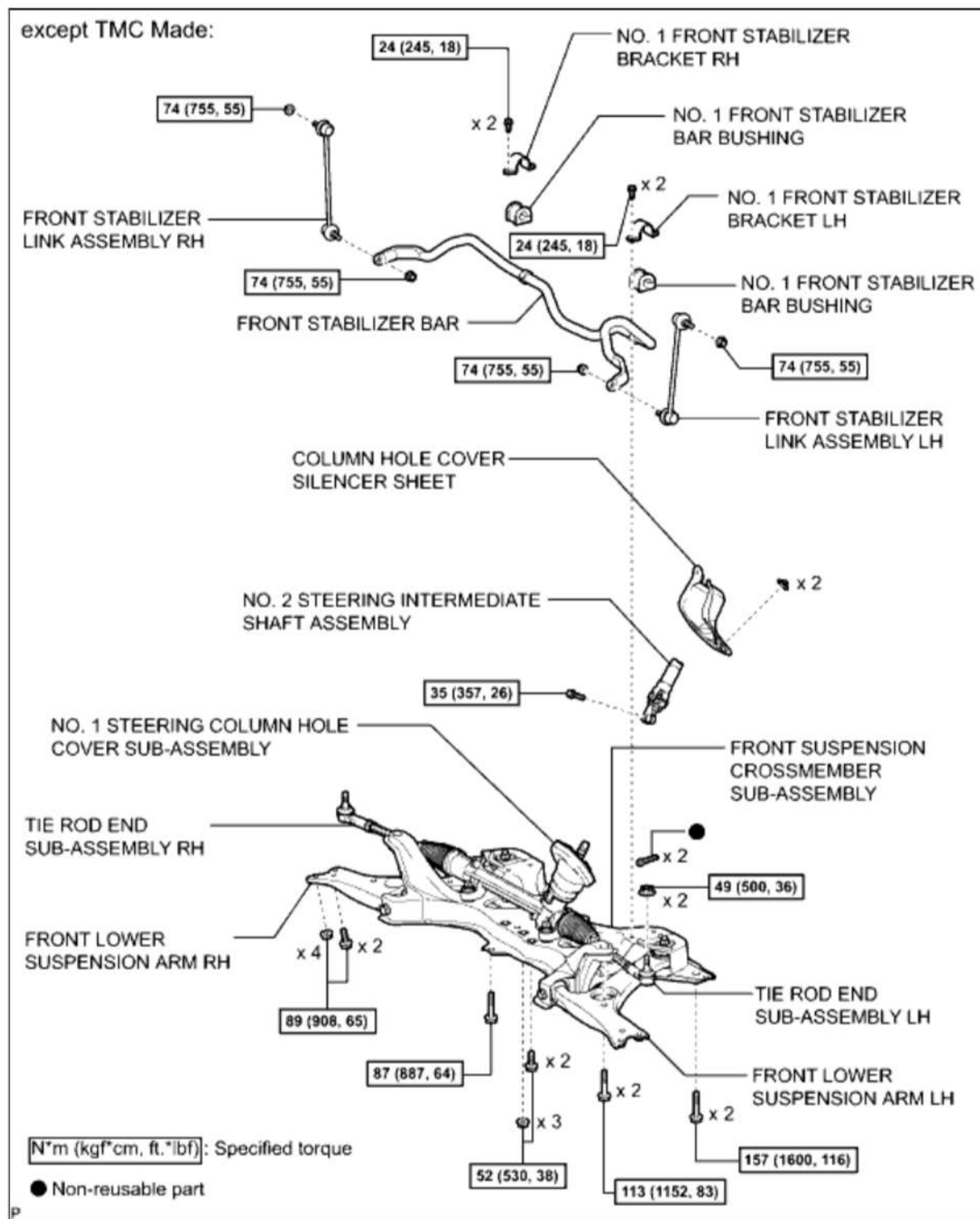
Last Modified: 3-10-2010	6.4 K	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM000002PCG00VX
Title: FRONT SUSPENSION: FRONT STABILIZER BAR: COMPONENTS (2010 Corolla)		

COMPONENTS

ILLUSTRATION



ILLUSTRATION



Last Modified: 3-10-2010	6.4 A	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000029T701SX
Title: FRONT SUSPENSION: FRONT STABILIZER BAR: REMOVAL (2010 Corolla)		

REMOVAL

1. PLACE FRONT WHEELS FACING STRAIGHT AHEAD

2. SECURE STEERING WHEEL 

3. REMOVE COLUMN HOLE COVER SILENCER SHEET 

4. SEPARATE NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY 

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

6. REMOVE FRONT WHEELS

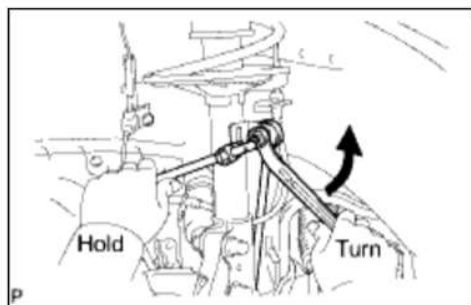
7. SEPARATE TIE ROD END SUB-ASSEMBLY LH 

8. SEPARATE TIE ROD END SUB-ASSEMBLY RH

HINT:

Perform the same procedure as the LH side.

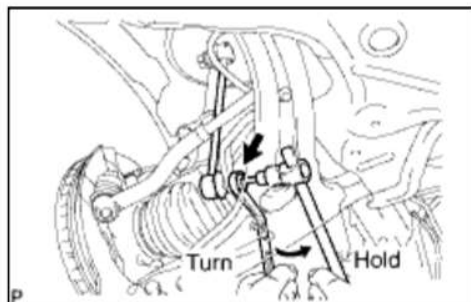
9. REMOVE FRONT STABILIZER LINK ASSEMBLY LH



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



(b) Remove the nut and 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.

10. REMOVE FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Perform the same procedure as the LH side.

11. SEPARATE FRONT LOWER SUSPENSION ARM LH

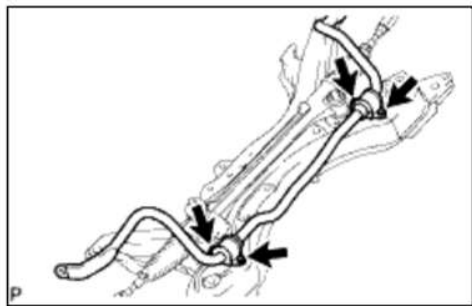
INFO

12. SEPARATE FRONT LOWER SUSPENSION ARM RH**HINT:**

Perform the same procedure as the LH side.

13. REMOVE FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY

INFO

14. REMOVE FRONT STABILIZER BAR

(a) Remove the 4 bolts, 2 No. 1 front stabilizer brackets and front stabilizer bar from the front suspension crossmember.

15. REMOVE NO. 1 FRONT STABILIZER BAR BUSHING

(a) Remove the 2 No. 1 front stabilizer bar bushings from the front stabilizer bar.



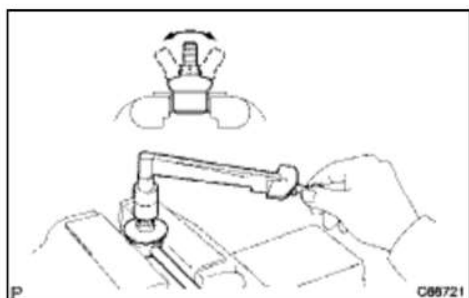
Last Modified: 3-10-2010	6.4 G	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000011DO01UX
Title: FRONT SUSPENSION: FRONT STABILIZER BAR: INSPECTION (2010 Corolla)		

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 2 to 4 seconds per turn and take the torque reading on the 5th turn.



Turning Torque - Torque: 0.1 to 2.0 N·m (1 to 20 kgf·cm, 1 to 17in·lbf)

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.

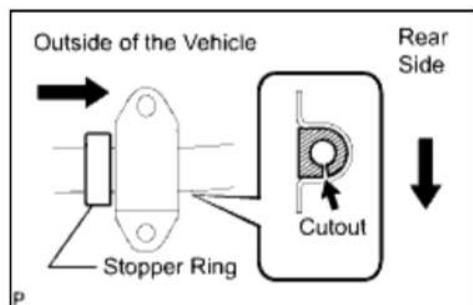
- (1) Check that the dust cover is not cracked and that there is no grease on it.



Last Modified: 3-10-2010	6.4 A	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000029T401SX
Title: FRONT SUSPENSION: FRONT STABILIZER BAR: INSTALLATION (2010 Corolla)		

INSTALLATION

1. INSTALL NO. 1 FRONT STABILIZER BAR BUSHING (for LH Side)



(a) Install the No. 1 front stabilizer bar bushing to the front stabilizer bar as shown in the illustration.

NOTICE:

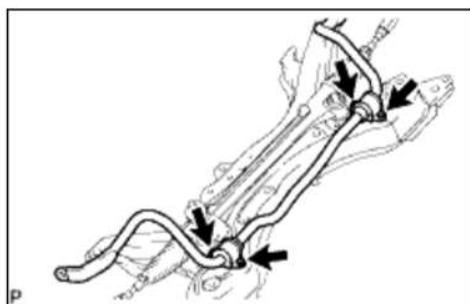
- Install the No. 1 front stabilizer bar bushing so that the cutout faces the rear of the vehicle.
- Make sure that the amount of deviation of the front stabilizer bar in the horizontal direction is within +/- 5 mm (0.20 in.).

2. INSTALL NO. 1 FRONT STABILIZER BAR BUSHING (for RH Side)

HINT:

Perform the same procedure as the LH side.

3. INSTALL FRONT STABILIZER BAR



(a) Install the front stabilizer bar and 2 No. 1 front stabilizer brackets to the front suspension crossmember with the 4 bolts.

TMC Made - Torque: 19 N·m (194 kgf·cm, 14ft·lbf)
except TMC Made - Torque: 24 N·m (245 kgf·cm, 18ft·lbf)

NOTICE:

Check the type of bolt before installing, Look at strength division number of the bolt head.

- 11T: TMC Made
- 10T: except TMC Made

4. INSTALL FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY (for TMC Made) INFO

5. REMOVE FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY (except TMC Made) INFO

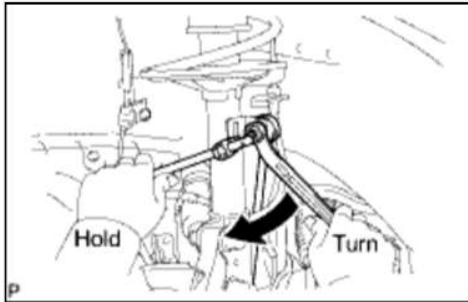
6. CONNECT FRONT LOWER SUSPENSION ARM LH INFO

7. CONNECT FRONT LOWER SUSPENSION ARM RH

HINT:

Perform the same procedure as the LH side.

8. INSTALL FRONT STABILIZER LINK ASSEMBLY LH

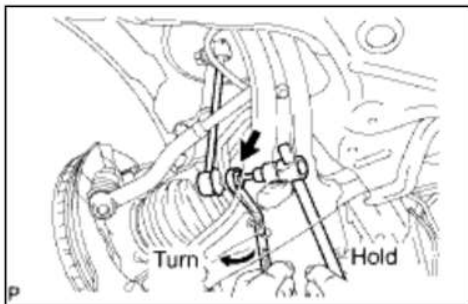


(a) Install the front stabilizer link assembly LH to the front shock absorber with coil spring with the nut.

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.



(b) 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.

9. INSTALL FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Perform the same procedure as the LH side.

10. CONNECT TIE ROD END SUB-ASSEMBLY LH INFO

11. CONNECT TIE ROD END SUB-ASSEMBLY RH

HINT:

Perform the same procedure as the LH side.

12. CONNECT NO. 1 STEERING COLUMN HOLE COVER SUB-ASSEMBLY INFO

13. CONNECT NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY INFO

14. PLACE FRONT WHEELS FACING STRAIGHT AHEAD

15. INSTALL COLUMN HOLE COVER SILENCER SHEET INFO

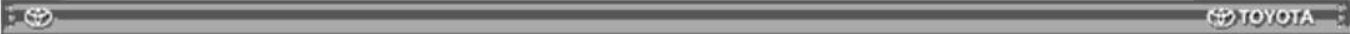
16. INSTALL FRONT WHEELS

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

17. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT

HINT:

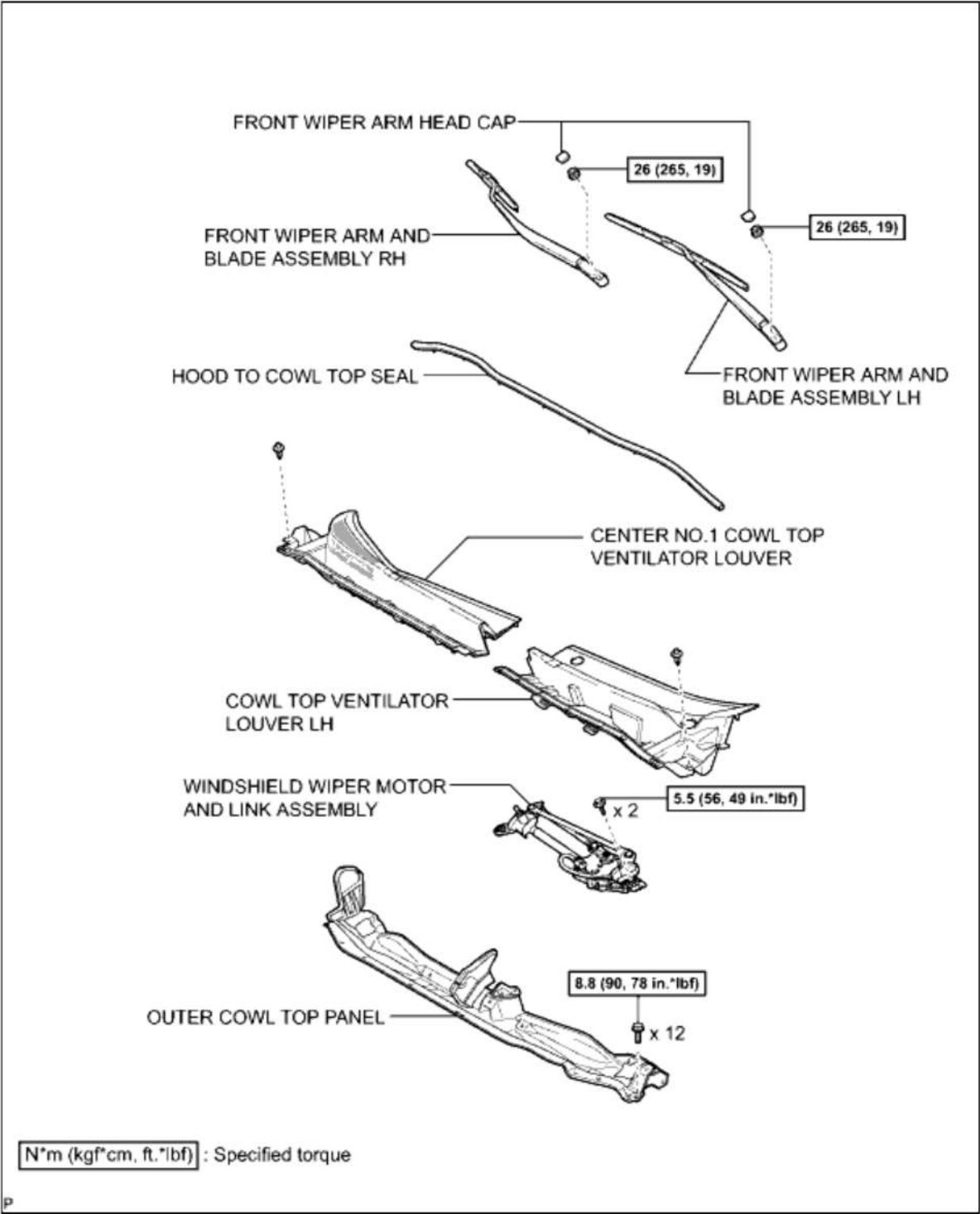
Inspect and adjust front wheel alignment INFO .



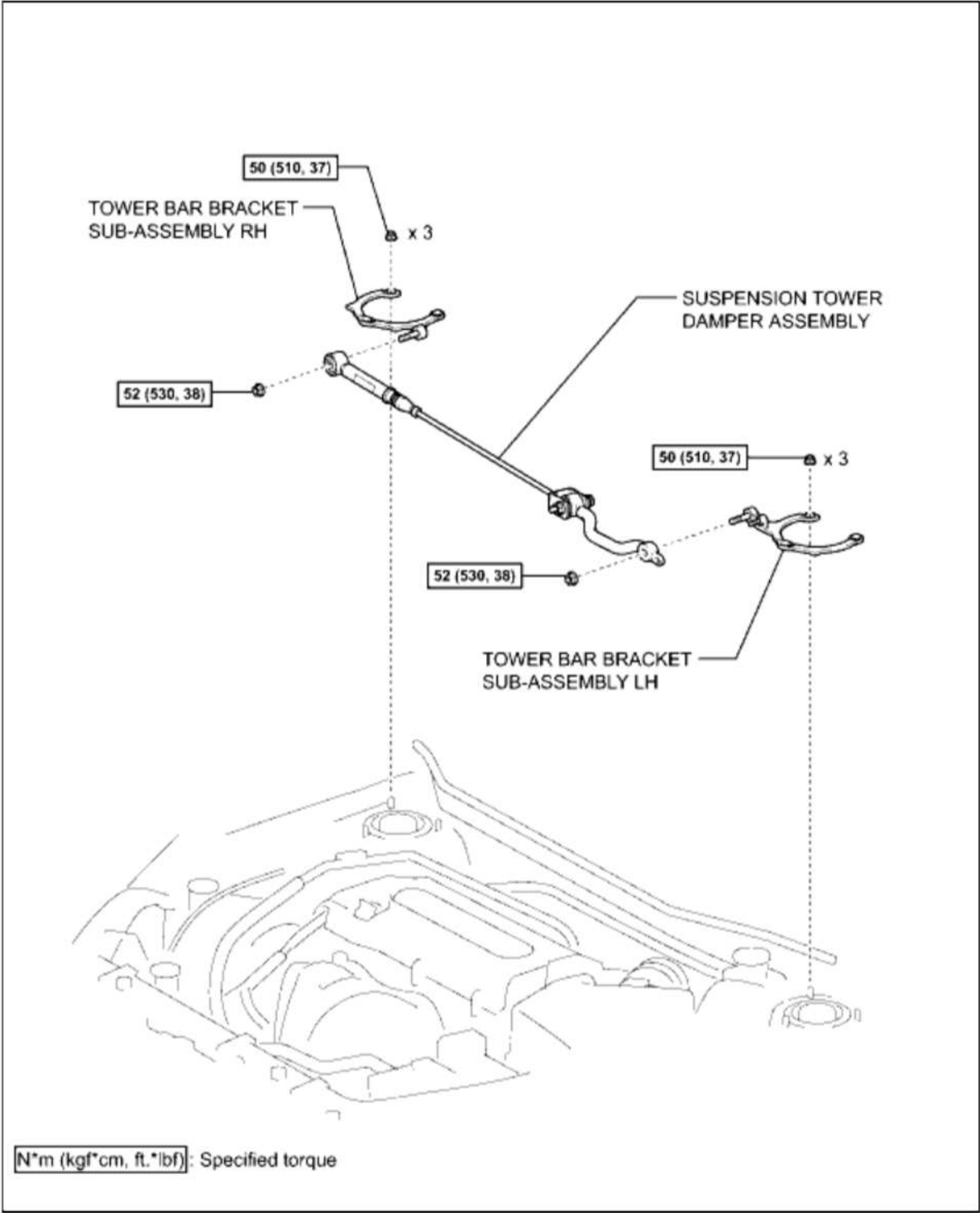
Last Modified: 3-10-2010	6.4 K	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM000002EY7007X
Title: FRONT SUSPENSION: FRONT STRUT BAR: COMPONENTS (2010 Corolla)		

COMPONENTS

ILLUSTRATION



ILLUSTRATION

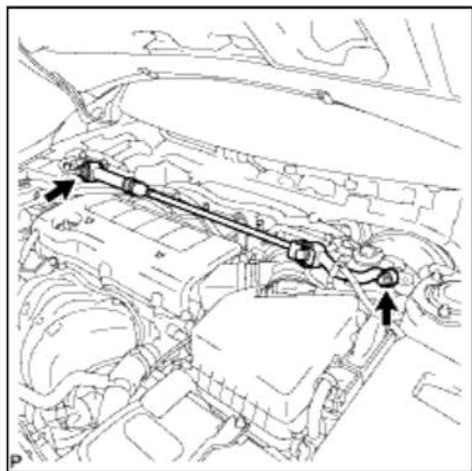


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Last Modified: 3-10-2010	6.4 A	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM000002EY8007X
Title: FRONT SUSPENSION: FRONT STRUT BAR: REMOVAL (2010 Corolla)		

REMOVAL

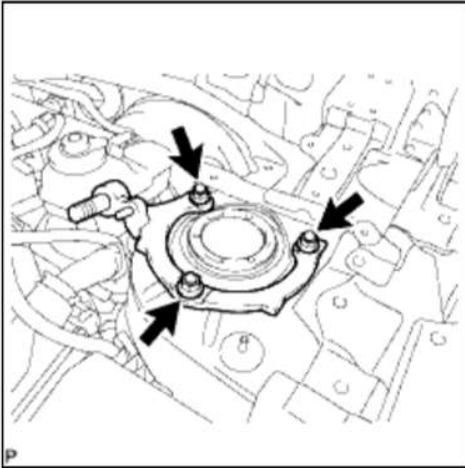
1. REMOVE FRONT WIPER ARM HEAD CAP [INFO](#)
2. REMOVE FRONT WIPER ARM AND BLADE ASSEMBLY LH [INFO](#)
3. REMOVE FRONT WIPER ARM AND BLADE ASSEMBLY RH [INFO](#)
4. REMOVE HOOD TO COWL TOP SEAL [INFO](#)
5. REMOVE CENTER NO.1 COWL TOP VENTILATOR LOUVER [INFO](#)
6. REMOVE COWL TOP VENTILATOR LOUVER LH [INFO](#)
7. REMOVE WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY [INFO](#)
8. REMOVE OUTER COWL TOP PANEL [INFO](#)
9. REMOVE SUSPENSION TOWER DAMPER ASSEMBLY



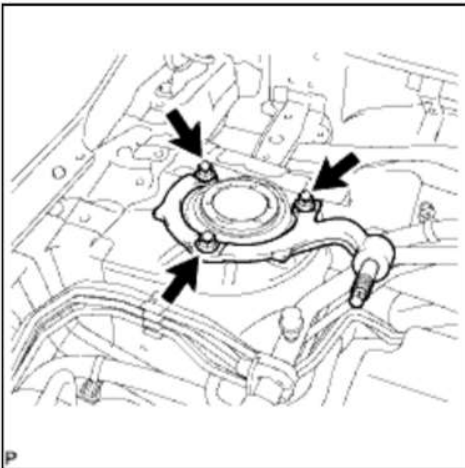
(a) Remove the 2 nuts and suspension tower damper assembly.

10. REMOVE TOWER BAR BRACKET SUB-ASSEMBLY LH

(a) Remove the 3 nuts and tower bar bracket sub assembly LH.



11. REMOVE TOWER BAR BRACKET SUB-ASSEMBLY RH

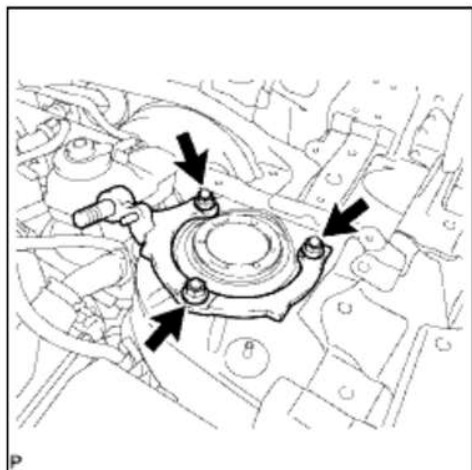


(a) Remove the 3 nuts and tower bar bracket sub assembly RH.

Last Modified: 3-10-2010	6.4 A	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM000002EY6007X
Title: FRONT SUSPENSION: FRONT STRUT BAR: INSTALLATION (2010 Corolla)		

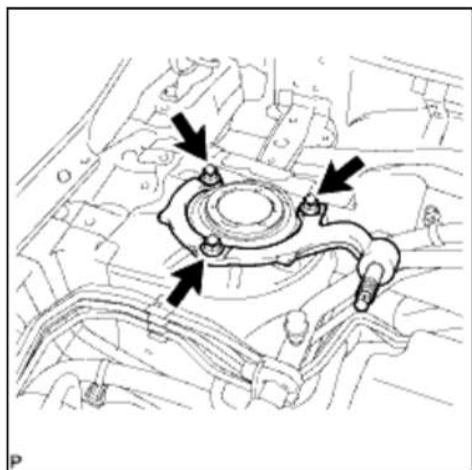
INSTALLATION

1. TEMPORARILY TIGHTEN TOWER BAR BRACKET SUB-ASSEMBLY LH



(a) Temporarily tighten the tower bar bracket sub assembly LH with the 3 nuts.

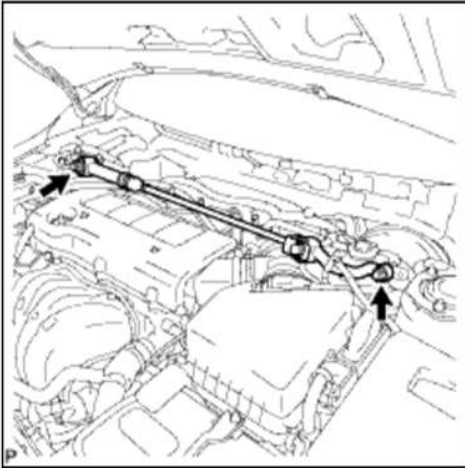
2. TEMPORARILY TIGHTEN TOWER BAR BRACKET SUB-ASSEMBLY RH



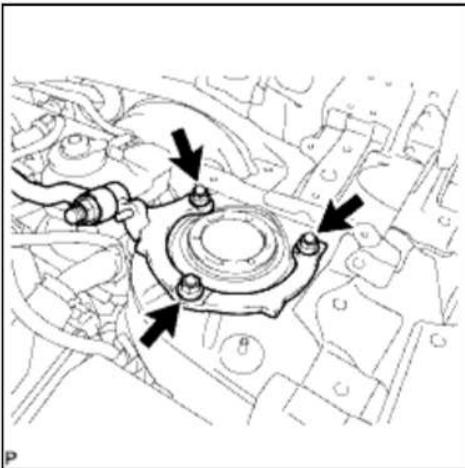
(a) Temporarily tighten the tower bar bracket sub assembly RH with the 3 nuts.

3. TEMPORARILY TIGHTEN SUSPENSION TOWER DAMPER ASSEMBLY

(a) Temporarily tighten the suspension tower damper assembly with the 2 nuts.



4. FULLY TIGHTEN TOWER BAR BRACKET SUB-ASSEMBLY LH



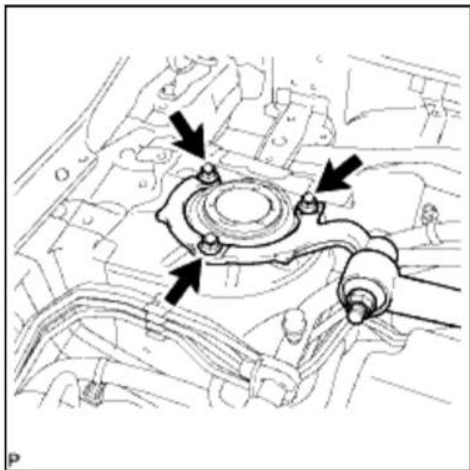
(a) Fully tighten the 3 nuts.

Torque: 50 N·m (510 kgf·cm, 37ft·lbf)

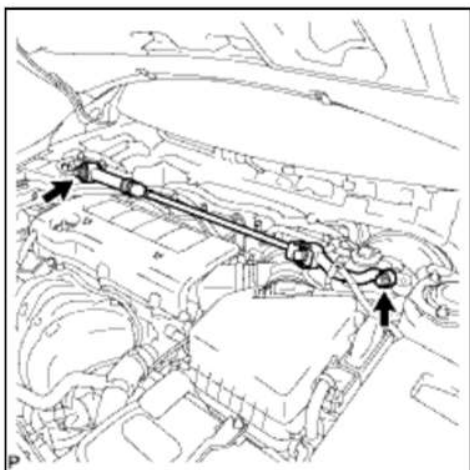
5. FULLY TIGHTEN TOWER BAR BRACKET SUB-ASSEMBLY RH

(a) Fully tighten the 3 nuts.

Torque: 50 N·m (510 kgf·cm, 37ft·lbf)



6. FULLY TIGHTEN SUSPENSION TOWER DAMPER ASSEMBLY



(a) Fully tighten the 2 nuts.

Torque: 52 N·m (530 kgf·cm, 38ft·lbf)

7. INSTALL OUTER COWL TOP PANEL INFO

8. INSTALL WINDSHIELD WIPER MOTOR AND LINK ASSEMBLY INFO

9. INSTALL COWL TOP VENTILATOR LOUVER LH INFO

10. INSTALL CENTER NO.1 COWL TOP VENTILATOR LOUVER INFO

11. INSTALL HOOD TO COWL TOP SEAL INFO

12. INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY RH INFO

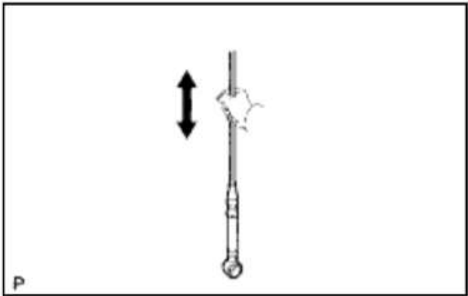
13. INSTALL FRONT WIPER ARM AND BLADE ASSEMBLY LH INFO

14. REMOVE FRONT WIPER ARM HEAD CAP INFO

Last Modified: 3-10-2010	6.4 G	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM000002F2D007X
Title: FRONT SUSPENSION: FRONT STRUT BAR: INSPECTION (2010 Corolla)		

INSPECTION

1. INSPECT SUSPENSION TOWER DAMPER ASSEMBLY



(a) Compress and extend the front strut bar 4 times or more. Check that there is no abnormal resistance/noise, operational resistance, bends/scratches on the rod or oil leaks. If these are found, replace the front strut bar with a new one.

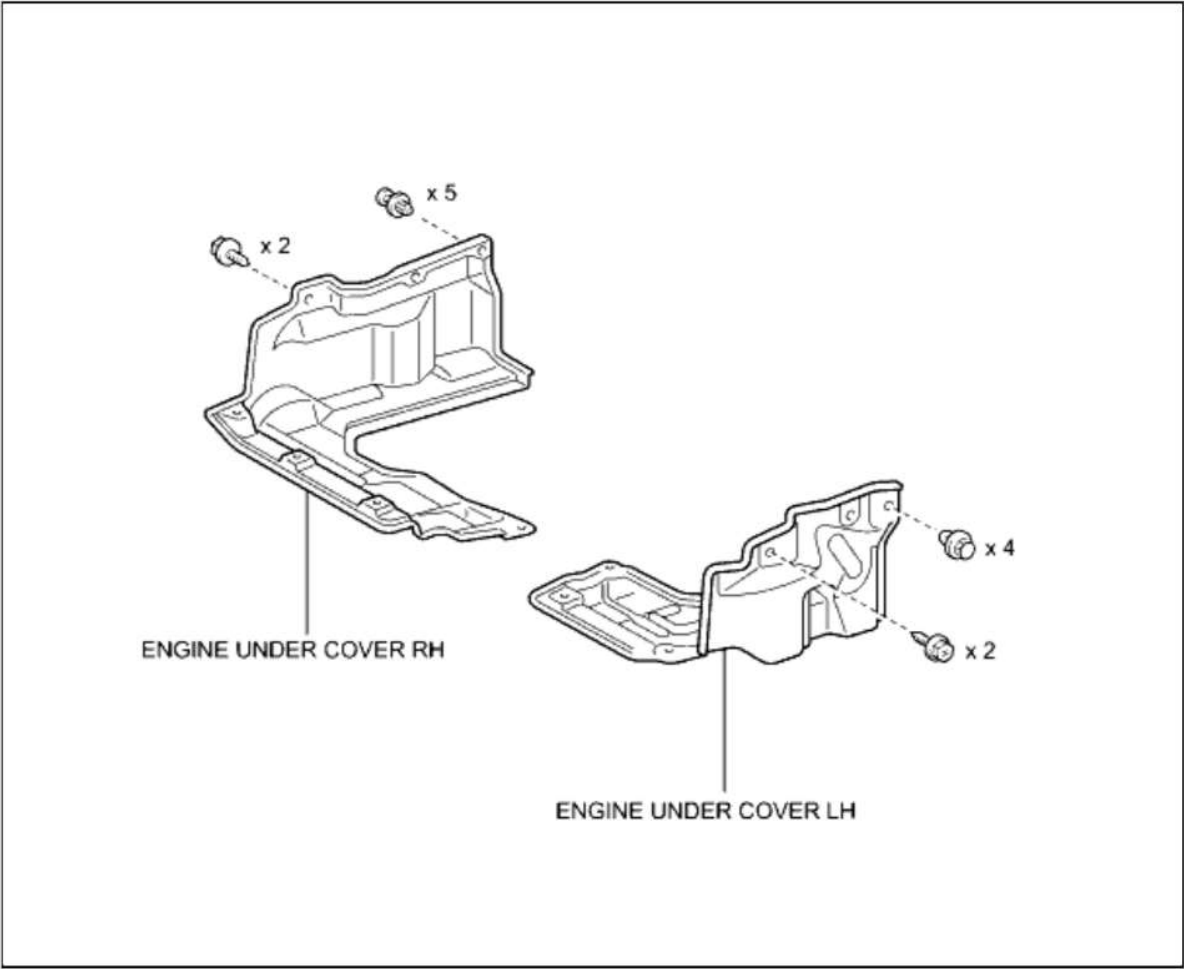
NOTICE:
When disposing of the suspension tower damper assembly, see Disposal. [INFO](#)



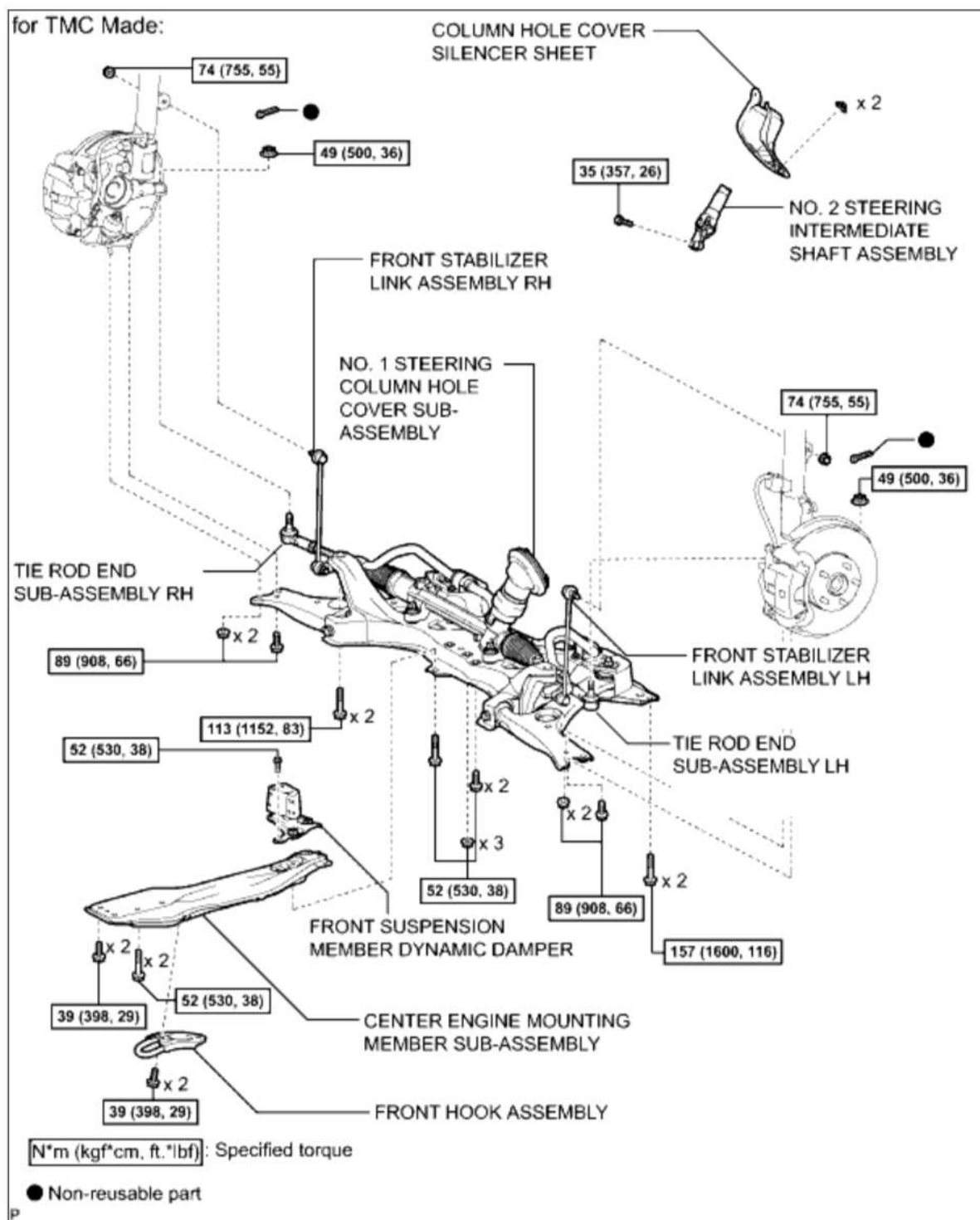
Last Modified: 3-10-2010	6.4 K	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM000003ASB00EX
Title: FRONT SUSPENSION: FRONT SUSPENSION MEMBER: COMPONENTS (2010 Corolla)		

COMPONENTS

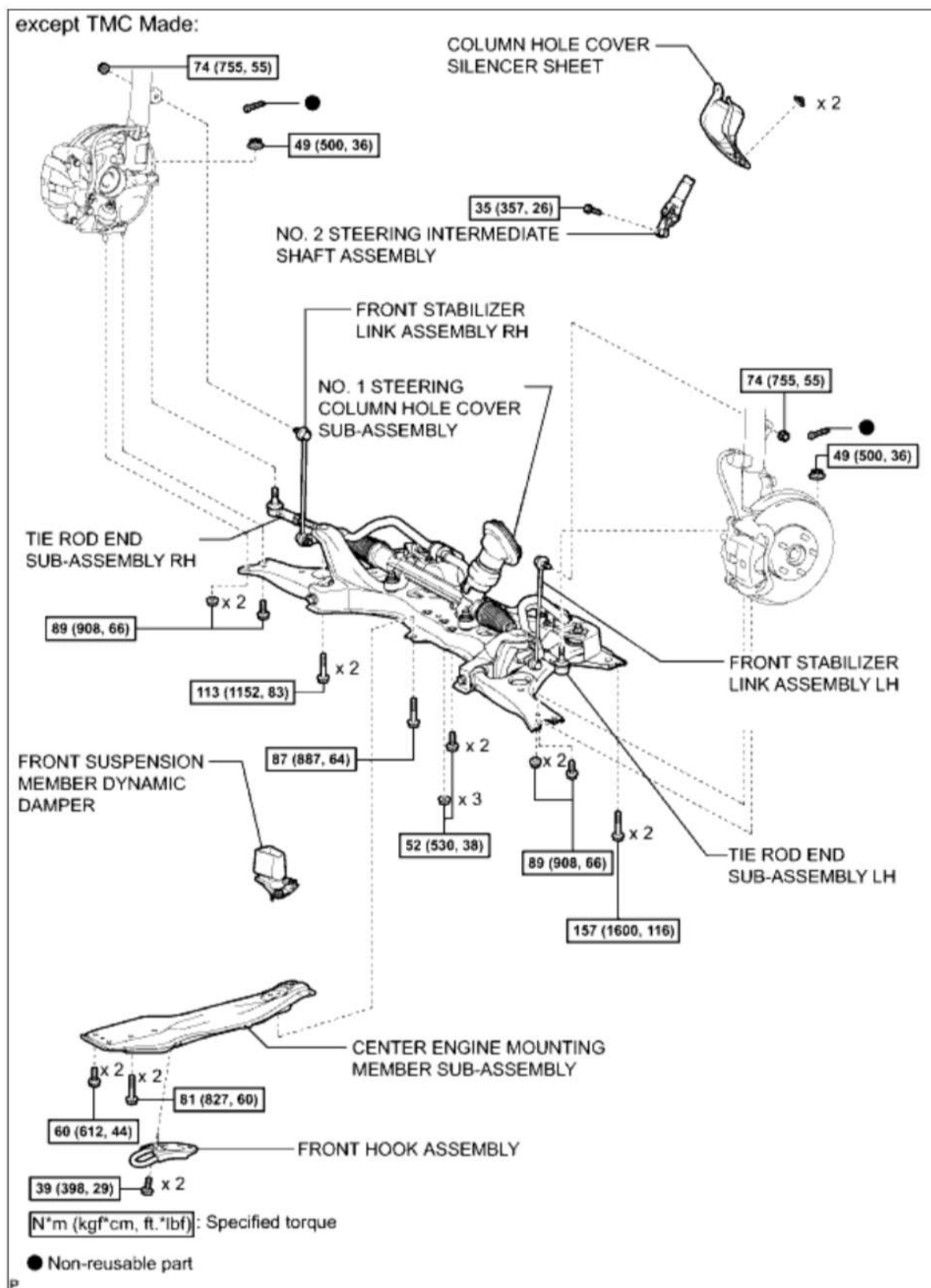
ILLUSTRATION



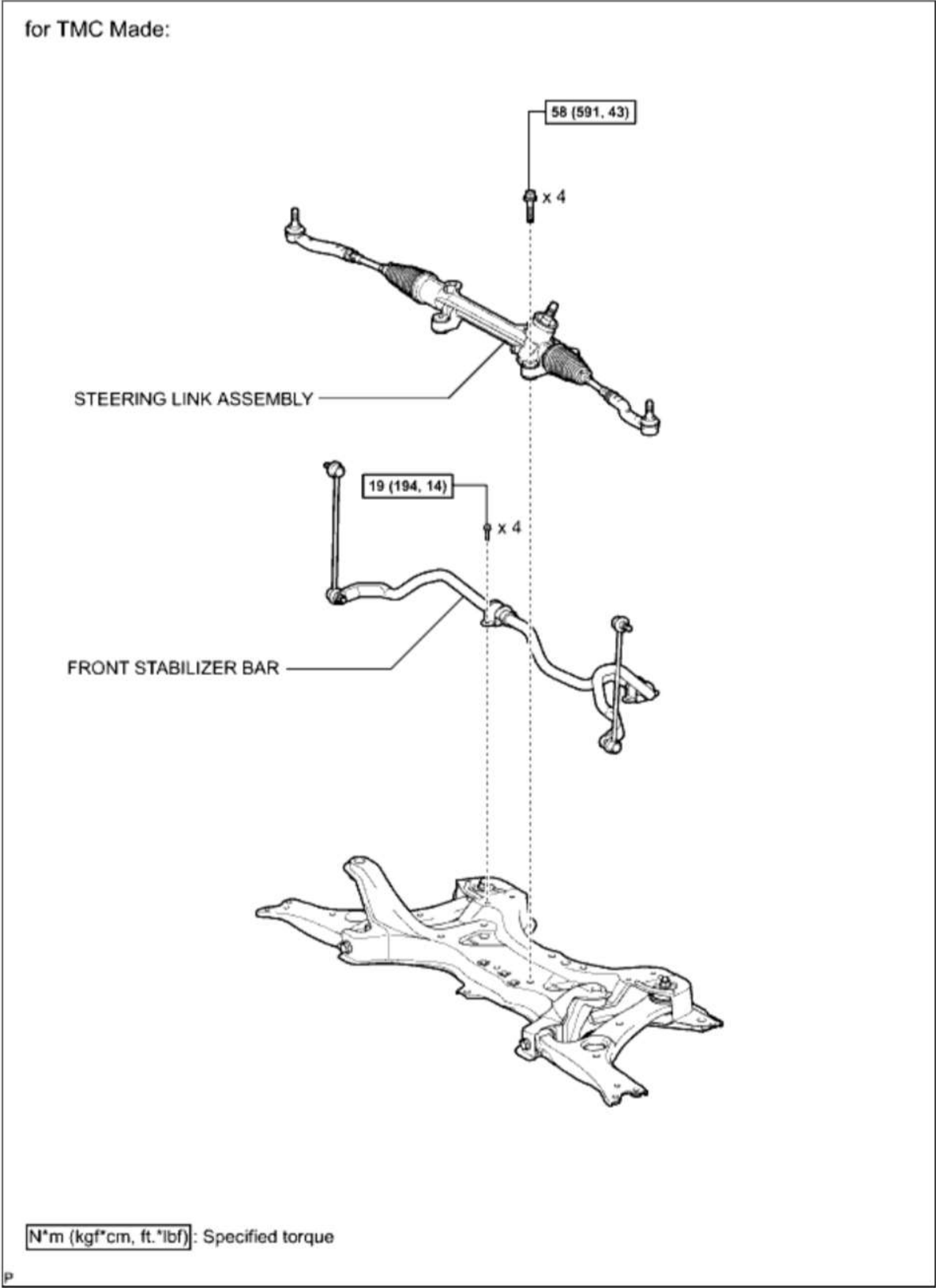
ILLUSTRATION



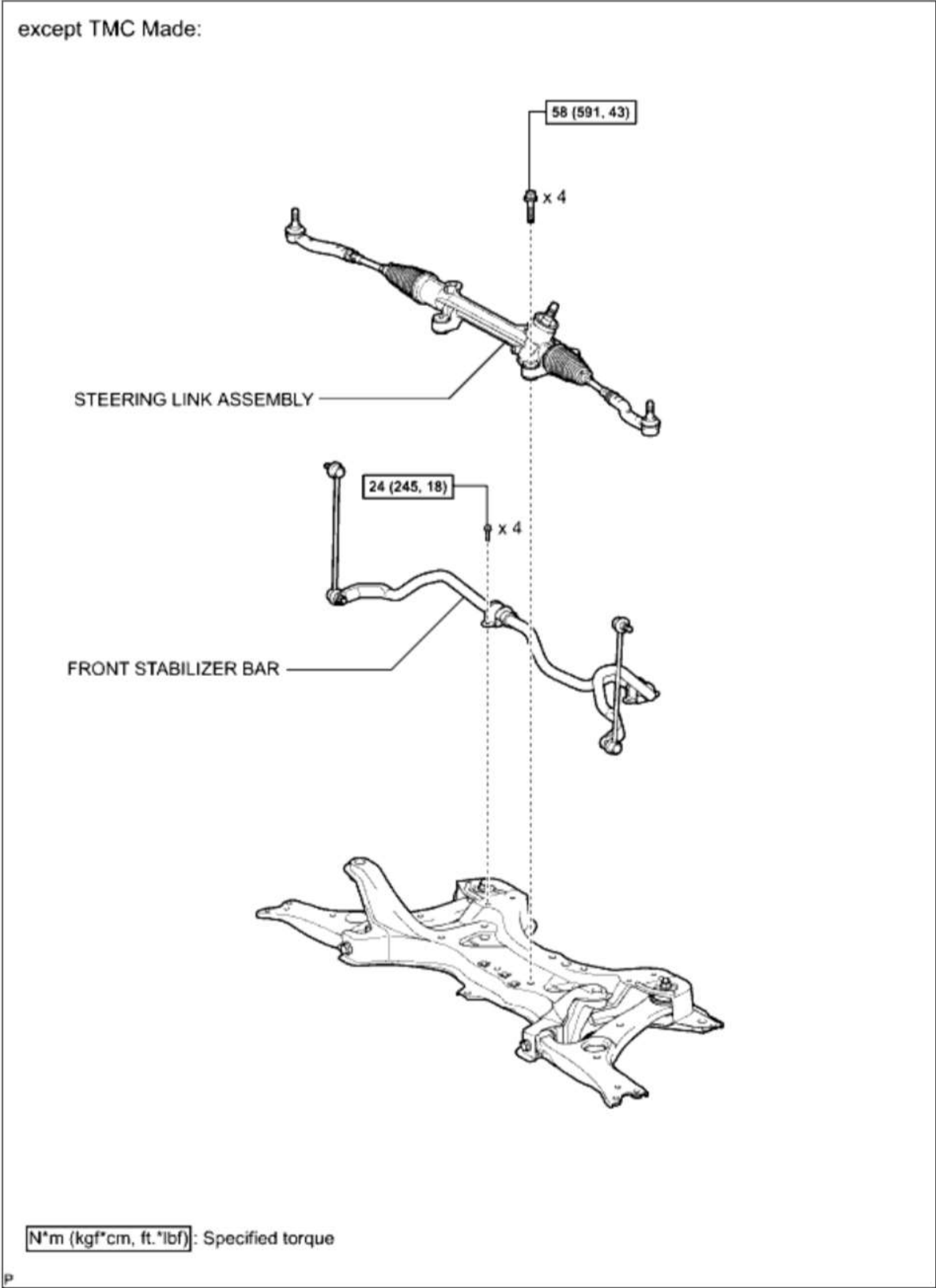
ILLUSTRATION



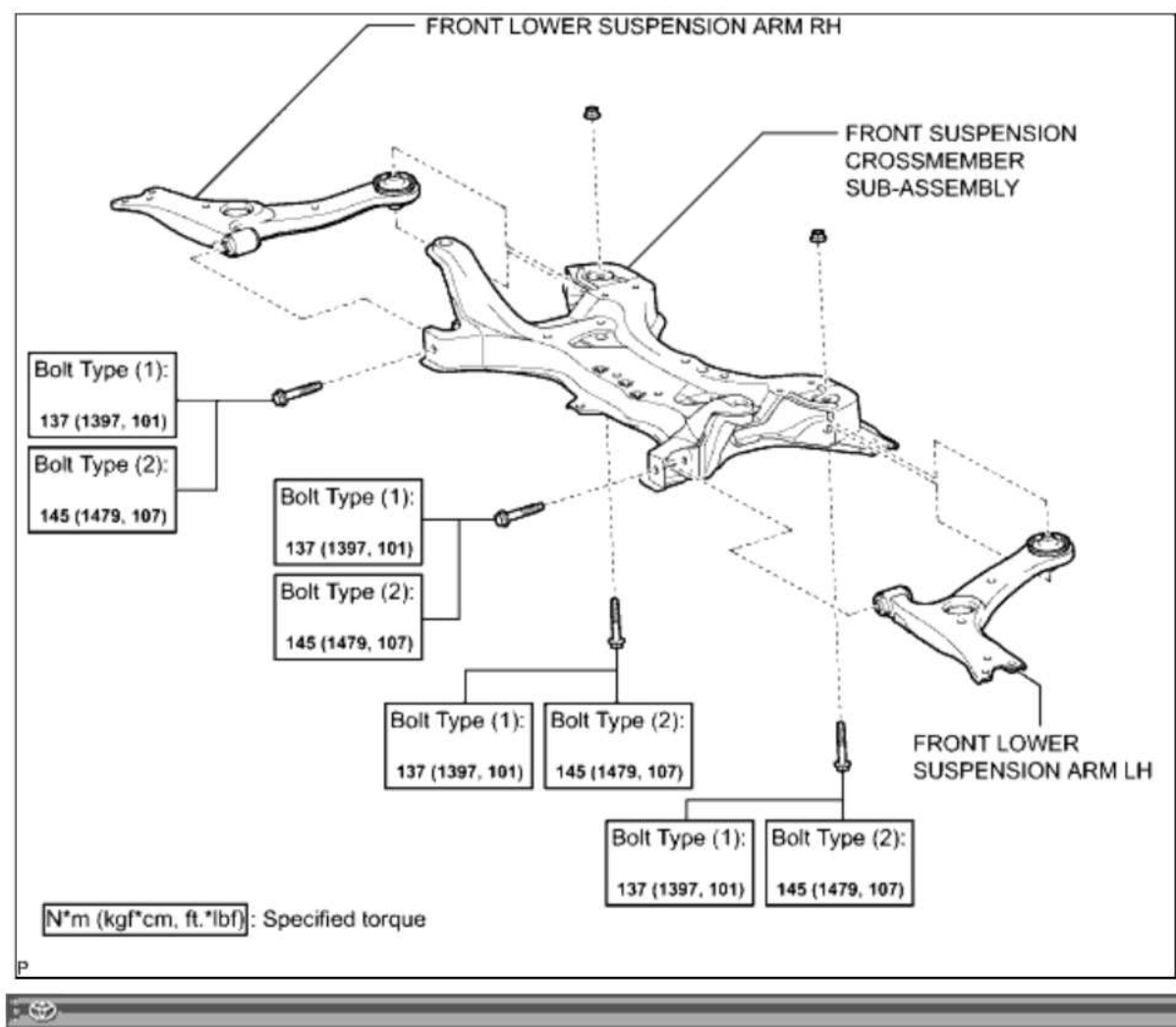
ILLUSTRATION



ILLUSTRATION



ILLUSTRATION



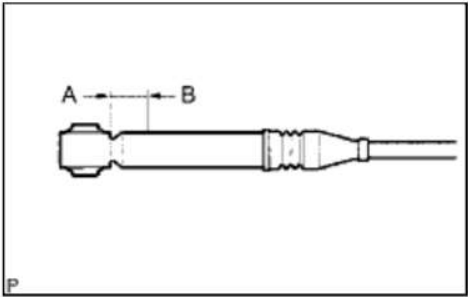
cardiagn.com

Last Modified: 3-10-2010	6.4 N	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM000002EY5007X
Title: FRONT SUSPENSION: FRONT STRUT BAR: DISPOSAL (2010 Corolla)		

DISPOSAL

1. DISPOSE OF FRONT STRUT BAR

(a) Fully extend the front strut bar.



(b) Using a drill, make a hole in the cylinder between A and B as shown in the illustration to discharge the gas inside.

A to B:
10 mm (0.394 in.)

NOTICE:

- Always use proper safety equipment and be careful when drilling because shards of metal fly about.
- The gas is colorless, odorless and non-poisonous.

Last Modified: 3-10-2010	6.4 A	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000029T401TX
Title: FRONT SUSPENSION: FRONT SUSPENSION MEMBER: INSTALLATION (2010 Corolla)		

INSTALLATION

1. INSTALL FRONT STABILIZER BAR

[INFO](#)

2. INSTALL STEERING LINK ASSEMBLY

[INFO](#)

3. TEMPORARILY INSTALL FRONT LOWER SUSPENSION ARM LH

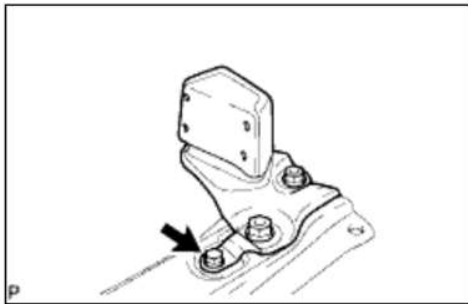
[INFO](#)

4. TEMPORARILY INSTALL FRONT LOWER SUSPENSION ARM RH

HINT:

Perform the same procedure as the LH side.

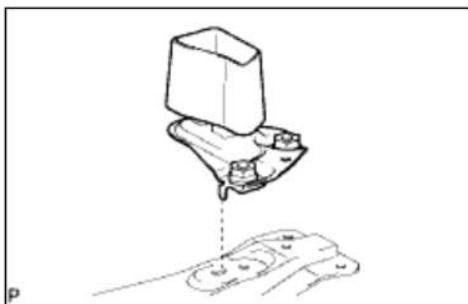
5. INSTALL FRONT SUSPENSION MEMBER DYNAMIC DAMPER (for TMC Made)



(a) Install the front suspension member dynamic damper with the bolt.

Torque: 52 N·m (530 kgf·cm, 38ft·lbf)

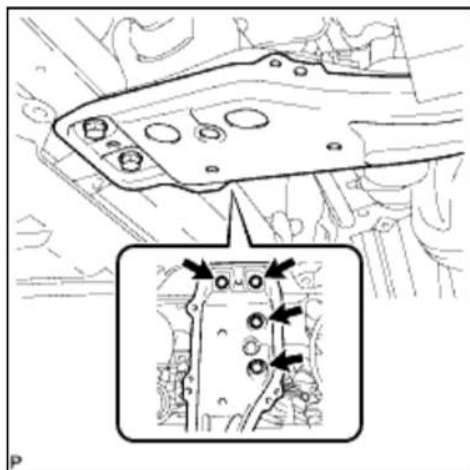
6. INSTALL FRONT SUSPENSION MEMBER DYNAMIC DAMPER (except TMC Made)



(a) Install the front suspension member dynamic damper.

7. TEMPORARILY INSTALL CENTER ENGINE MOUNTING MEMBER SUB-ASSEMBLY

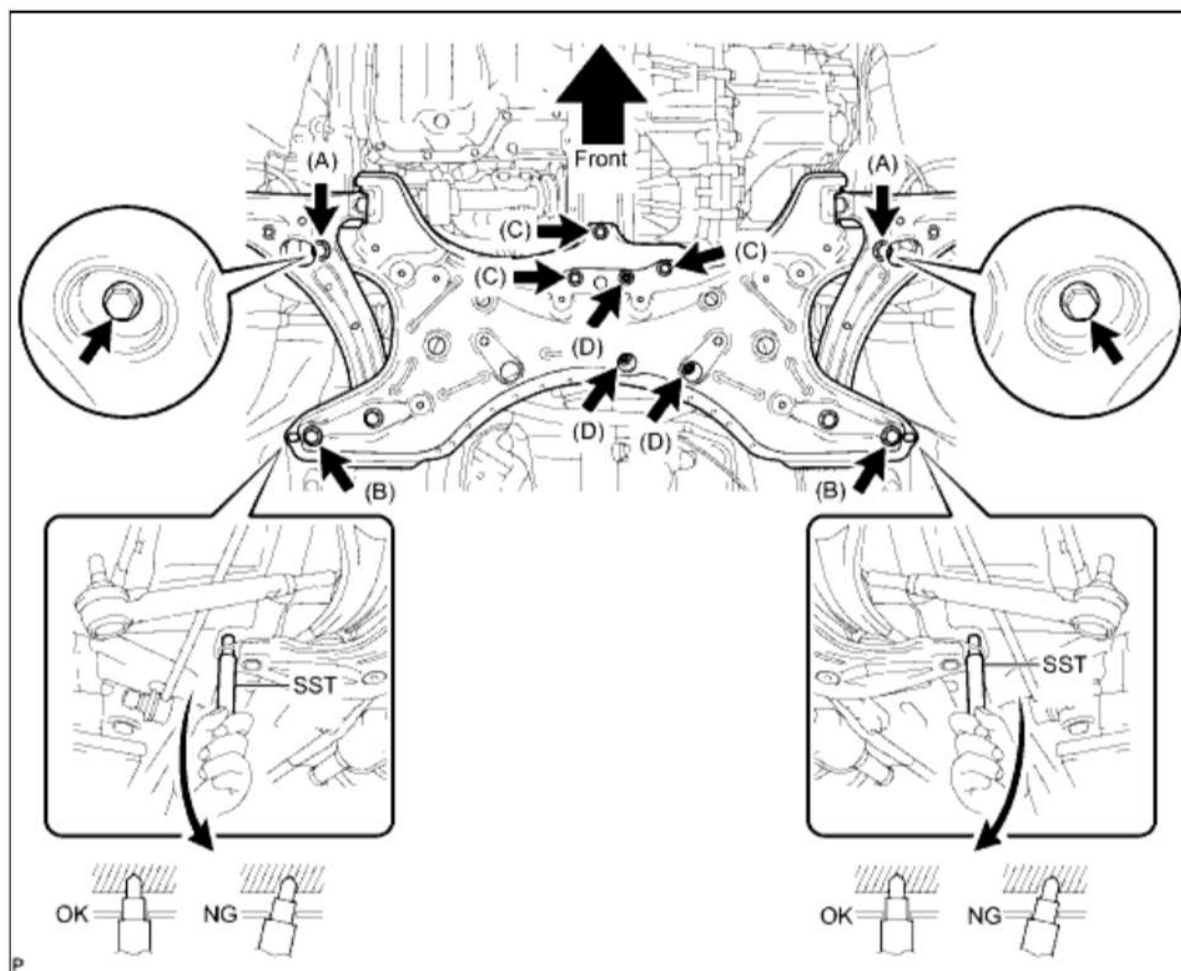
(a) Temporarily install the center engine mounting member sub-assembly with the 4 bolts.



8. INSTALL FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY (for TMC Made)

- (a) While alternately inserting SST into the guide holes on both sides of the front suspension crossmember RH and LH, tighten 2 bolts (A), 2 bolts (B), 3 bolts (C), and 3 nuts (D) on the RH and LH sides to the respective specified torque in several steps.

SST: 09670-00010



Bolt A - Torque: 113 N·m (1152 kgf·cm, 83ft·lbf)

Bolt B - Torque: 157 N·m (1600 kgf·cm, 116ft·lbf)

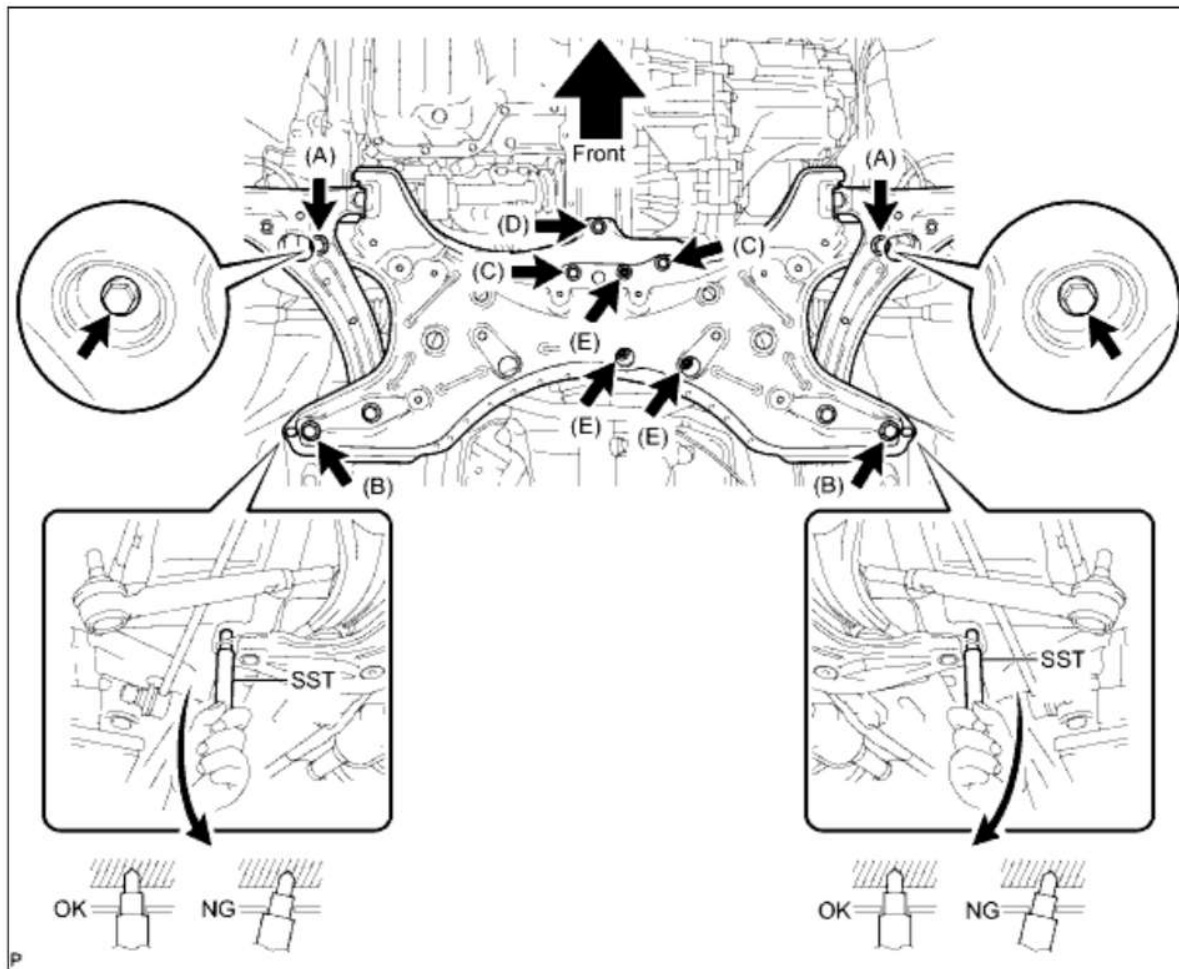
Bolt C - Torque: 52 N·m (530 kgf·cm, 38ft·lbf)

Nut D - Torque: 52 N·m (530 kgf·cm, 38ft·lbf)

9. INSTALL FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY (except TMC Made)

- (a) While alternately inserting SST into the guide holes on both sides of the front suspension crossmember RH and LH, tighten 2 bolts (A), 2 bolts (B), 2 bolts (C), bolt (D) and 3 nuts (E) on the RH and LH sides to the respective specified torque in several steps.

SST: 09670-00010



Bolt A - Torque: 113 N·m (1152 kgf·cm, 83ft·lbf)

Bolt B - Torque: 157 N·m (1600 kgf·cm, 116ft·lbf)

Bolt C - Torque: 52 N·m (530 kgf·cm, 38ft·lbf)

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

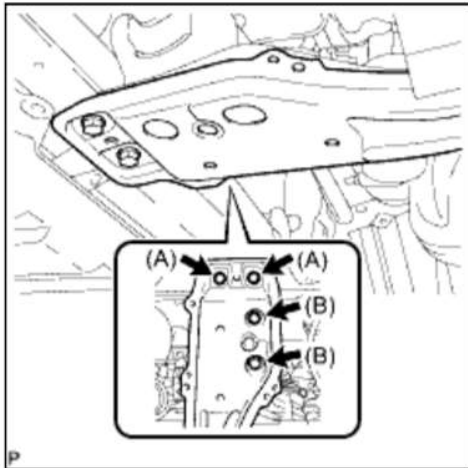
Nut E - Torque: 52 N·m (530 kgf·cm, 38ft·lbf)

10. FULLY TIGHTEN CENTER ENGINE MOUNTING MEMBER SUB-ASSEMBLY

- (a) Fully tighten the center engine mounting member sub-assembly with the 4 bolts.

Bolt A (TMC Made) - Torque: 39 N·m (398 kgf·cm, 29ft·lbf)

Bolt A (except TMC Made) - Torque: 60 N·m (612 kgf·cm,

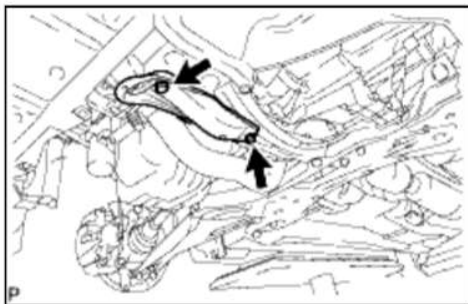


44ft·lbf)

Bolt B (TMC Made) - Torque: 52 N·m (530 kgf·cm, 38ft·lbf)

Bolt B (except TMC Made) - Torque: 81 N·m (827 kgf·cm, 160in·lbf)

11. INSTALL FRONT HOOK ASSEMBLY



(a) Install the front hook assembly with the 2 bolts.

Torque: 39 N·m (398 kgf·cm, 29ft·lbf)

12. CONNECT FRONT LOWER SUSPENSION ARM LH

INFO

13. CONNECT FRONT LOWER SUSPENSION ARM RH

HINT:

Perform the same procedure as the LH side.

14. CONNECT FRONT STABILIZER LINK ASSEMBLY LH

INFO

15. CONNECT FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Perform the same procedure as 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 the LH side.

18. INSTALL ENGINE UNDER COVER LH

19. INSTALL ENGINE UNDER COVER RH**20. CONNECT NO. 1 STEERING COLUMN HOLE COVER SUB-ASSEMBLY** **21. CONNECT NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY** **22. PLACE FRONT WHEELS FACING STRAIGHT AHEAD****23. INSTALL COLUMN HOLE COVER SILENCER SHEET** **24. INSTALL FRONT WHEELS**

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

25. STABILIZE SUSPENSION **26. FULLY TIGHTEN FRONT LOWER SUSPENSION ARM LH** **27. FULLY TIGHTEN FRONT LOWER SUSPENSION ARM RH****HINT:**

Perform the same procedure as the LH side.

28. INSPECT AND ADJUST FRONT WHEEL ALIGNMENT**HINT:**

Inspect and adjust front wheel alignment  .



Last Modified: 3-10-2010	6.4 A	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM0000029T701TX
Title: FRONT SUSPENSION: FRONT SUSPENSION MEMBER: REMOVAL (2010 Corolla)		

REMOVAL

1. PLACE FRONT WHEELS FACING STRAIGHT AHEAD

2. SECURE STEERING WHEEL 

3. REMOVE COLUMN HOLE COVER SILENCER SHEET 

4. SEPARATE NO. 2 STEERING INTERMEDIATE SHAFT ASSEMBLY 

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

6. REMOVE ENGINE UNDER COVER LH

7. REMOVE ENGINE UNDER COVER RH

8. REMOVE FRONT WHEELS

9. SEPARATE TIE ROD END SUB-ASSEMBLY LH 

10. SEPARATE TIE ROD END SUB-ASSEMBLY RH

HINT:

Perform the same procedure as the LH side.

11. SEPARATE FRONT STABILIZER LINK ASSEMBLY LH 

12. SEPARATE FRONT STABILIZER LINK ASSEMBLY RH

HINT:

Perform the same procedure as the LH side.

13. SEPARATE FRONT LOWER SUSPENSION ARM LH 

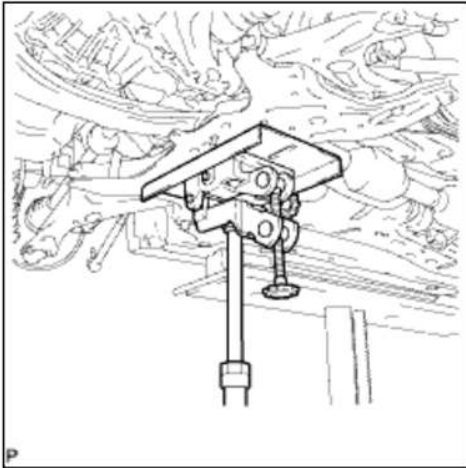
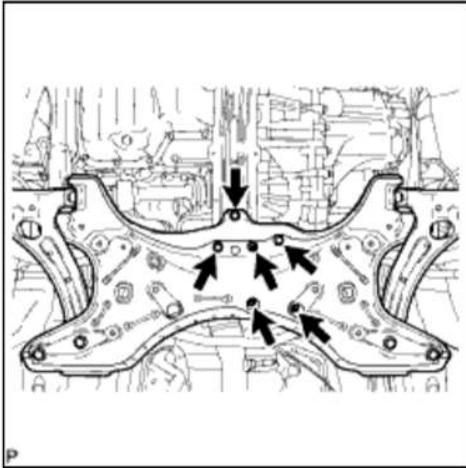
14. SEPARATE FRONT LOWER SUSPENSION ARM RH

HINT:

Perform the same procedure as the LH side.

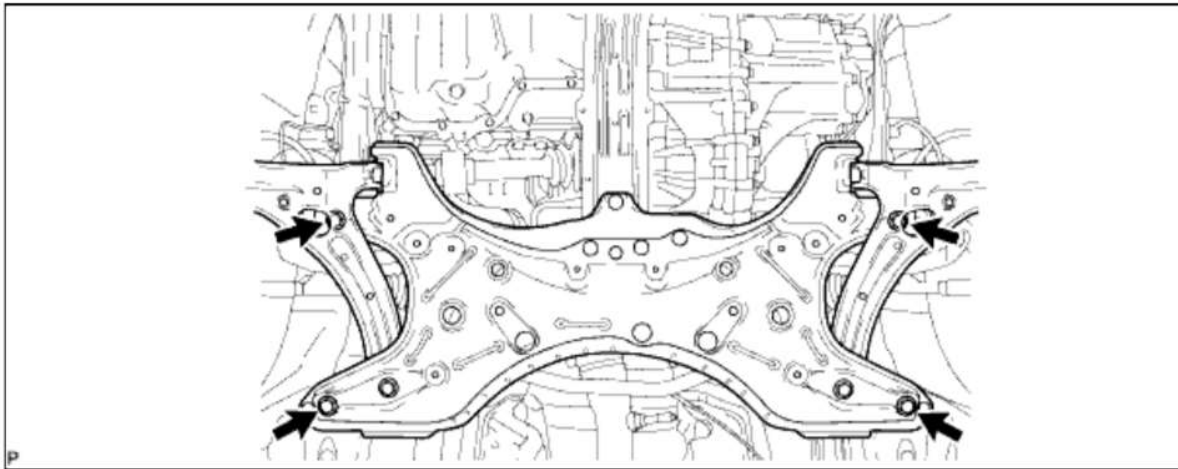
15. REMOVE FRONT SUSPENSION CROSSMEMBER SUB-ASSEMBLY

(a) Remove the 3 bolts and 3 nuts.

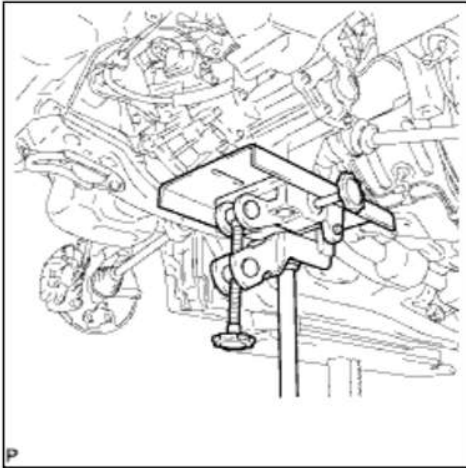


(b) Using a transmission jack or equivalent, support the front suspension crossmember sub-assembly.

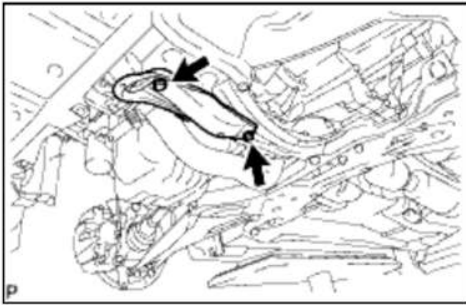
(c) Remove the 4 bolts and front suspension crossmember sub-assembly.



16. REMOVE FRONT HOOK ASSEMBLY

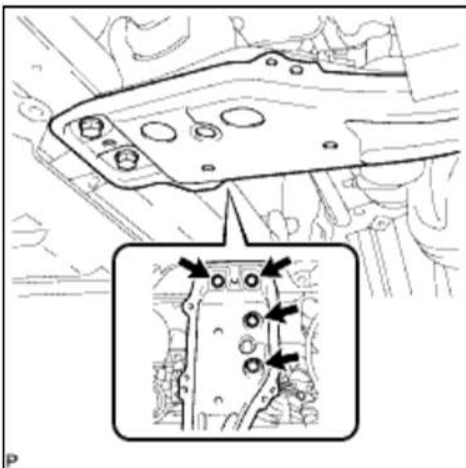


(a) Using a transmission jack or equivalent, support the transmission.



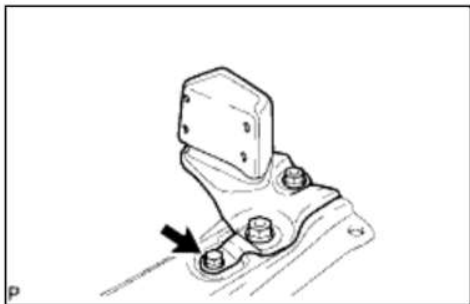
(b) Remove the 2 bolts and front hook assembly.

17. REMOVE CENTER ENGINE MOUNTING MEMBER SUB-ASSEMBLY



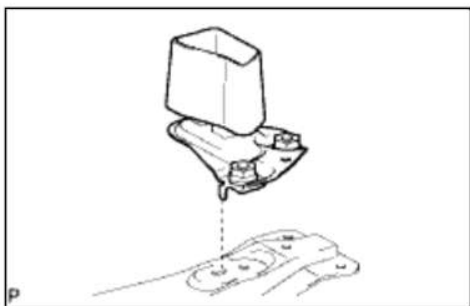
(a) Remove the 4 bolts and center engine mounting member sub-assembly.

18. REMOVE FRONT SUSPENSION MEMBER DYNAMIC DAMPER (for TMC Made)



(a) Remove the bolt and front suspension member dynamic damper.

19. REMOVE FRONT SUSPENSION MEMBER DYNAMIC DAMPER (except TMC Made)



(a) Remove the front suspension member dynamic damper.

20. REMOVE FRONT STABILIZER BAR INFO

21. REMOVE STEERING LINK ASSEMBLY INFO

22. REMOVE FRONT LOWER SUSPENSION ARM LH INFO

23. REMOVE FRONT LOWER SUSPENSION ARM RH

HINT:

Perform the same procedure as the LH side.



Last Modified: 3-10-2010	6.4 T	From: 200901
Model Year: 2010	Model: Corolla	Doc ID: RM000003CRU006X
Title: FRONT SUSPENSION: FRONT SUSPENSION SYSTEM: PROBLEM SYMPTOMS TABLE (2010 Corolla)		

PROBLEM SYMPTOMS TABLE

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 shock absorber (worn)	INFO
	Steering linkage (loose or worn)	INFO
	Front hub bearing (worn)	INFO
	Steering gear (broken)	INFO
	Suspension parts (worn)	-
Bottoming	Vehicle (overloaded)	-
	Front coil spring (weak)	INFO
	Front shock absorber (worn)	INFO
Sway/pitches	Tire (worn or improperly inflated)	INFO
	Front coil spring (weak)	INFO
	Front shock absorber (worn)	INFO
	Front stabilizer bar (bent or broken)	INFO
Wheel shimmy	Tire (worn or improperly inflated)	INFO
	Wheel (out of balance)	INFO
	Front wheel alignment (incorrect)	INFO
	Front shock absorber (worn)	INFO
	Front lower ball joint (worn)	INFO
	Front hub bearing (worn)	INFO
	Steering linkage (loose or worn)	INFO

SYMPTOM	SUSPECTED AREA	SEE PAGE
Abnormal tire wear	Steering gear (broken)	INFO
	Tire (worn or improperly inflated)	INFO
	Wheel (out of balance)	INFO
	Front wheel alignment (incorrect)	INFO
	Suspension parts (worn)	-