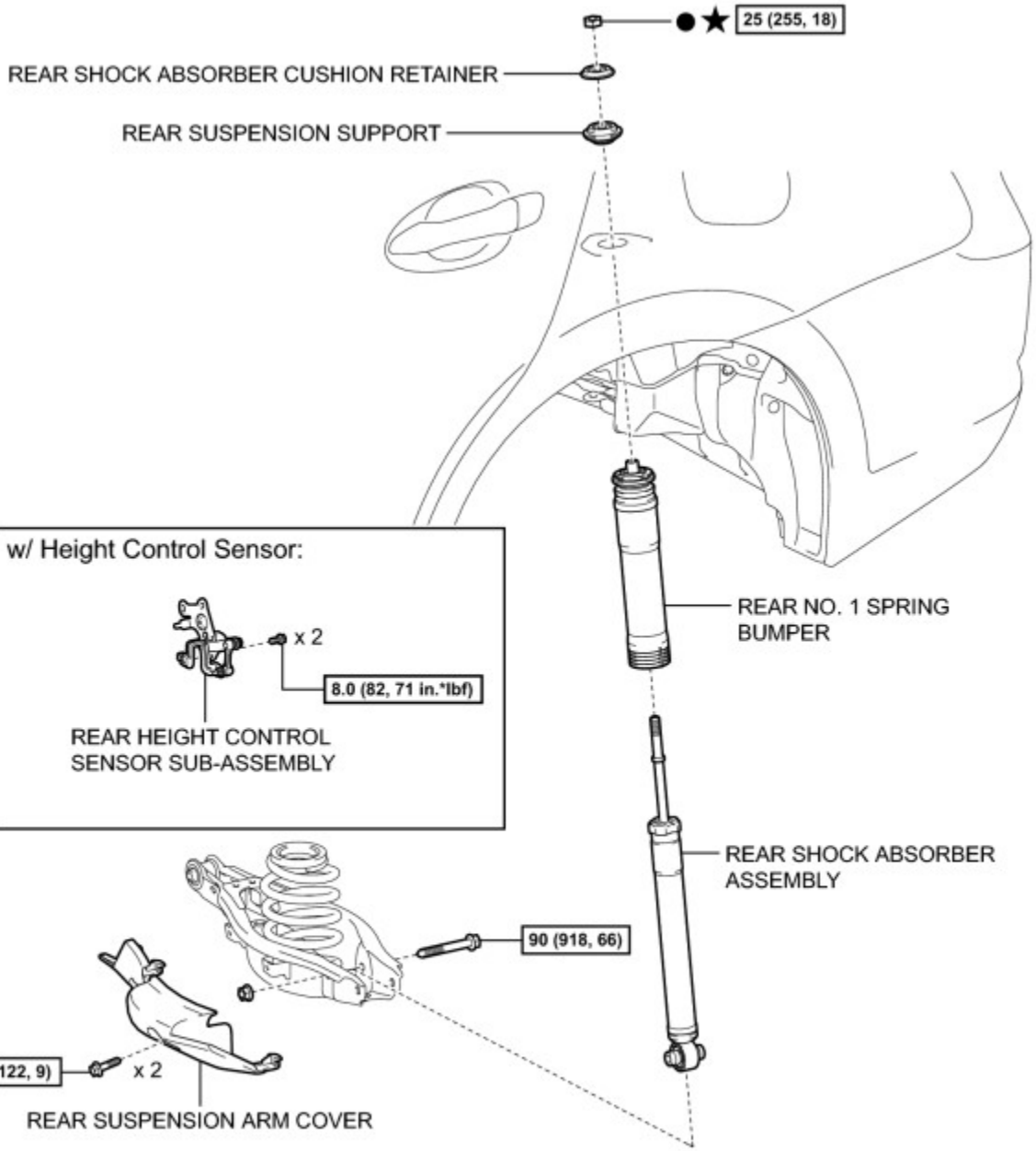


Last Modified: 10-5-2010	6.4 K	From: 200907
Model Year: 2010	Model: HS250H	Doc ID: RM000003UVJ003X
Title: REAR SUSPENSION: REAR SHOCK ABSORBER: COMPONENTS (2010 HS250H)		

COMPONENTS

ILLUSTRATION



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

● Non-reusable part

★ Precoated part



Last Modified: 10-5-2010	6.4 A	From: 200907
Model Year: 2010	Model: HS250H	Doc ID: RM000003UVK003X
Title: REAR SUSPENSION: REAR SHOCK ABSORBER: REMOVAL (2010 HS250H)		

REMOVAL

HINT:

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

1. REMOVE INNER LUGGAGE COMPARTMENT TRIM COVER

HINT:

Refer to the procedure up to Remove Inner Luggage Compartment Trim Cover [INFO](#).

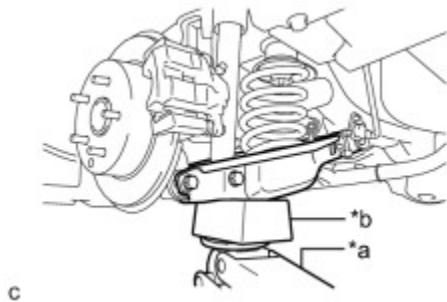
2. REMOVE REAR WHEEL

3. REMOVE REAR HEIGHT CONTROL SENSOR SUB-ASSEMBLY (w/ Height Control Sensor) [INFO](#)

4. REMOVE REAR SUSPENSION ARM COVER [INFO](#)

5. REMOVE REAR SHOCK ABSORBER CUSHION RETAINER

(a) Using a jack and wooden block, jack up the rear No. 2 suspension arm assembly to replicate standard vehicle height conditions.



Text in Illustration	
*a	Jack
*b	Wooden Block

CAUTION:

Do not jack up the rear No. 2 suspension arm assembly too high as the vehicle may fall.

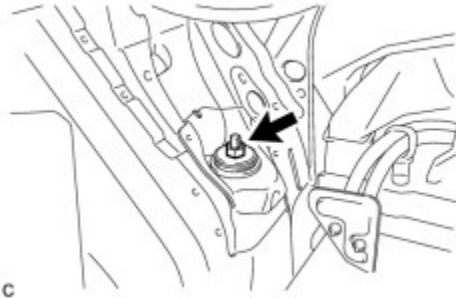
NOTICE:

Keep supporting the rear No. 2 suspension arm assembly with a jack until the installation of the rear shock absorber assembly has been completed.

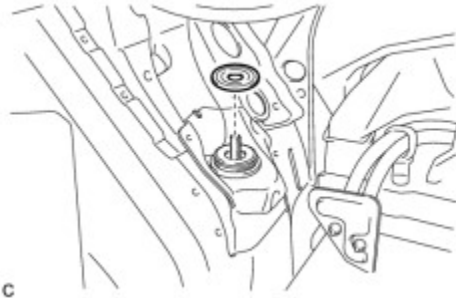
(b) Using a socket hexagon, secure the rear shock absorber rod and remove the lock nut.

NOTICE:

Securely insert the socket hexagon to the rear shock absorber rod to prevent damage to the rear shock absorber assembly when removing the lock nut.

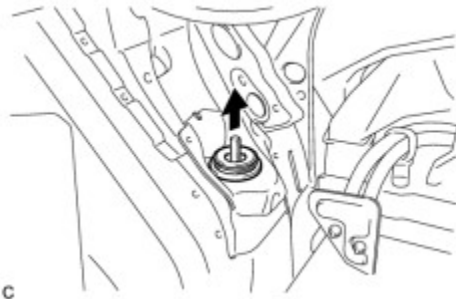


(c) Remove the rear shock absorber cushion retainer.



6. REMOVE REAR SUSPENSION SUPPORT

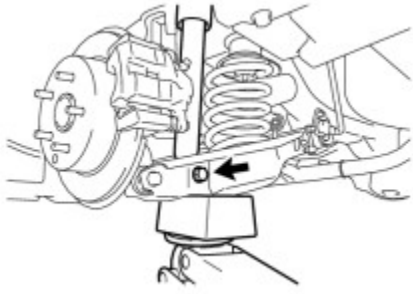
(a) Remove the rear suspension support.



7. REMOVE REAR SHOCK ABSORBER ASSEMBLY

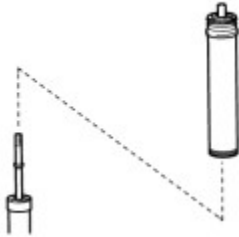
(a) Remove the bolt while holding the nut and remove the rear shock absorber assembly and rear No. 1 spring bumper while compressing the rear shock absorber assembly.

NOTICE:

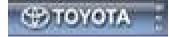


Since a stopper nut is used, turn the bolt.

8. REMOVE REAR NO. 1 SPRING BUMPER



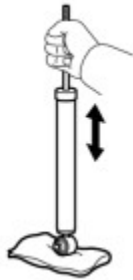
(a) Remove the rear No. 1 spring bumper from the rear shock absorber assembly.



Last Modified: 10-5-2010	6.4 G	From: 200907
Model Year: 2010	Model: HS250H	Doc ID: RM000003UVI003X
Title: REAR SUSPENSION: REAR SHOCK ABSORBER: INSPECTION (2010 HS250H)		

INSPECTION

1. INSPECT REAR SHOCK ABSORBER ASSEMBLY



(a) Compress and extend the rear shock absorber rod, and check that there is no abnormal resistance or unusual sound during operation. If there is any abnormality, replace the shock absorber with a new one.

NOTICE:

When disposing of the rear shock absorber assembly, refer to the Disposal procedure [INFO](#).



Last Modified: 10-5-2010	6.4 A	From: 200907
Model Year: 2010	Model: HS250H	Doc ID: RM000003UVH003X
Title: REAR SUSPENSION: REAR SHOCK ABSORBER: INSTALLATION (2010 HS250H)		

INSTALLATION

HINT:

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

1. INSTALL REAR NO. 1 SPRING BUMPER

(a) Install the rear No. 1 spring bumper to the rear shock absorber assembly.

2. TEMPORARILY TIGHTEN REAR SHOCK ABSORBER ASSEMBLY

(a) Insert the upper end of the rear shock absorber assembly to the vehicle body.

(b) Temporarily tighten the rear shock absorber assembly to the rear No. 2 suspension arm assembly with the bolt and nut.

NOTICE:

- Since the stopper nut is used, turn the bolt.
- Insert the bolt with the threaded end facing the front of the vehicle.

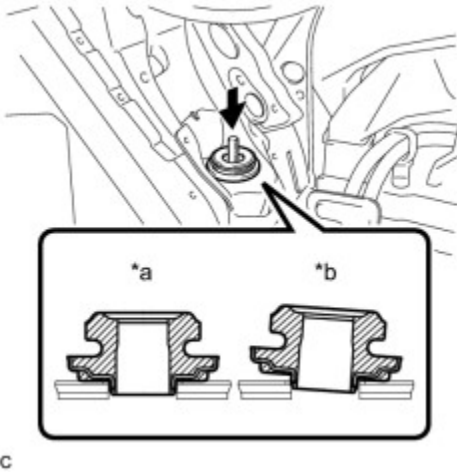
3. INSTALL REAR SUSPENSION SUPPORT

(a) Install the rear suspension support.

Text in Illustration	Correct
*a	
*b	Incorrect

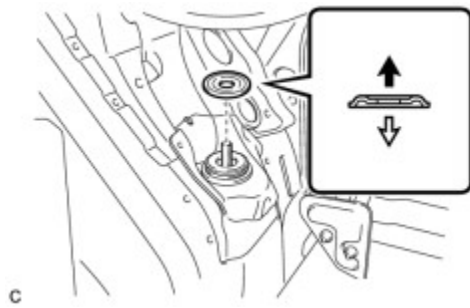
NOTICE:

Make sure that the rear suspension support is correctly installed as shown in the illustration.



4. INSTALL REAR SHOCK ABSORBER CUSHION RETAINER

(a) Install the rear shock absorber cushion retainer.



Text in Illustration

➔	Upper Side
⇨	Lower Side

NOTICE:

Be sure to install the rear shock absorber cushion retainer in the correct direction.

(b) Apply a few drops of adhesive to the threads of a new nut.


Adhesive:

Toyota genuine adhesive 1324, three bond 1324 or equivalent

(c) Using a union nut wrench, fully tighten the nut while holding the rear shock absorber rod with a socket hexagon.

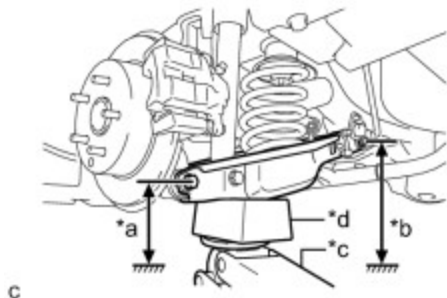
Torque: **25 N·m (255 kgf·cm, 18ft·lbf)**

NOTICE:

- Securely insert the socket hexagon to the rear shock absorber rod to prevent damage to the rear shock absorber assembly when tightening the nut.
- Use the formula to calculate special torque values for situations where the union nut wrench is combined with a torque wrench .

5. STABILIZE SUSPENSION

(a) Jack up the rear No. 2 suspension arm assembly, placing a wooden block underneath to avoid damage. Apply load to the suspension so that the rear No. 2 suspension arm assembly is positioned until the length (*b - *a) in the illustration is within the specification.



Text in Illustration	
*a	Ground clearance of rear No. 2 suspension arm set bolt center (outside of the vehicle)
*b	Ground clearance of rear No. 2 suspension arm set bolt center (inside of the vehicle)
*c	Jack
*d	Wooden Block

Reference length (*b - *a):

16.2 mm (0.638 in.)

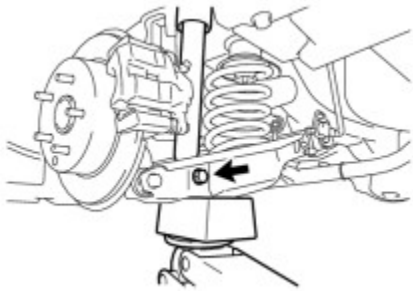
CAUTION:

Do not jack up the rear No. 2 suspension arm assembly too high as the vehicle may fall.

HINT:

- If the rear No. 2 suspension arm assembly cannot be positioned within the specification even when the rear No. 2 suspension arm assembly is jacked up, apply additional load such as by placing a weight in the luggage compartment.
- This procedure duplicates standard vehicle height conditions.
- Use the same procedure for the RH side and LH side.

6. FULLY TIGHTEN REAR SHOCK ABSORBER ASSEMBLY



(a) Fully tighten the bolt.

Torque: **90 N·m (918 kgf·cm, 66ft·lbf)**

NOTICE:

- Since a stopper nut is used, turn the bolt.
- The final torque must be applied under the standard vehicle height conditions.

7. INSTALL REAR HEIGHT CONTROL SENSOR SUB-ASSEMBLY (w/ Height Control Sensor) [INFO](#)

8. INSTALL REAR SUSPENSION ARM COVER [INFO](#)

9. INSTALL REAR WHEEL

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

10. INSTALL LUGGAGE COMPARTMENT TRIM COVER INNER LH

HINT:

Refer to the procedure from Install Inner Luggage Compartment Trim Cover [INFO](#).

11. HEIGHT CONTROL SENSOR SIGNAL INITIALIZATION (w/ Height Control Sensor)

[INFO](#)

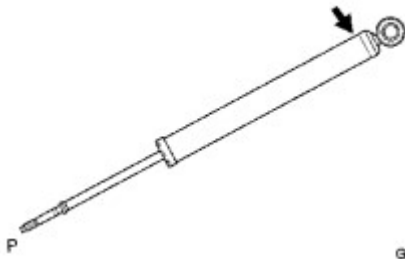
12. INSPECT AND ADJUST HEADLIGHT AIMING (w/ Height Control Sensor)



Last Modified: 10-5-2010	6.4 N	From: 200907
Model Year: 2010	Model: HS250H	Doc ID: RM000003UVG003X
Title: REAR SUSPENSION: REAR SHOCK ABSORBER: DISPOSAL (2010 HS250H)		

DISPOSAL

1. DISPOSE OF REAR SHOCK ABSORBER ASSEMBLY



(a) Extend the rear shock absorber rod and secure the rear shock absorber assembly at an angle in a vise.

(b) Using a drill, slowly make a hole at the position indicated by the arrow in the illustration to discharge the gas inside.

CAUTION:

Be careful when drilling as shards of metal may fly about, so always use proper safety equipment.

HINT:

The gas is colorless, odorless and nonpoisonous.

