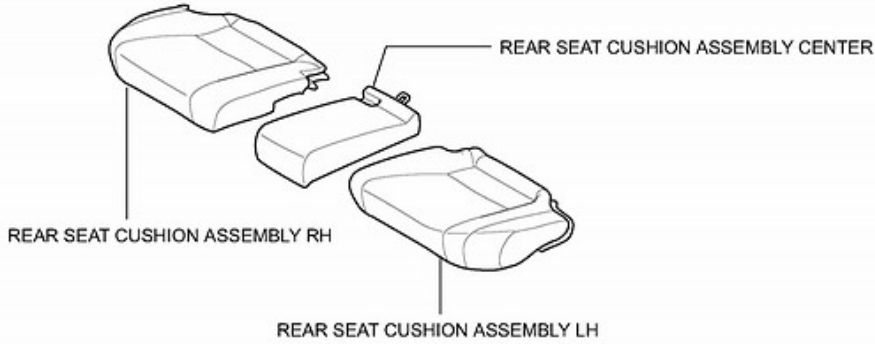
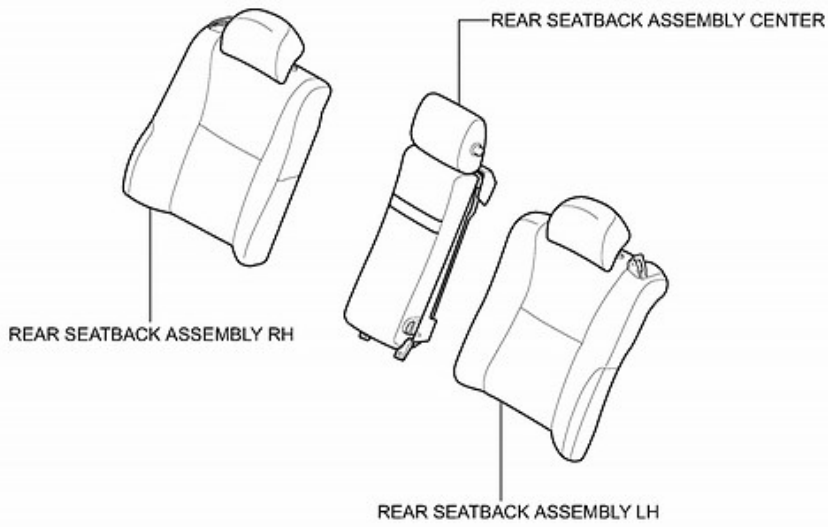


REAR SHOCK ABSORBER (w/ Air Suspension)

COMPONENTS

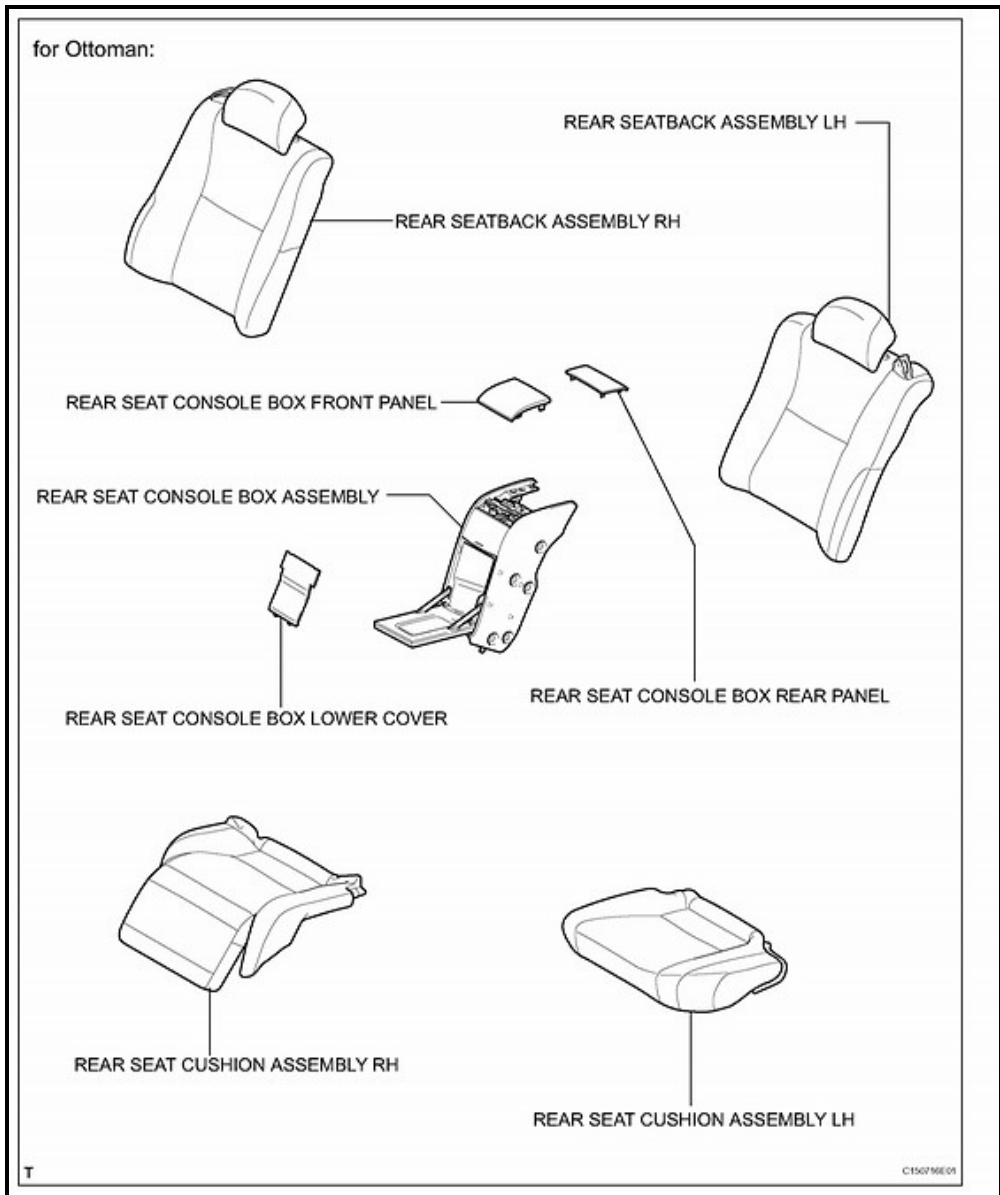
for Power Seat:



0

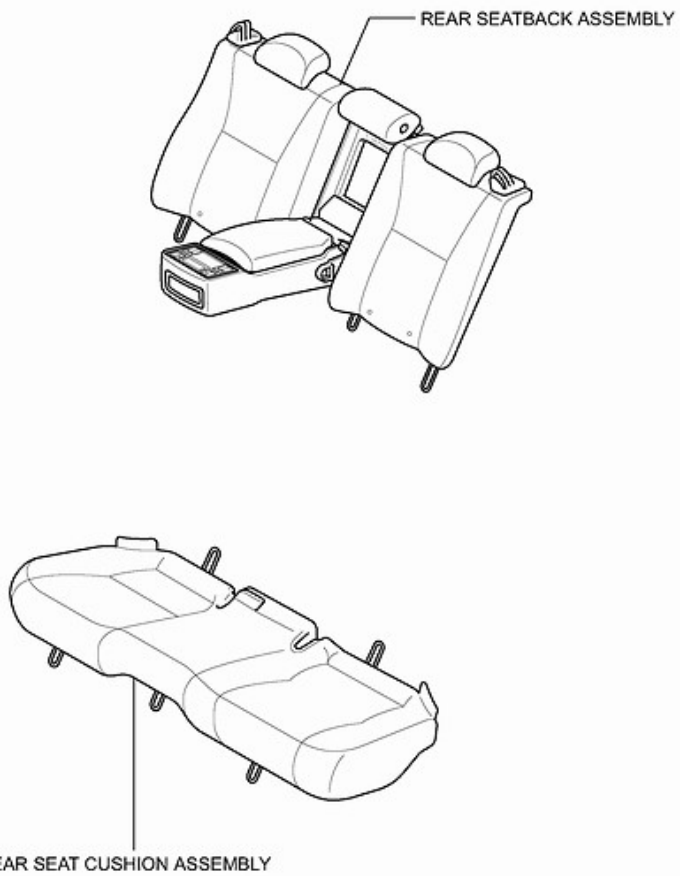
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COMPONENTS (Part 1)



COMPONENTS (Part 2)

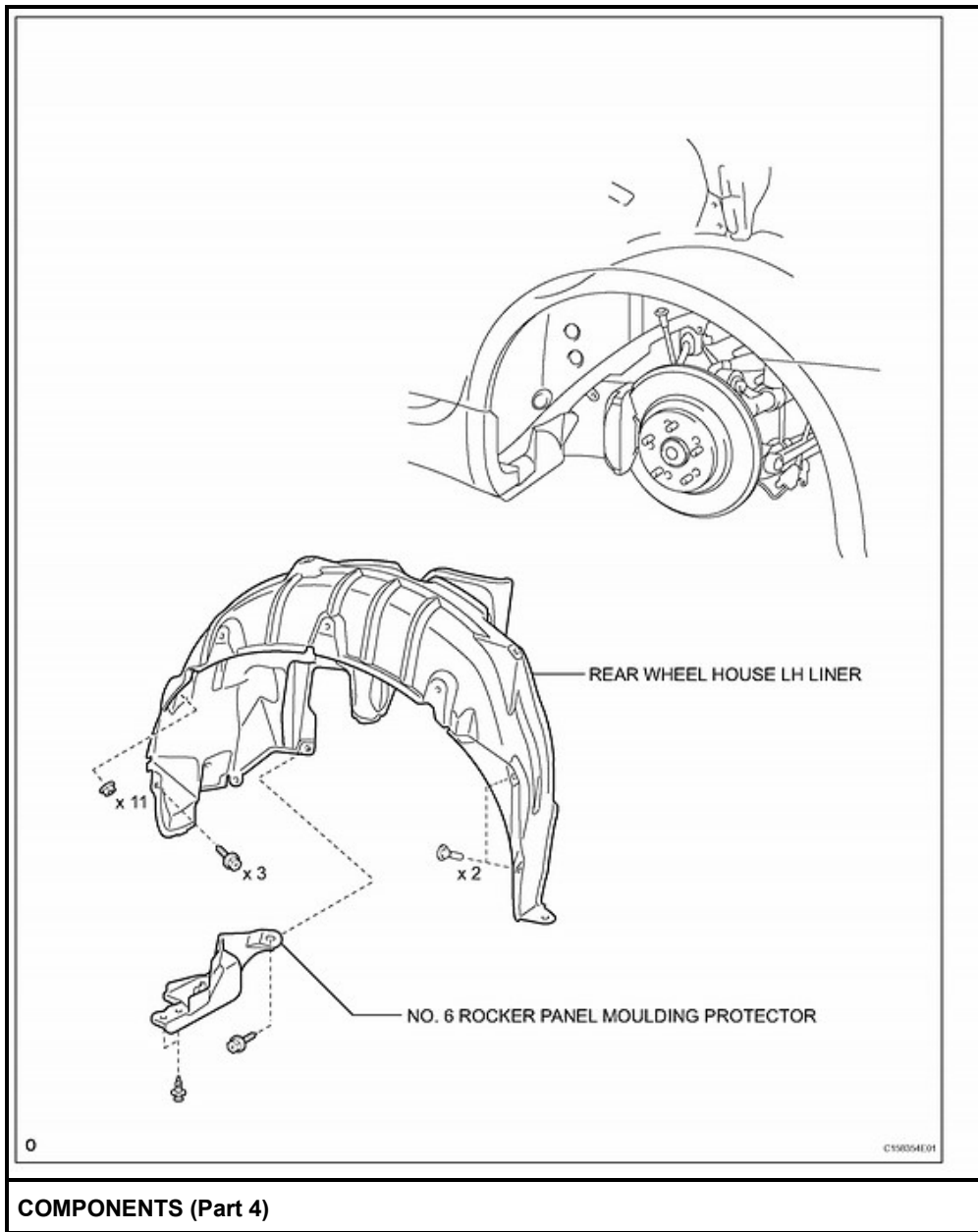
for Fixed Seat Type:



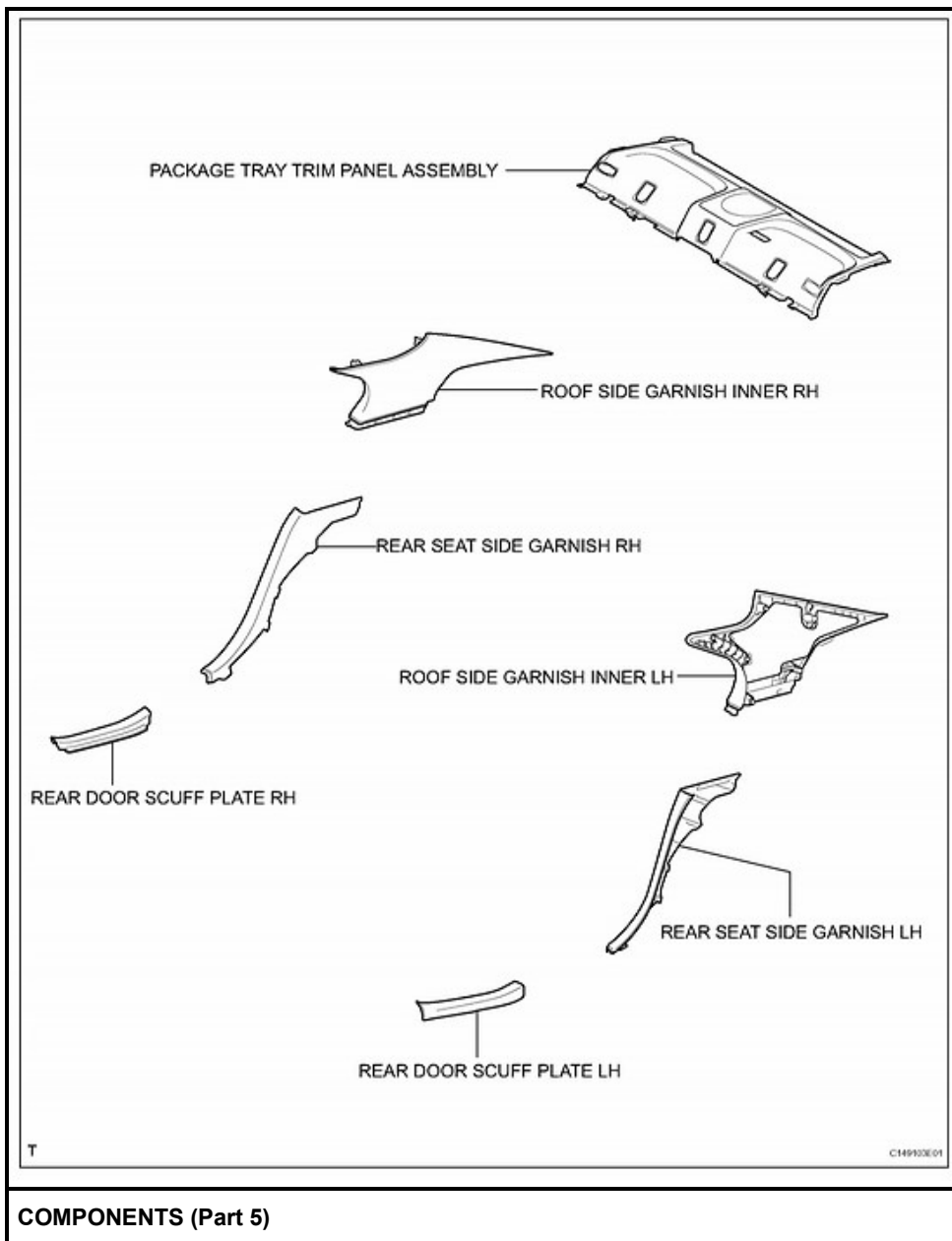
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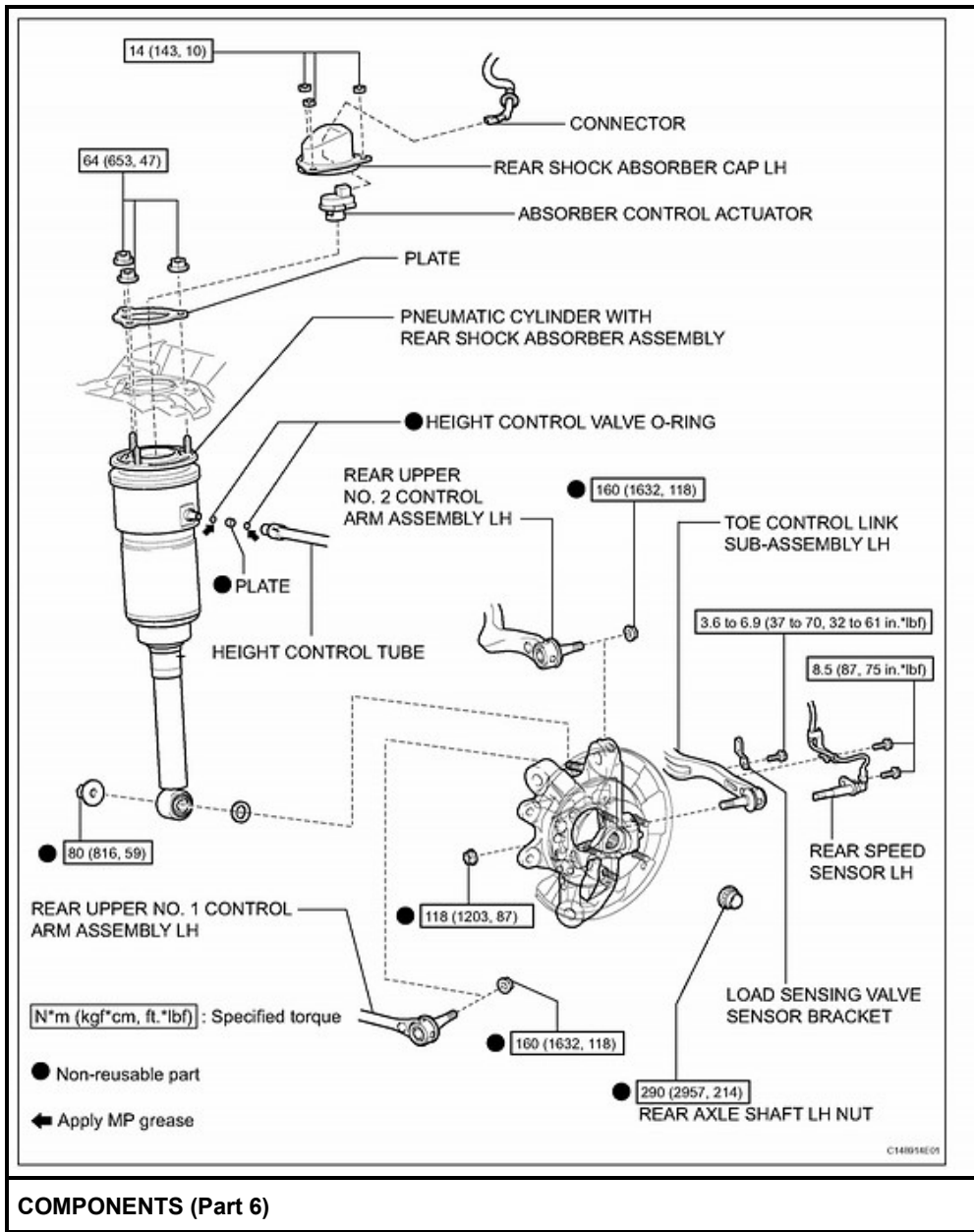
COMPONENTS (Part 3)



COMPONENTS (Part 4)



COMPONENTS (Part 5)



COMPONENTS (Part 6)

REMOVAL

CAUTION: Be sure to read the "PRECAUTION" thoroughly before servicing.

HINT:

- ^ Use the same procedures for the RH side and LH side.
- ^ The procedures listed below are for the LH side.

1. REMOVE COWL TOP VENTILATOR LOUVER RH
2. DISCONNECT CABLE FROM NEGATIVE BATTERY TERMINAL

CAUTION: Wait at least 90 seconds after disconnecting the cable from the negative (-) battery terminal to prevent airbag and seat belt pretensioner activation.

NOTICE: After the engine switch is turned off, the HDD navigation system requires **approximately 6 minutes** to record various types of memory and settings. As a result, after turning the engine switch off, wait **6 minutes or more** before disconnecting the cable from the negative (-) battery terminal.

3. REMOVE REAR WHEEL
4. REMOVE REAR SEAT CUSHION ASSEMBLY LH

- (a) Remove the seat cushion for power seat.
- (b) Remove the seat cushion for ottoman.
- 5. REMOVE REAR SEAT CUSHION ASSEMBLY RH
 - (a) Remove the seat cushion for power seat.
 - (b) Remove the seat cushion for ottoman.
- 6. REMOVE REAR SEAT CUSHION ASSEMBLY CENTER (for Power Seat)
- 7. REMOVE REAR SEATBACK ASSEMBLY LH
 - (a) Remove the seatback for power seat.
 - (b) Remove the seatback for ottoman.
- 8. REMOVE REAR SEAT CONSOLE BOX ASSEMBLY (for Ottoman)
- 9. REMOVE REAR SEATBACK ASSEMBLY RH
 - (a) Remove the seatback for power seat.
 - (b) Remove the seatback for ottoman.
- 10. REMOVE REAR SEATBACK ASSEMBLY CENTER (for Power Seat)
- 11. REMOVE REAR SEAT CUSHION ASSEMBLY (for Fixed Seat Type)
- 12. REMOVE REAR SEATBACK ASSEMBLY (for Fixed Seat Type)
- 13. REMOVE NO. 6 ROCKER PANEL MOULDING PROTECTOR
- 14. REMOVE REAR WHEEL HOUSE LH LINER
- 15. REMOVE REAR DOOR SCUFF PLATE LH
 - (a) Remove the scuff plate for standard body.
 - (b) Remove the scuff plate for long body.
- 16. REMOVE REAR DOOR SCUFF PLATE RH

HINT: Use the same procedures described for the LH side.

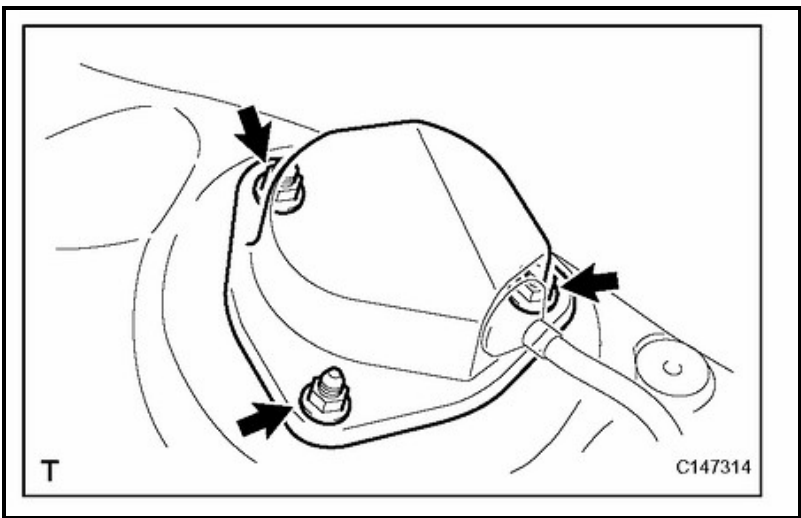
- 17. REMOVE REAR SEAT SIDE GARNISH LH
 - (a) Remove the side garnish for standard body.
 - (b) Remove the side garnish for long body.
- 18. REMOVE REAR SEAT SIDE GARNISH RH

HINT: Use the same procedures described for the LH side.

- 19. REMOVE ROOF SIDE GARNISH INNER LH
 - (a) Remove the garnish for standard body.
 - (b) Remove the garnish for long body.
- 20. REMOVE ROOF SIDE GARNISH INNER RH

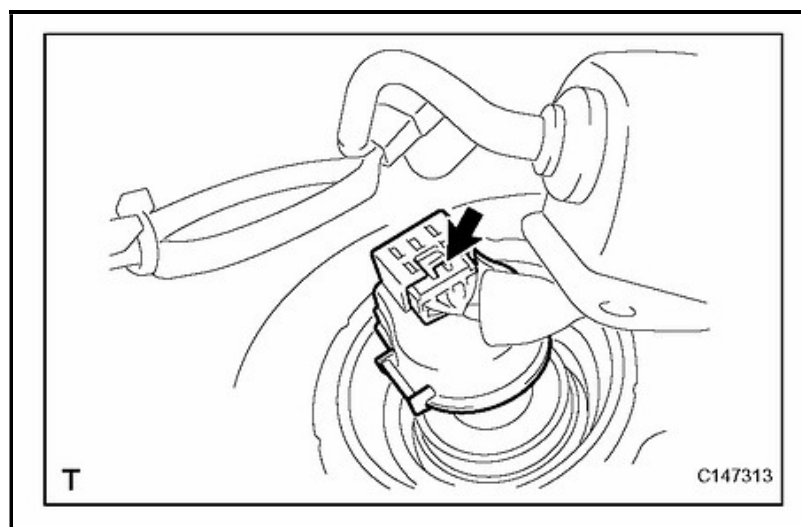
HINT: Use the same procedures described for the LH side.

- 21. REMOVE PACKAGE TRAY TRIM PANEL ASSEMBLY
- 22. REMOVE REAR SPEED SENSOR LH
- 23. REMOVE LOAD SENSING VALVE SENSOR BRACKET
- 24. DISCONNECT REAR UPPER NO. 2 CONTROL ARM ASSEMBLY LH
- 25. DISCONNECT REAR UPPER NO. 1 CONTROL ARM ASSEMBLY LH
- 26. DISCONNECT TOE CONTROL LINK SUB-ASSEMBLY LH
- 27. REMOVE REAR AXLE SHAFT LH NUT



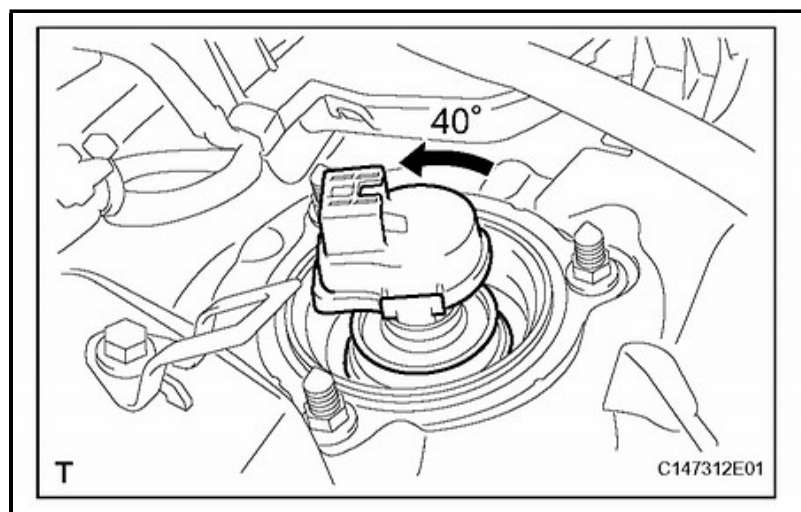
28. REMOVE REAR SHOCK ABSORBER CAP LH

- (a) Remove the 3 nuts and cap.



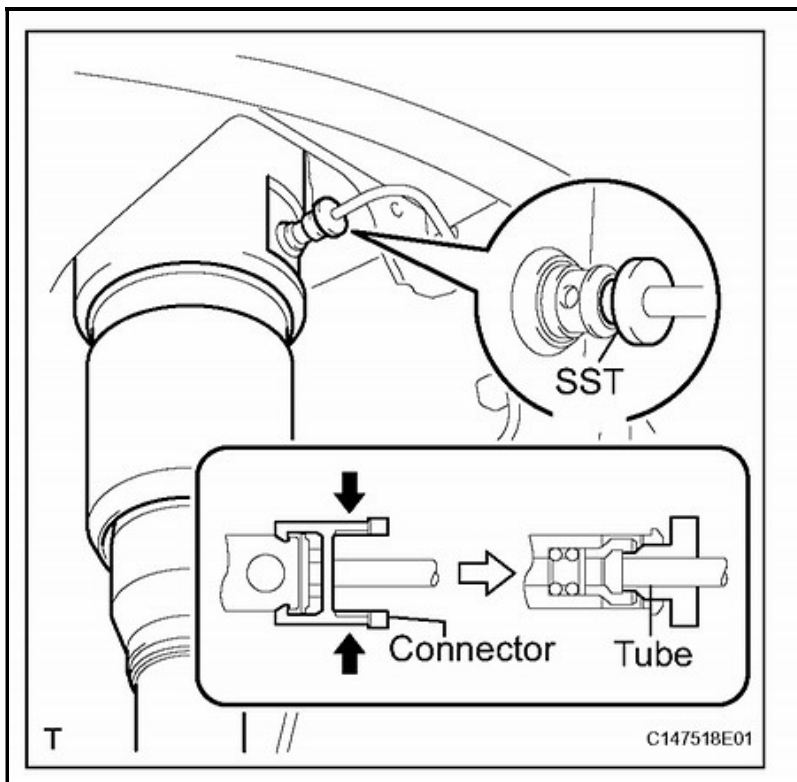
29. DISCONNECT CONNECTOR

- (a) Disconnect the connector from the absorber actuator.



30. REMOVE ABSORBER CONTROL ACTUATOR

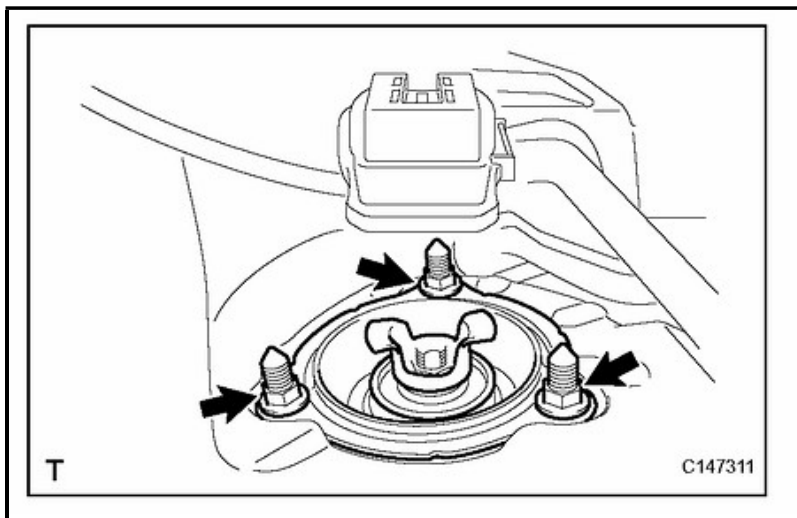
- (a) Turn the absorber control actuator **counterclockwise approximately 40°** and remove it.



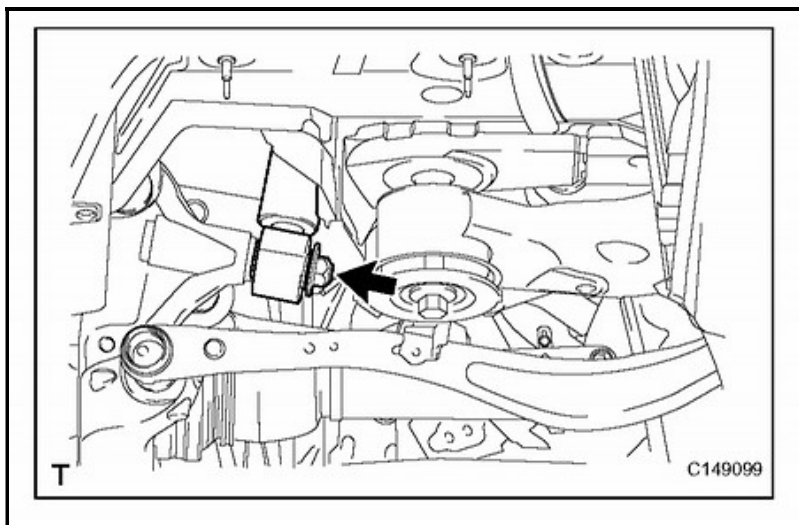
31. REMOVE PNEUMATIC CYLINDER WITH REAR SHOCK ABSORBER ASSEMBLY LH

- (a) Pinch and pull connector No. 1 to release it.
- (b) Using SST, pull out the height control tube from the pneumatic cylinder with shock absorber.
SST 09730-00010

NOTICE: After pulling out the height control tube, replace the O-ring and plate with new ones.



- (c) Remove the 3 nuts on the upper side of the shock absorber.

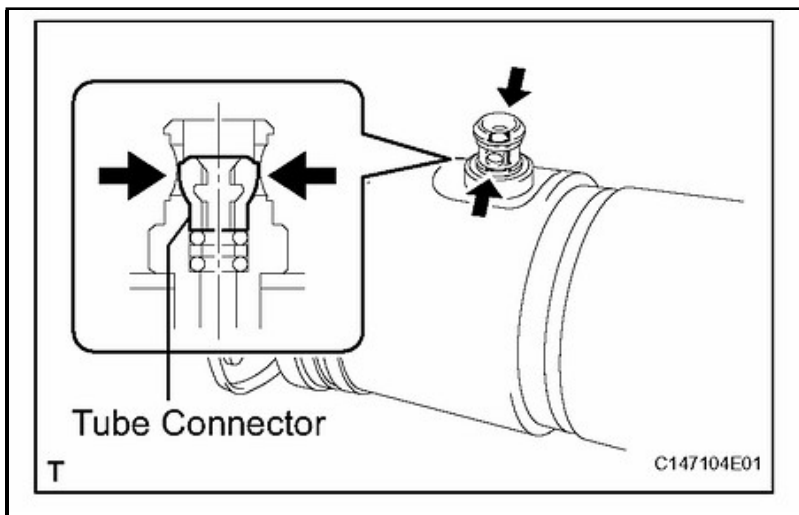


(d) Remove the nut from the shock absorber lower side.

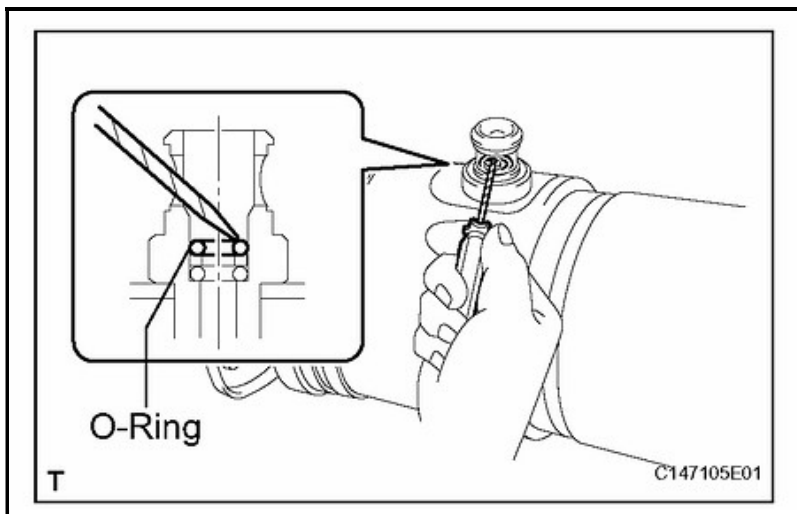
(e) Angle the axle carrier's upper tip toward the vehicle's outer side, and remove the shock absorber.

32. REMOVE HEIGHT CONTROL VALVE O-RING

HINT: It is unnecessary to perform the following procedures if the pneumatic cylinder with shock absorber has been replaced with a new one.

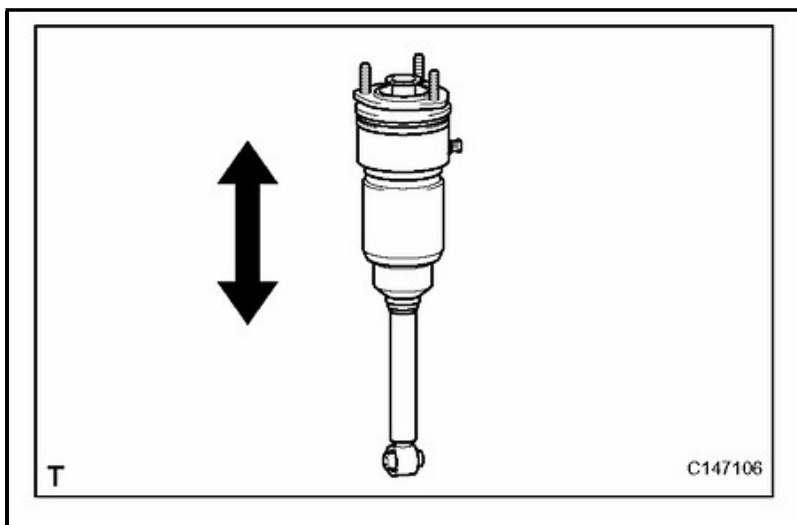


(a) Using a screwdriver, detach the 2 clips and remove the tube connector.



(b) Using a screwdriver, remove the plate and 2 O-rings.

INSPECTION



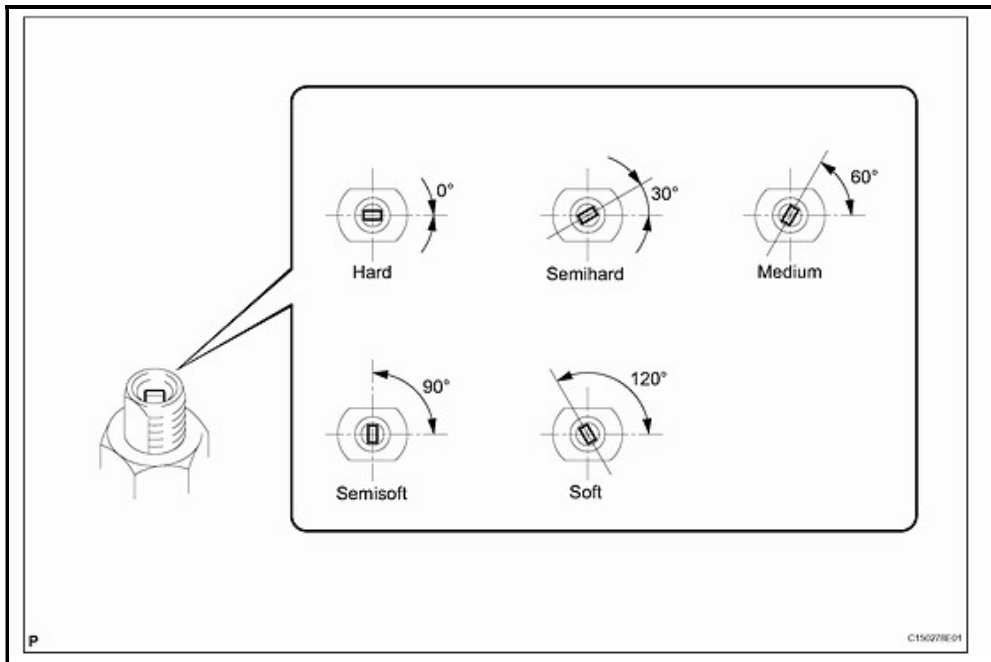
1. INSPECT PNEUMATIC CYLINDER WITH REAR SHOCK ABSORBER ASSEMBLY LH

(a) Extend the pneumatic cylinder with shock absorber and check that it is as described below.

Standard: While extending the cylinder at a constant speed, the load is constant for each stroke and there is no abnormal feedback or noises. Also, the cylinder returns at a constant speed when extended.

If an abnormality is found, replace the pneumatic cylinder with shock absorber with a new one.

NOTICE: When extending the pneumatic cylinder with shock absorber rear LH, do not block the air inlet/outlet opening.



(b) While adjusting the damping force control rod to hard, semi hard, medium, soft and semi soft, inspect the pneumatic cylinder assembly with rear shock absorber LH by compressing and extending it.
 Standard: The damping forces are not the same.

INSTALLATION

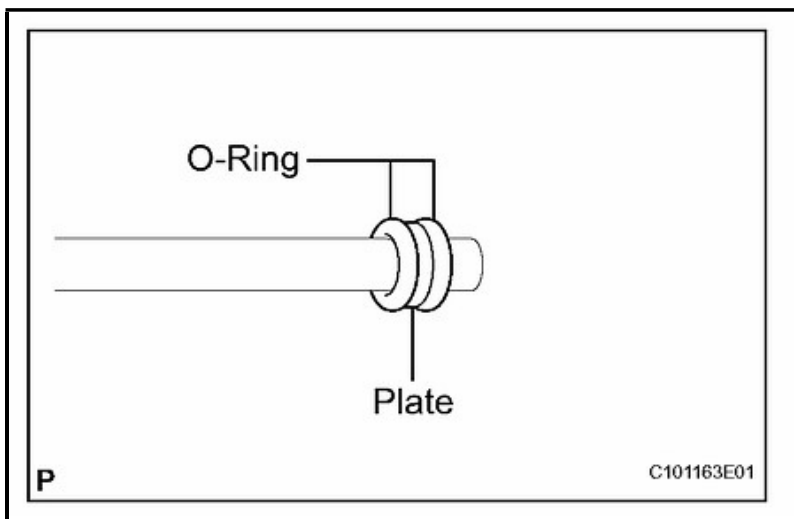
HINT:

- ^ Use the same procedures for the RH side and LH side.
- ^ The procedures listed below are for the LH side.
- ^ A bolt without a torque specification is shown in the standard bolt chart.

1. INSTALL HEIGHT CONTROL VALVE O-RING

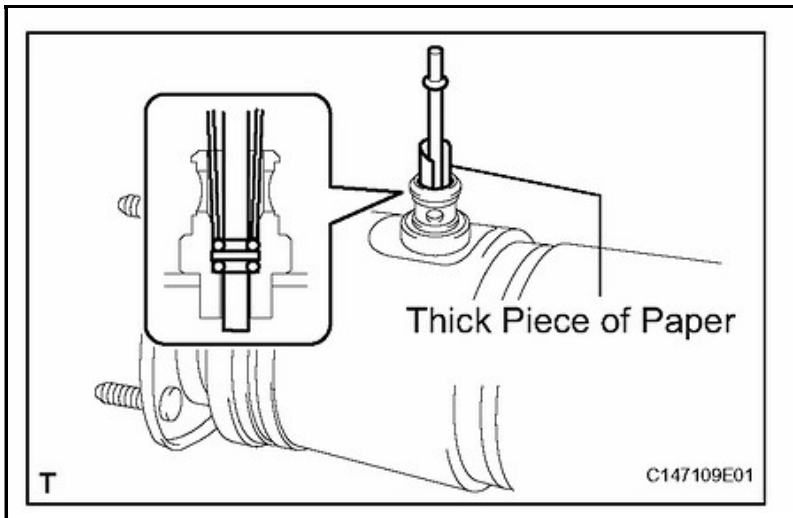
HINT: It is unnecessary to perform the following procedures if the pneumatic cylinder with shock absorber has been replaced with a new one.

(a) Apply a light coat of MP grease No. 2 to 2 new O-rings.



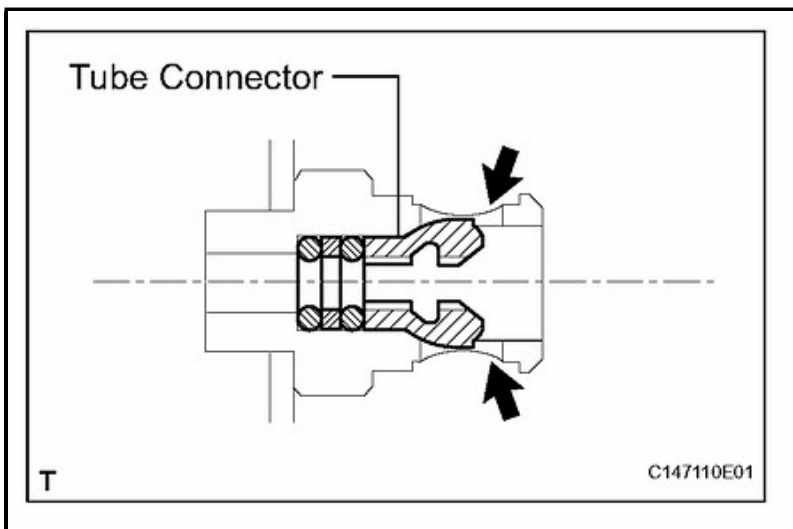
(b) Install the 2 O-rings and a new plate to a height control tube or equivalent, as shown in the illustration.

NOTICE: Set the plate between the 2 O-rings.



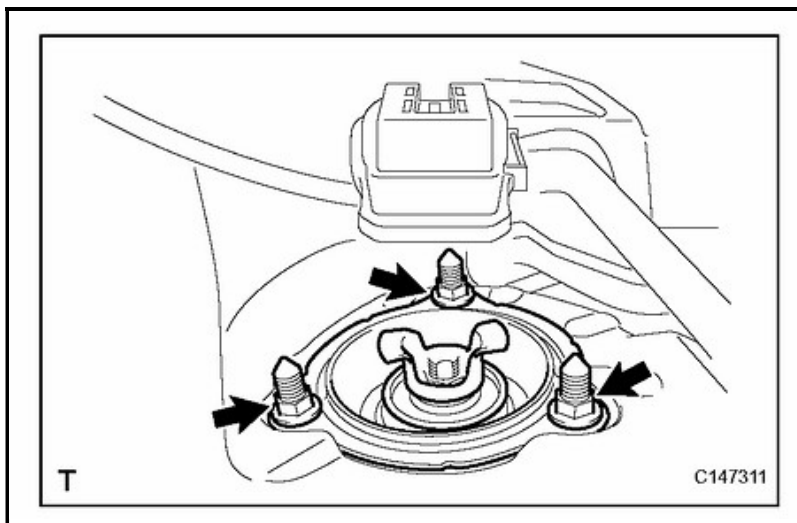
(c) Insert the tube end with the 2 O-rings and plate into the pneumatic cylinder with shock absorber. Then, lightly push in the O-rings and plate with a thick piece of paper.

(d) While holding the O-rings and plate in place with the paper, slowly pull out the tube.



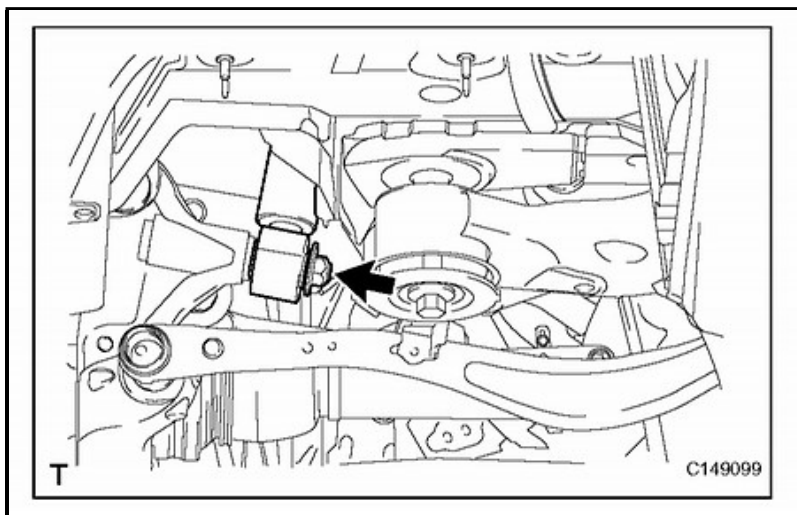
(e) Install a new tube connector.

NOTICE: Push in the tube connector until a "click" sound is heard.

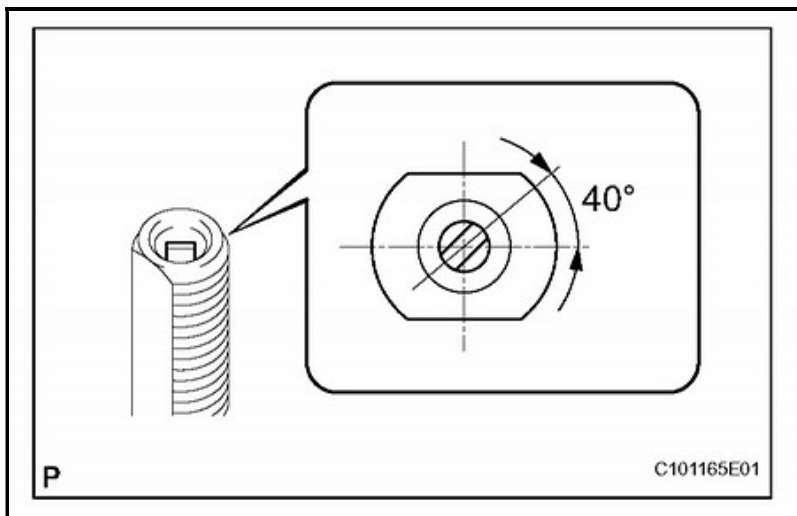


2. TEMPORARILY INSTALL PNEUMATIC CYLINDER WITH REAR SHOCK ABSORBER ASSEMBLY LH

- (a) Install the rear shock absorber on the vehicle by installing the 3 nuts on the suspension support side.
Torque: **64 N*m (653 kgf*cm, 47 ft.*lbf)**



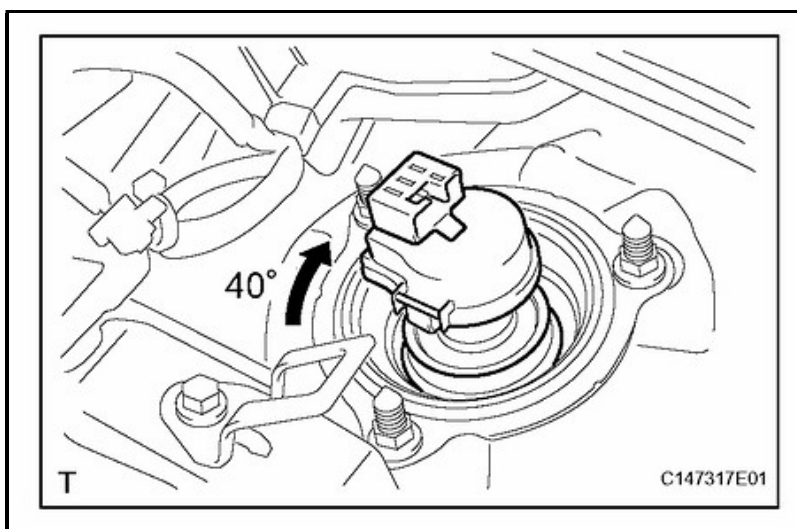
- (b) Temporarily install the rear shock absorber lower side on the rear axle carrier with the washer and new nut.
(c) Insert the height control tube into the pneumatic cylinder with shock absorber.
(d) Pinch the connector No. 1 and set its tips into the groove of the shock absorber.



3. INSTALL ABSORBER CONTROL ACTUATOR

(a) Check that the control rod of the rear shock absorber is in the position shown in the illustration.

NOTICE: If the control rod is not in the position shown in the illustration, turn the control rod to adjust the position and install the absorber control actuator.



(b) Install the absorber control actuator to the actuator support bracket. Turn the actuator **clockwise approximately 40°** until a click is felt.

NOTICE: Do not excessively turn the actuator.

4. CONNECT CONNECTOR

(a) Connect the connector to the shock absorber control actuator.

5. INSTALL REAR SHOCK ABSORBER CAP LH

(a) Install the shock absorber cap with the 3 nuts.

Torque: **14 N*m (143 kgf*cm, 10 ft.*lbf)**

6. CONNECT TOE CONTROL LINK SUB-ASSEMBLY LH

7. CONNECT REAR UPPER NO. 1 CONTROL ARM ASSEMBLY LH

8. CONNECT REAR UPPER NO. 2 CONTROL ARM ASSEMBLY LH

9. STAKE REAR AXLE SHAFT LH NUT

10. INSTALL LOAD SENSING VALVE SENSOR BRACKET

11. INSTALL REAR SPEED SENSOR LH

12. INSTALL PACKAGE TRAY TRIM PANEL ASSEMBLY

13. INSTALL ROOF SIDE GARNISH INNER LH

(a) Install the side garnish for standard body.

(b) Install the side garnish for long body.

14. INSTALL ROOF SIDE GARNISH INNER RH

HINT: Use the same procedures described for the LH side.

15. INSTALL REAR SEAT SIDE GARNISH LH

(a) Install the garnish for standard body.

(b) Install the garnish for long body.

16. INSTALL REAR SEAT SIDE GARNISH RH

HINT: Use the same procedures described for the LH side.

17. INSTALL REAR DOOR SCUFF PLATE LH

(a) Install the scuff plate for standard body.

(b) Install the scuff plate for long body.

18. INSTALL REAR DOOR SCUFF PLATE RH

HINT: Use the same procedures described for the LH side.

19. INSTALL REAR SEATBACK ASSEMBLY (for Fixed Seat Type)

20. INSTALL REAR SEAT CUSHION ASSEMBLY (for Fixed Seat Type)

21. INSTALL REAR SEATBACK ASSEMBLY CENTER (for Power Seat)

22. INSTALL REAR SEATBACK ASSEMBLY RH

(a) Install the seatback for power seat.

(b) Install the seatback for ottoman.

23. INSTALL REAR SEAT CONSOLE BOX ASSEMBLY (for Ottoman)

24. INSTALL REAR SEATBACK ASSEMBLY LH

(a) Install the seatback for power seat.

(b) Install the seatback for ottoman.

25. INSTALL REAR SEAT CUSHION ASSEMBLY CENTER (for Power Seat)

26. INSTALL REAR SEAT CUSHION ASSEMBLY RH

(a) Install the seat cushion for power seat.

(b) Install the seat cushion for ottoman.

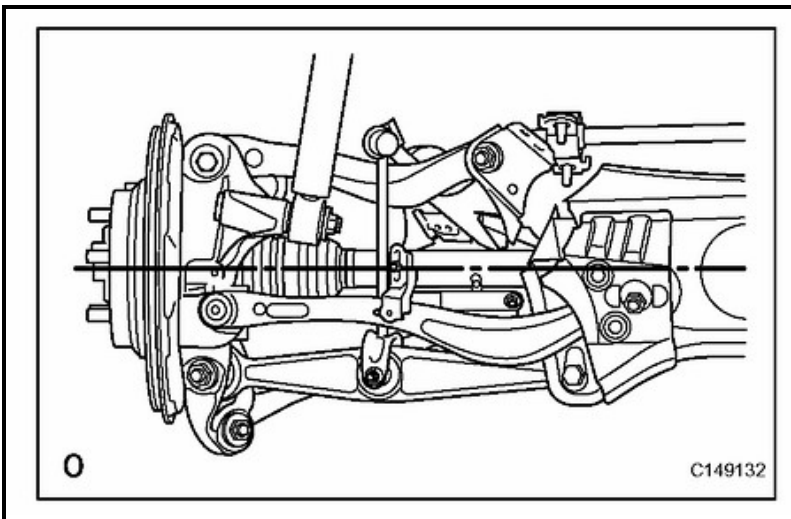
27. INSTALL REAR SEAT CUSHION ASSEMBLY LH

(a) Install the seat cushion for power seat.

(b) Install the seat cushion for ottoman.

28. INSTALL REAR WHEEL HOUSE LH LINER

29. INSTALL NO. 6 ROCKER PANEL MOULDING PROTECTOR



30. STABILIZE SUSPENSION

(a) Install the rear tires.

Torque: **119 to 161 N*m (1213 to 1642 kgf*cm, 88 to 119 ft.*lbf)**

(b) Lower the vehicle and start the engine. Then fill the pneumatic cylinder assembly with rear shock absorber with air.

(c) Lower the vehicle and bounce it up and down several times to stabilize the rear suspension.

(d) Remove the rear tires.

(e) Jack up the axle carrier with a wooden block between the jack and axle carrier. Apply a load to the suspension so that the rear drive shaft assembly is placed in a horizontal position.

31. TIGHTEN PNEUMATIC CYLINDER WITH REAR SHOCK ABSORBER ASSEMBLY LH

(a) Tighten the nut on the axle carrier.

Torque: **80 N*m (816 kgf*cm, 59 ft.*lbf)**

32. CONNECT CABLE TO NEGATIVE BATTERY TERMINAL

33. INSTALL COWL TOP VENTILATOR LOUVER RH

34. PERFORM INITIALIZATION

(a) Perform initialization.

NOTICE: Certain systems need to be initialized after disconnecting and reconnecting the cable from the negative (-) battery terminal.

35. INSTALL REAR WHEEL

Torque: **119 to 161 N*m (1213 to 1642 kgf*cm, 88 to 119 ft.*lbf)**

36. CHECK CONNECTIONS OF TUBES FOR AIR LEAKAGE

(a) Check the connection of the tubes for air leakage.

37. CHECK SUSPENSION CONTROL SYSTEM

(a) Check the suspension control system.

38. INSPECT AND ADJUST REAR WHEEL ALIGNMENT

(a) Inspect and adjust the rear wheel alignment.

39. CHECK SPEED SENSOR SIGNAL

(a) Check the speed sensor signal.

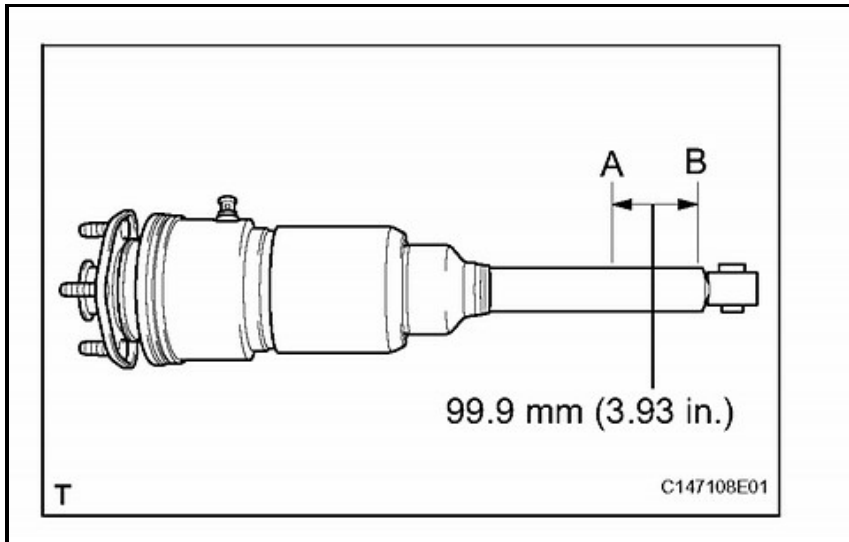
40. VEHICLE PREPARATION FOR VEHICLE FOR HEADLIGHT AIMING ADJUSTMENT

41. PREPARATION FOR HEADLIGHT AIMING (Using a screen)

42. HEADLIGHT AIMING INSPECTION

43. HEADLIGHT AIMING ADJUSTMENT

DISPOSAL



1. DISPOSE OF PNEUMATIC CYLINDER WITH REAR SHOCK ABSORBER ASSEMBLY

(a) Fully extend the rear shock absorber rod.

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

CAUTION: Be careful as the cylinder is a high-pressure gas type which is at a higher pressure than normal shock absorbers. Also be careful with high temperatures as the cylinder's pressure becomes even higher.

NOTICE: The gas is colorless, odorless and harmless.