

# SUSPENSION CONTROL SYSTEM

25019-04

## ON-VEHICLE INSPECTION

### 1. ADJUST STANDARD VEHICLE HEIGHT

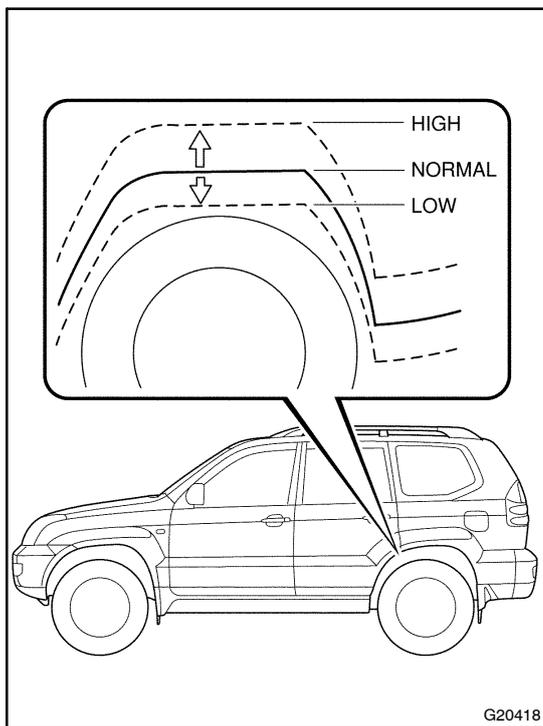
- (a) Release the parking brake and stabilize the suspensions by pushing up and down the corners of the vehicle.
- (b) Place the shift lever into "N" position and settle the tires by moving the vehicle back and forth by hand.
- (c) Start the engine.
- (d) On the height control switch, first press "HIGH" to raise the vehicle height, and then change the switch to "LOW" to lower it. Perform this operation one more time.

**NOTICE:**

**Make sure to release the parking brake and place the shift lever into "N" position.**

### 2. INSPECT TIRE (See page 28-1)

### 3. MEASURE VEHICLE HEIGHT (See page 26-7)



### 4. OPERATE HEIGHT CONTROL SWITCH AND CHECK CHANGE OF VEHICLE HEIGHT

- (a) Start the engine and change the height control switch from the NORMAL position to the HIGH and LOW position.  
Check the time until the height adjustment is completed and the amount of change in the vehicle height.

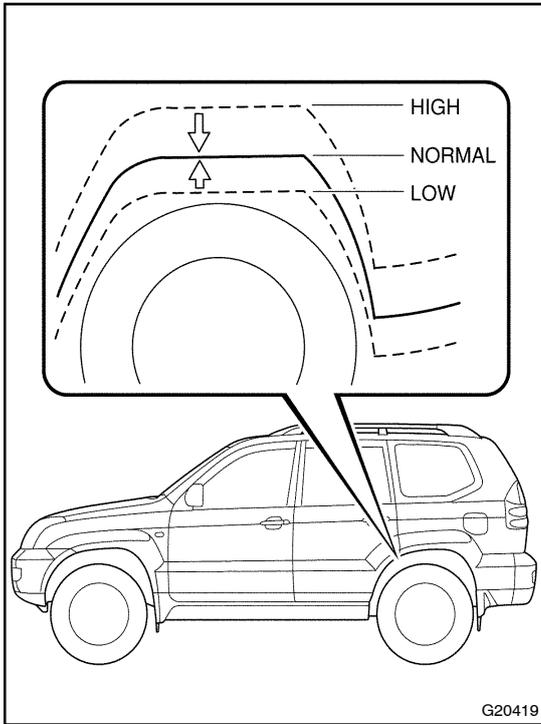
**Adjustment time**

From operation of height control switch to start of compressor.	Approx. 2 sec.
From start of compressor to completion of height adjustment.	15 - 20 sec. (HIGH position)

**Amount of change in vehicle height**

**HIGH position: 40 mm (1.57 in.)**

**LOW position: -20 mm (-0.79 in.)**



- (b) With the vehicle in the HIGH position height adjustment, start the engine and change the height control switch from the HIGH and LOW position to the NORMAL position. Check the time until the height adjustment is completed and the amount of change in the vehicle height.

**Adjustment time**

From operation of height control switch to open of exhaust valve.	Approx. 2 sec.
From open of exhaust valve to completion of height adjustment.	10 - 15 sec. (HIGH position)

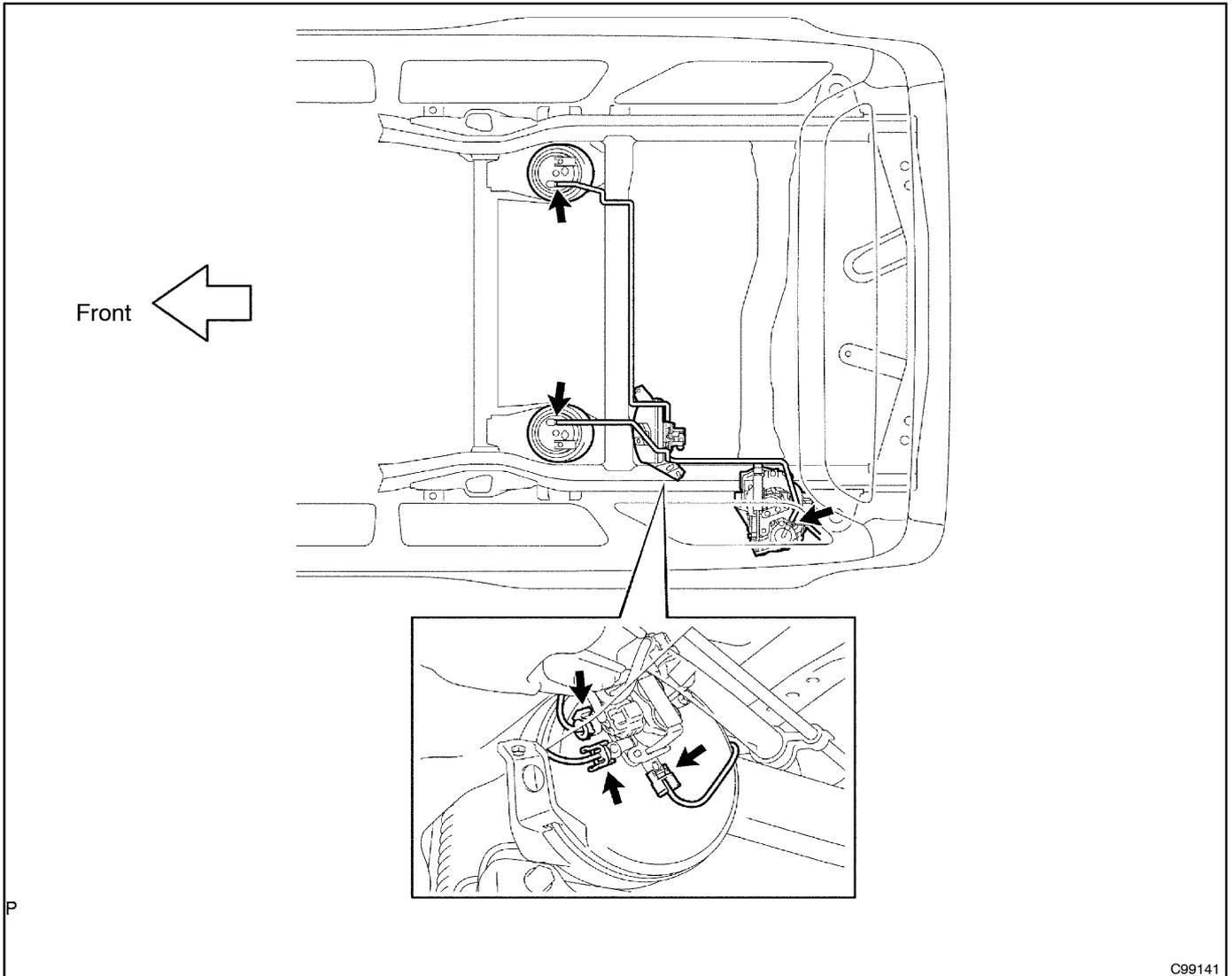
**Amount of change in vehicle height**

**HIGH position: 40 mm (1.57 in.)**

**LOW position: -20 mm (-0.79 in.)**

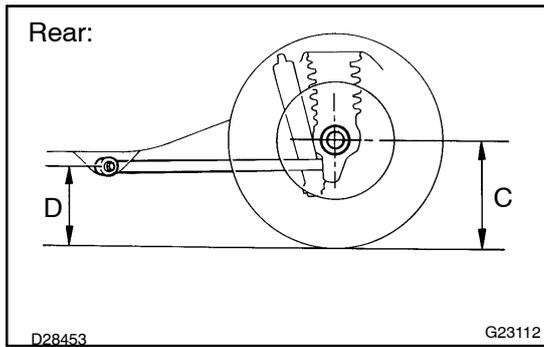
**5. CHECK CONNECTIONS OF TUBES FOR AIR LEAKAGE**

- (a) Set the height control switch in the HIGH position and raise the vehicle height.
- (b) Stop the engine.
- (c) Apply soapy water to the connections of the tubes and check if there is any air leakage.

**6. ADJUST VEHICLE HEIGHT****NOTICE:**

**While adjusting the vehicle height, never getting on and off or load and unload the vehicle which cause the vehicle height to be changed.**

- (a) Suspend the vehicle height control by pressing the height control OFF switch.
- (b) Put the vehicle in a level state.



- (c) Measure again the vehicle height (C - D measurement) on the right side and left side.

**Standard vehicle height value: See page 26-7**

**Difference between the right side and the left side: 10 mm (0.39 in.) or less**

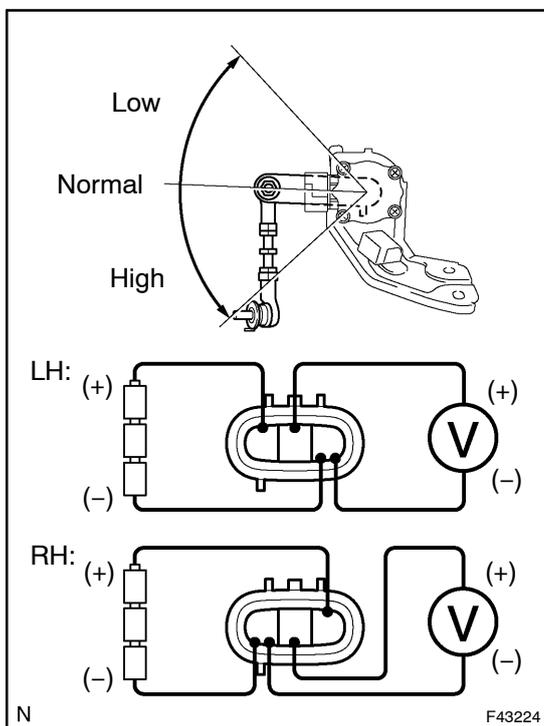
- (d) If the actual vehicle height differs from the vehicle height (C - D measurement), adjust it to by jacking up the frame, etc.

- (e) Using the hand-held tester.

- (1) Turn the ignition switch to ON or ACC.
- (2) Using the hand-held tester, measure each vehicle height value of the right side and the left side sensors.

**Difference between the tester value and vehicle height (C - D measurement) : 5 mm (0.20 in.) or less**

**Difference between the right side and the left side: 5 mm (0.20 in.) or less**



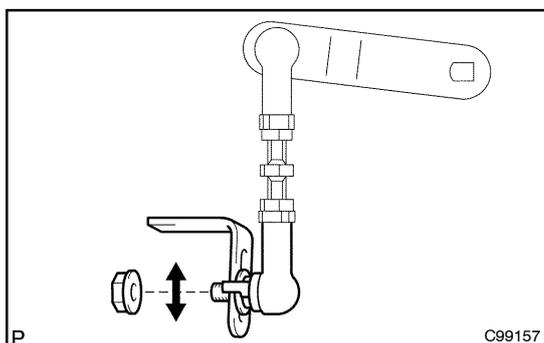
- (f) Not using the hand-held tester.

- (1) Disconnect the connector of the height control sensor.
- (2) Connect three 1.5 V dry cell batteries in series.
- (3) Connect the battery positive (+) and negative (-) to the terminals as shown in the illustration.

**Standard:**

Position	Voltage
High	2.31 - 3.81 V
Normal	2.31 ± 0.04 V
Low	1.39 - 2.31 V

**Difference between the right side and the left side: 0.06 V or less**

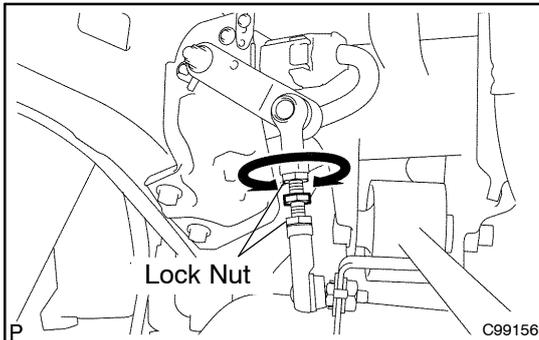


- (g) If the value in (e) or (f) differs from the vehicle height (C - D measurement), adjust it by following the procedures below.

- (1) Loosen the nut.
- (2) Move the height control sensor link up and down along the slotted hole of the bracket.
- (3) Adjust the vehicle height to the vehicle height (C - D measurement) while checking the value on the hand-held tester or the voltmeter.

(4) Tighten the nut.

**Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)**



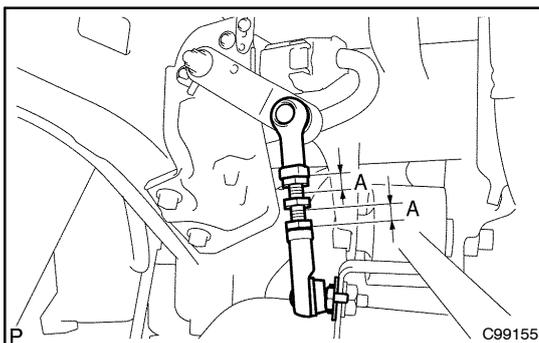
(h) If the vehicle height cannot be adjusted by performing (g), adjust it again by following the procedures below.

(1) Loosen the 2 lock nuts of the height control sensor link.

(2) Adjust the vehicle height to the vehicle height (C - D measurement) by turning the link while checking the value on the hand-held tester or the voltmeter.

(3) Tighten the 2 lock nuts.

**Torque: 5.4 N·m (55 kgf·cm, 48 in·lbf)**



(i) Check that the lengths of the screw parts, "A" in the illustration, are within the standard value.

**Standard length: 6.5 - 15.0 mm (0.26 - 0.59 in.)**

(j) Operate the height control. (From normal position to high position, and from high position to normal position)

(k) Measure again the vehicle height (C - D measurement) on the right side and left side.

(l) Check that the vehicle height (C - D measurement) and the difference between the right side and the left side fall within the specification.

**HINT:**

If the values are outside the standard, perform the procedure from (d) to (k) again.