

T-SB-0189-12

October 10, 2012

Rear Brake Strut Improvement

Service Category Brake

Section Brake System

Market USA

Toyota Supports ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2009 – 2011	Corolla	WMI(s): 2T1, 5YF

Introduction

Some 2009 – 2011 Corolla vehicles may exhibit a condition where, over time, there is a slight, but perceptible increase in brake pedal travel. This condition has no effect on braking performance. Improved rear drum brake adjusters have been developed to address this condition.

Production Change Information

This bulletin applies to vehicles produced **BEFORE** the Production Change Effective VINs shown below.

MODEL	PLANT	PRODUCTION CHANGE EFFECTIVE VIN
Corolla	TMMC	2TIBU4EE#BC707539
	TMMMS	5YFBU4EE#BP001039

Warranty Information

OP CODE	DESCRIPTION	TIME	OFF	T1	T2
BR1204	R & R Drum Brake Strut Kit	1.4	04943-02070	4B	41
			04943-52030		

APPLICABLE WARRANTY

- This repair is covered under the Toyota Comprehensive Warranty. This warranty is in effect for 36 months or 36,000 miles, whichever occurs first, from the vehicle's in-service date.
- Warranty application is limited to occurrence of the specified condition described in this bulletin.

Rear Brake Strut Improvement

Parts Information

PLANT	PREVIOUS PART NUMBER	CURRENT PART NUMBER	PART NAME	QTY
TMMC	04943-02070	04943-02080	Strut Kit, Rear Drum Brake	1
TMMMS				

Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Shoe Hold Down Spring Driver	<u>09718-00010</u>	1
Spring Tension Tool	<u>09921-00010</u>	1
Plastic Pry Tool Set*	<u>00002-06000-01</u>	1

* Essential SST.

NOTE

Additional SSTs may be ordered by calling 1-800-933-8335.

Repair Procedure

1. Test-drive the vehicle and confirm the condition.
2. Remove rear wheels.
3. Remove the rear drums.
 - A. Disengage the parking brake.
 - B. Remove the rear drum.

NOTE

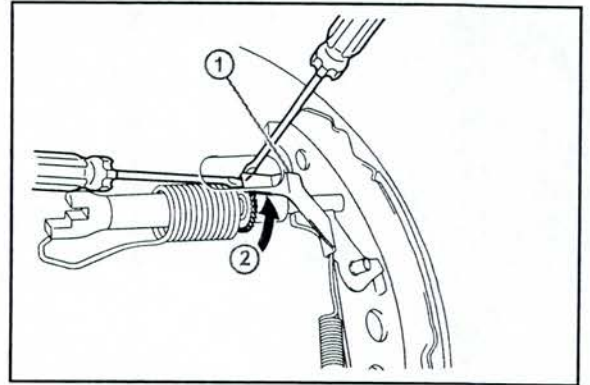
If the rear drum cannot be removed easily complete steps 4 and 5, otherwise continue to step 6.

Rear Brake Strut Improvement

Repair Procedure (Continued)

4. Remove the shoe adjusting hole plug and insert a screwdriver through the hole into the backing plate, and hold the automatic adjust lever away from the adjuster.

Figure 1.



1	Automatic Adjust Lever
2	Compress

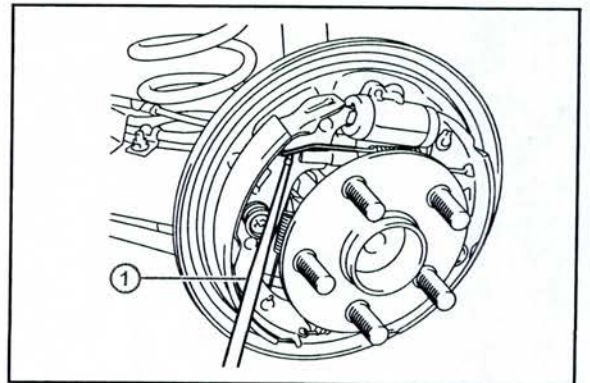
5. Using another screwdriver, compress the brake shoe by turning the adjusting bolt.
6. Remove the brake shoe (forward leading).
 - A. Using the SST, separate the shoe return spring from the rear brake shoe.

SST: 09921-00010

NOTICE

Be cautious NOT to damage the wheel cylinder boot with the SST or the return spring during this process.

Figure 2.



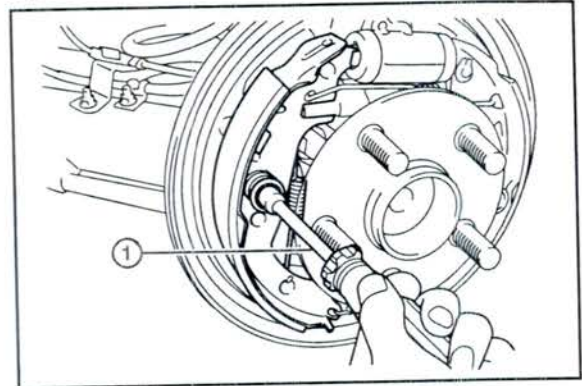
1	SST
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Rear Brake Strut Improvement

Repair Procedure (Continued)

- B. Using the SST, remove the 2 shoe hold down spring cups, shoe hold down spring, pin, and the rear brake shoe.

Figure 3.

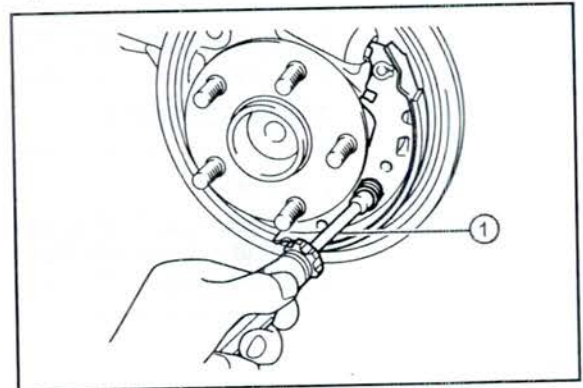


1	SST
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- 7. Remove the rear brake strut set.

- A. Remove the shoe return spring from the rear brake shoe and remove the rear brake shoe.

Figure 4.

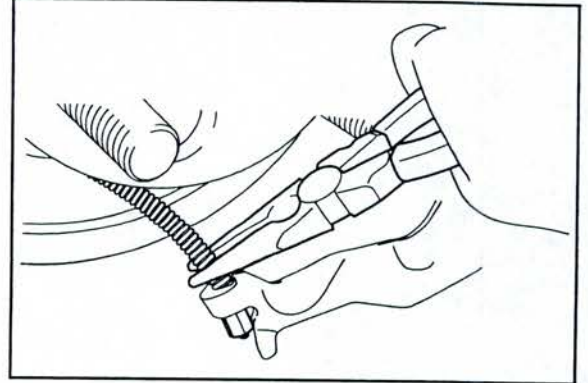


1	SST
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Rear Brake Strut Improvement

Repair Procedure (Continued)

- B. Using needle-nose pliers, separate the parking brake cable. Figure 5.

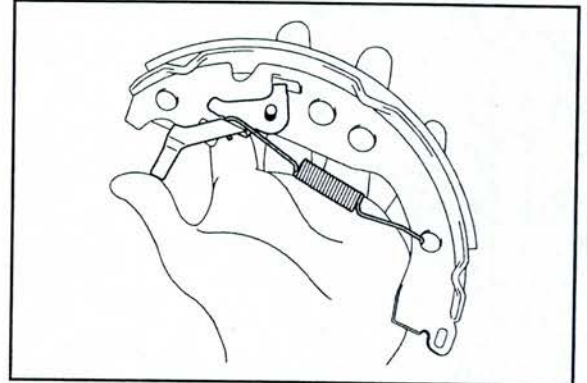


8. Remove both rear brake shoes from the backing plate.

NOTE

Since the old brake shoes are being reused, there is no need to remove the parking brake lever from the brake shoe.

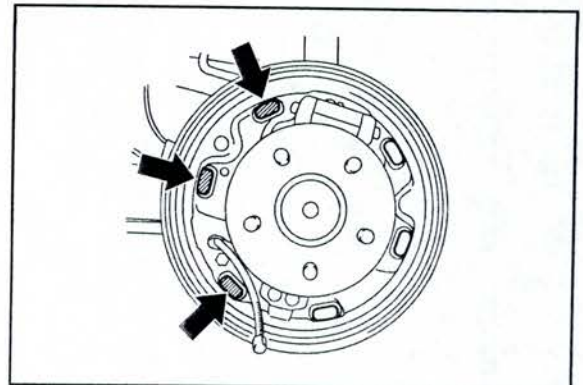
Figure 6.



9. Install the rear brake shoes with the NEW strut set.

- A. Apply high temperature grease to the surface of the backing plate that contacts the forward leading brake shoe as indicated.

Figure 7. High Temperature Grease Locations

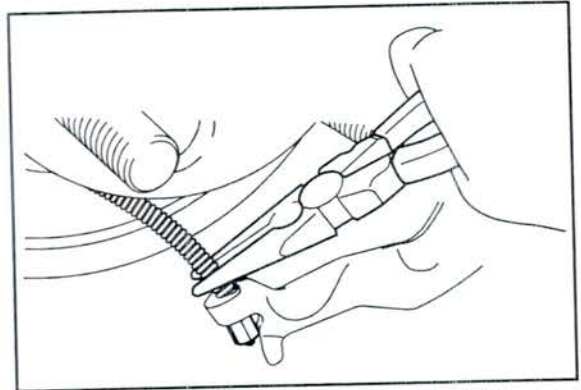


Rear Brake Strut Improvement

Repair Procedure (Continued)

- B. Using needle-nose pliers, install the parking brake cable to the rear brake parking brake shoe lever assembly.

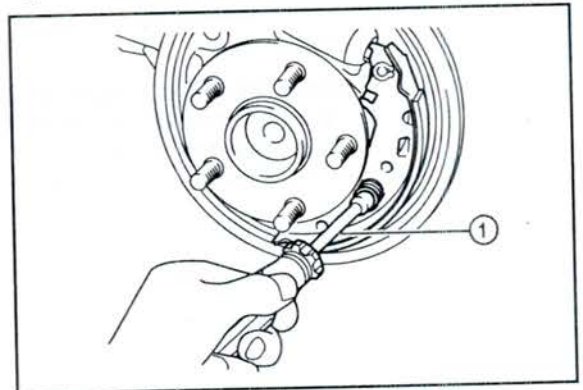
Figure 8.



- C. Using the SST, install the rear brake shoe, pin, and hold down spring cup.

SST: 09718-00010

Figure 9.



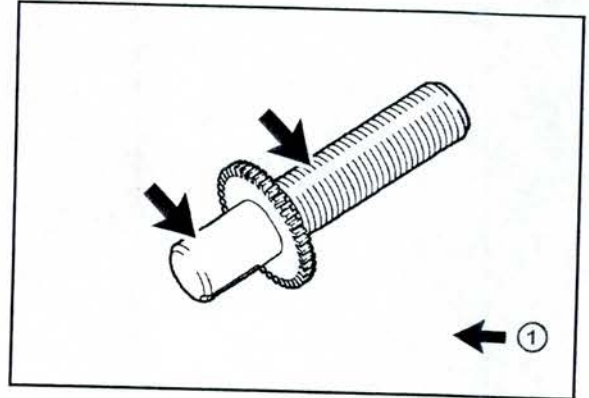
1	SST
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Rear Brake Strut Improvement

Repair Procedure (Continued)

D. Apply high temperature grease to the NEW adjustment bolt (strut set).

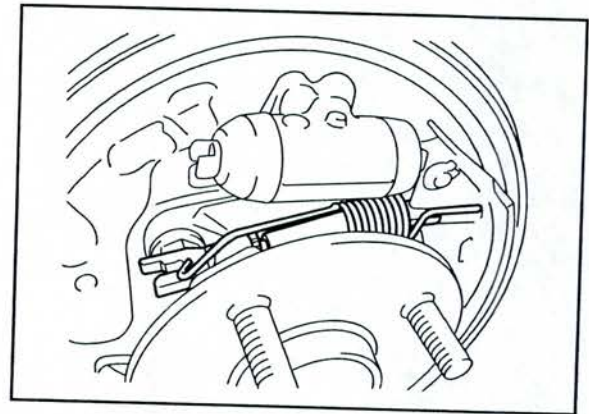
Figure 10.



1	High Temperature Grease
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E. Install the rear brake strut set assembly with tension spring.

Figure 11.



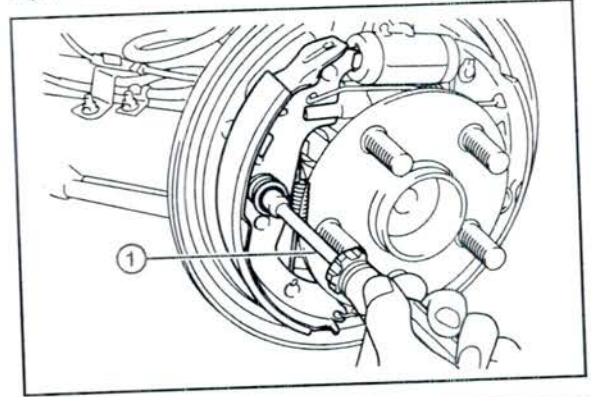
Rear Brake Strut Improvement

Repair Procedure (Continued)

10. Install rear brake shoe (forward leading).

- A. Using the SST, Install the rear brake shoe, pin and hold down spring and shoe hold down spring cup.
SST: 09921-00010

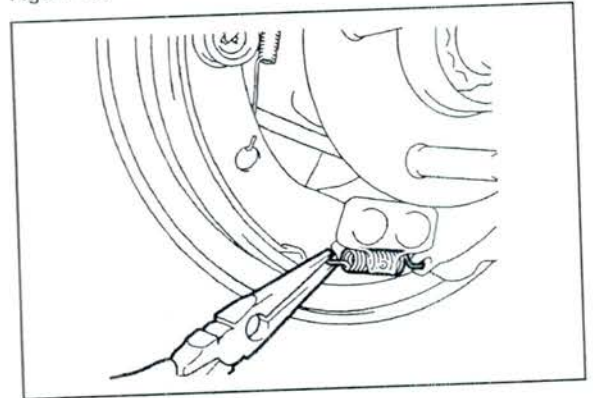
Figure 12.



1	SST
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- B. Using needle-nose pliers, install the tension spring to the rear brake shoe.

Figure 13.



Rear Brake Strut Improvement

Repair Procedure (Continued)

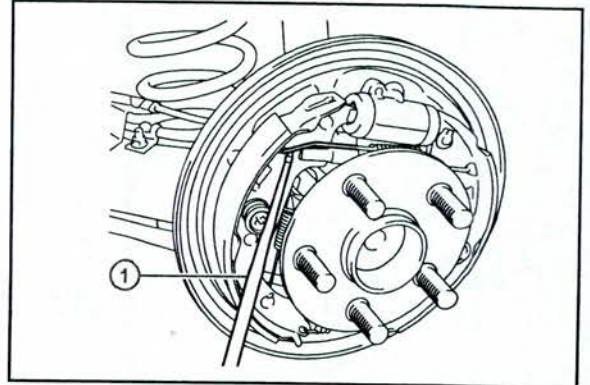
- C. Using the SST, install the shoe return spring to the rear brake shoe.

SST: 09921-00010

NOTICE

Be cautious **NOT** to damage the wheel cylinder boot with the SST or the return spring during this process.

Figure 14.



1	SST
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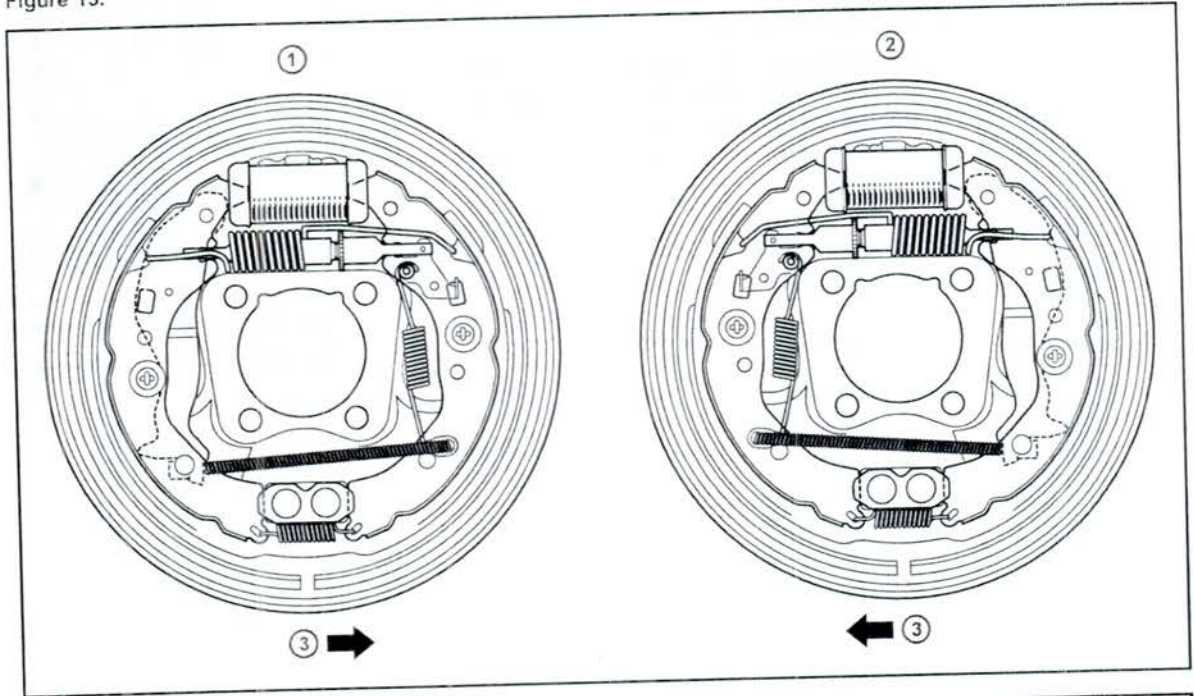
Rear Brake Strut Improvement

Repair Procedure (Continued)

11. Inspect rear drum brake.

A. Inspect that each part is installed properly as shown in the illustration.

Figure 15.



1	RH Side
2	LH Side

3	Front
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NOTICE
 There should be no oil or grease on the shoes or drum.

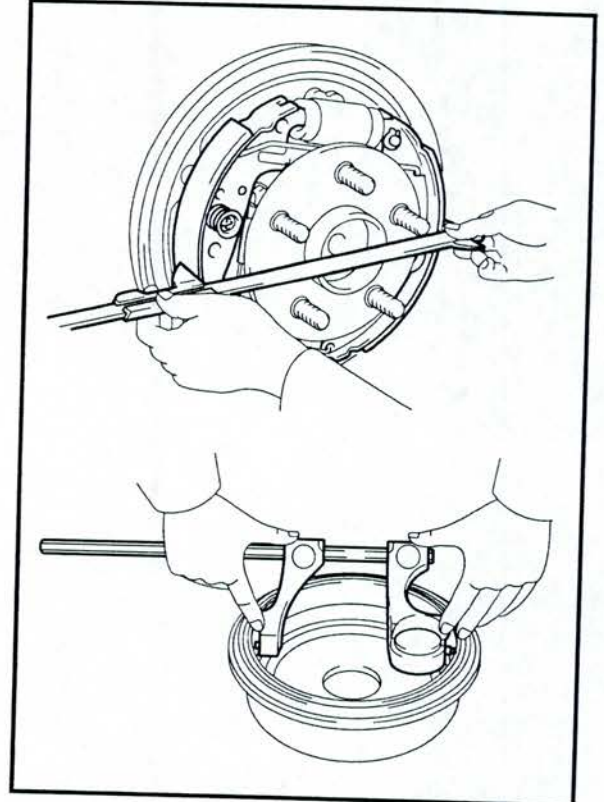
Rear Brake Strut Improvement

Repair Procedure (Continued)

- B. Measure the brake drum inner diameter and the diameter of the brake shoes. Check that the difference between the diameters is equal to the specified shoe clearance.

Shoe clearance: 0.4 mm (0.0157 in.)

Figure 16.



- C. Install rear brake drum(s).

Rear Brake Strut Improvement

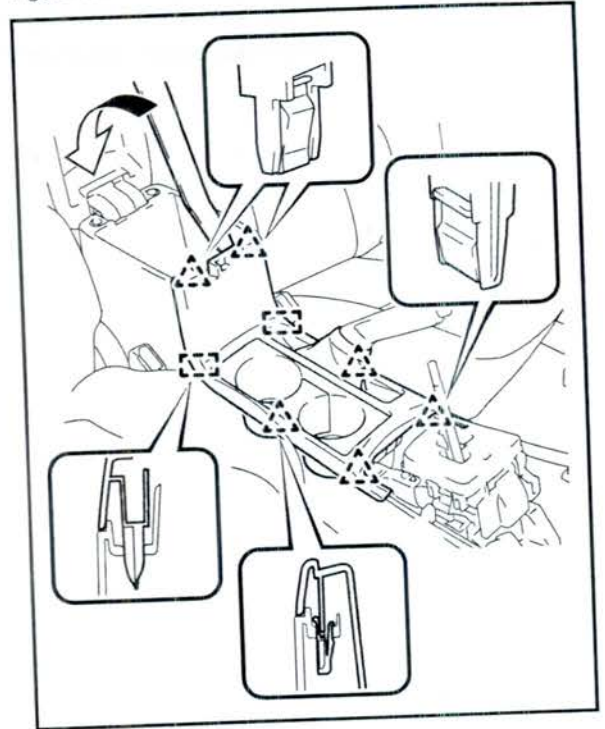
Repair Procedure (Continued)

12. Adjust parking brake lever travel.

A. Remove the upper console box assembly.

Using a plastic pry tool, disengage the 6 clips and 2 guides, and remove the upper console panel sub-assembly.

Figure 17.



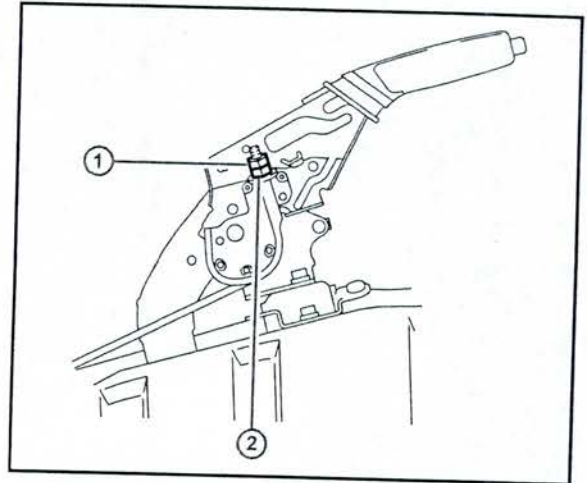
B. Completely release the parking brake lever.

Rear Brake Strut Improvement

Repair Procedure (Continued)

- C. Loosen the lock nut and the adjusting nut to completely release the cable.

Figure 18.



1	Lock Nut
2	Adjusting Nut

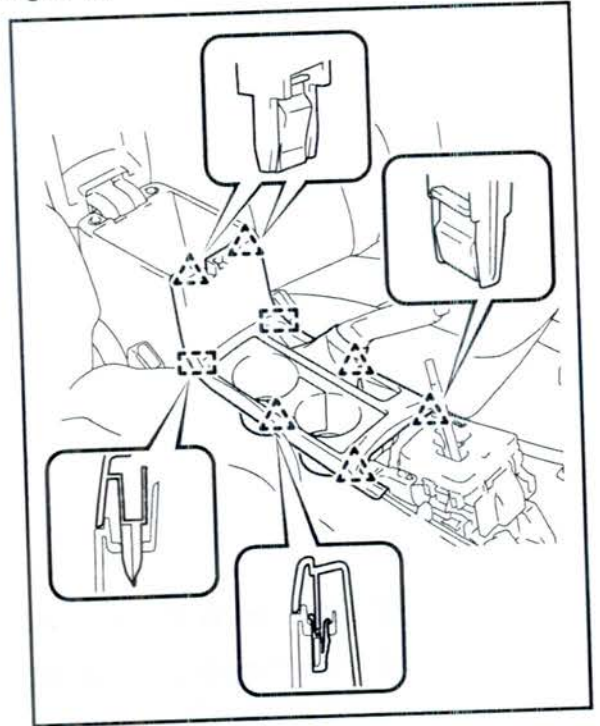
- D. Operate the parking brake lever 3 to 5 times with the engine stopped.
- E. Turn the adjusting nut until the parking brake lever travel is corrected to within the specified range.
Parking Brake Lever Travel: 6 to 9 notches at 200 N*m (20 kgf*cm, 45.0 ft*lbf)
- F. Using a wrench or an equivalent tool, hold the adjusting nut and tighten the lock nut.
Torque: 6.0 N*m (61 kgf*cm, 53 in*lbf)
- G. Operate the parking brake lever 3 to 4 times, and check the parking brake lever travel.
- H. Check for any rear brake drag and adjust as needed.

Rear Brake Strut Improvement

Repair Procedure (Continued)

- I. Install the upper console box assembly by engaging the 6 clips and 2 guides.

Figure 19.



13. Install the rear wheels and torque to specification.
Torque: 103 N*m (1050 kgf*cm, 76 ft*lb)
14. Test-drive the vehicle and confirm proper brake operation and pedal feel.