

Vehicle Pulling to One Side

Service Category Suspension

Section Alignment/Handling Diagnoses

Market USA

Lexus Supports
ASE Certification 

Applicability

YEAR(S)	MODEL(S)	ADDITIONAL INFORMATION
2007 – 2010	LS460	
2008 – 2010	LS600H	

TSIB REVISION NOTICE

October 21, 2010 Rev2:

- **Applicability has been updated to include 2010 model year vehicles.**

January 13, 2009 Rev1:

- **Applicability has been updated to include 2009 model year LS 460 and LS 600h vehicles.**
- **The Warranty Information table has been updated.**

Any previous printed versions of this service bulletin should be discarded.

Introduction

This bulletin contains the recommended procedure to correct a pulling condition on LS 460/460L and LS 600h vehicles. This information supplements the Repair Manual procedures when the symptoms are:

- The driver holds the steering wheel without exerting steering effort while driving straight ahead, and the vehicle drifts to the right or the left.
- While driving straight ahead, the driver has to steer either to the right or the left to maintain straight driving.

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Warranty Information

MODEL	OP CODE	DESCRIPTION	TIME	OFP	T1	T2
LS 460/460L	ST8010	Front to Rear Tire Rotation	0.5	45046-09020	31	99
LS 600h	ST8011		0.5			
LS 460/460L and LS 600h	Combo A	Front Tire Rotation	0.5			
	Combo B	Camber Adjustment, Bracket	2.2			
	Combo C	Combo: Air Suspension	0.1			
	Combo D	Caster Adjustment, Bracket	1.4			
	Combo F	Combo: Adjustment, Toe	0.1			
	Combo G	Combo: Adjustment, Camber	0.2			
	Combo H	Combo: Adjustment, Caster	0.2			

APPLICABLE WARRANTY

- This repair is covered under the Lexus Wheel Alignment Warranty. This warranty is in effect for 12 months or 20,000 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.

Required Tools & Equipment

SPECIAL SERVICE TOOLS (SST)	PART NUMBER	QTY
Ball Joint Puller*	09960-20010	1

* Essential SST.

NOTE

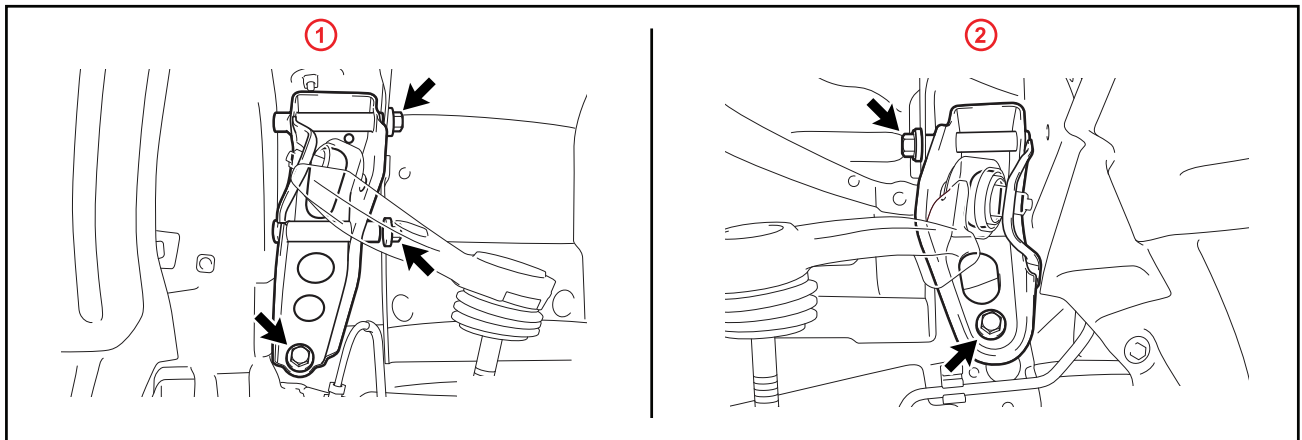
Additional SSTs may be ordered by calling 1-800-933-8335.

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Parts Information

PART NUMBER	PAINT MARKING ON UPDATED PART	PART NAME	QTY
48614-50030	Pink	No. 1 Arm Attachment Plate Inner (RH)	1
48614-50050	Blue	No. 2 Arm Attachment Plate Inner (RH)	1
48617-50030	Pink	No. 1 Arm Attachment Plate Inner (LH)	1
48617-50050	Blue	No. 2 Arm Attachment Plate Inner (LH)	1

Figure 1.



1 No. 1 Arm Attachment Plate Inner (LH Shown)

2 No. 2 Arm Attachment Plate Inner (LH Shown)

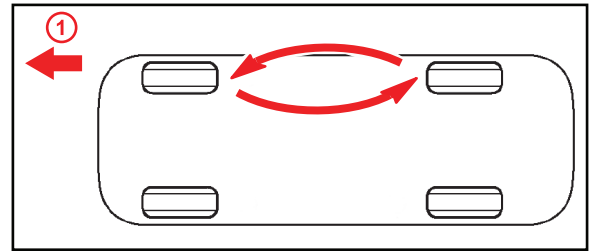
- No. 1 arm has 3 attachment bolts and is the upper control arm towards the FRONT of the vehicle.
- No. 2 arm has 2 attachment bolts and is the upper control arm towards the REAR of the vehicle.

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Repair Procedure

1. Confirm the vehicle pull condition.
2. If the pulling condition is present, swap the front and rear **RIGHT-hand** tires.

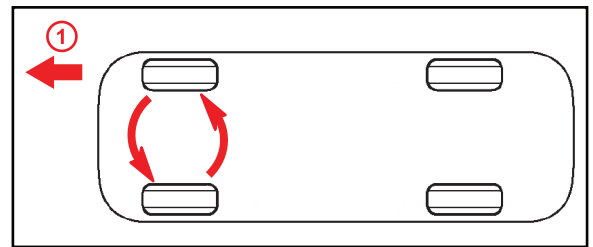
Figure 2.



1 Front of Vehicle

3. If the pulling condition is still present, swap the **FRONT** right-hand and left-hand tires.

Figure 3.



1 Front of Vehicle

NOTE

Use step 4 for LS 600h vehicles **ONLY**.

4. If the pulling condition is still present, adjust caster and/or camber with the front and rear adjusting cam to Repair Manual specifications.

Complete the alignment by adjusting front and rear toe to Repair Manual specifications. Test drive the vehicle to ensure the pull condition no longer exists.

HINT

LS 460/460L and LS 600h:

- If the vehicle is pulling to the **RIGHT**, follow steps 5 and 6.
- If the vehicle is pulling to the **LEFT**, follow steps 7 and 8.

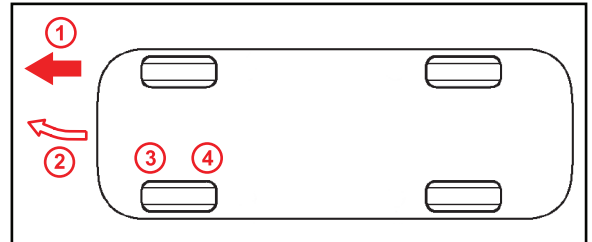
Vehicle Pulling to One Side

Repair Procedure (Continued)

- If the vehicle is still pulling to the **RIGHT**, replace the No. 1 and No. 2 arm attachment inner plates on the **LEFT** side. This adjusts camber.

Complete the alignment by adjusting front and rear toe to Repair Manual specifications. Test drive the vehicle to ensure the pull condition no longer exists.

Figure 4.

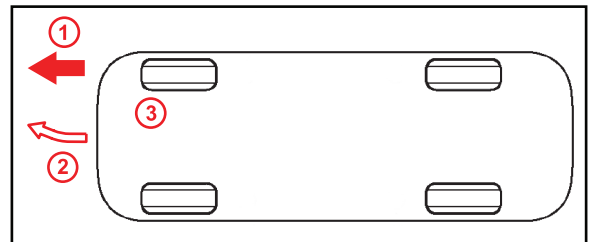


1	Front of Vehicle
2	Pulls Right
3	No. 1 Arm Attachment Inner Plate
4	No. 2 Arm Attachment Inner Plate

- If the vehicle is still pulling to the **RIGHT**, replace the No. 1 arm attachment inner plate on the **RIGHT** side. This adjusts caster.

Complete the alignment by adjusting front and rear toe to Repair Manual specifications. Test drive the vehicle to ensure the pull condition no longer exists.

Figure 5.

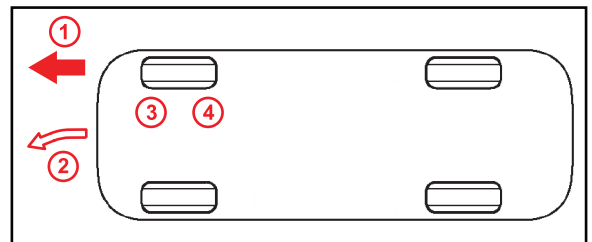


1	Front of Vehicle
2	Pulls Right
3	No. 1 Arm Attachment Inner Plate

- If the vehicle is still pulling to the **LEFT**, replace the No. 1 and No. 2 arm attachment inner plates on the **RIGHT** side. This adjusts camber.

Complete the alignment by adjusting front and rear toe to Repair Manual specifications. Test drive the vehicle to ensure the pull condition no longer exists.

Figure 6.



1	Front of Vehicle
2	Pulls Left
3	No. 1 Arm Attachment Inner Plate
4	No. 2 Arm Attachment Inner Plate

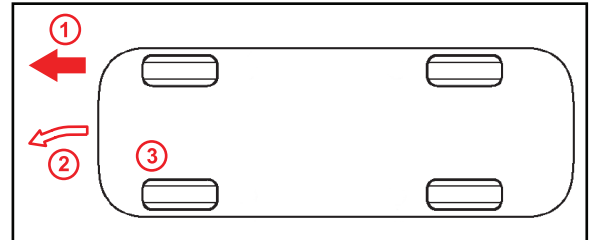
Vehicle Pulling to One Side

Repair Procedure (Continued)

8. If the vehicle is still pulling to the LEFT, replace the No. 1 arm attachment inner plate on the **LEFT** side. This adjusts caster.

Complete the alignment by adjusting front and rear toe to Repair Manual specifications. Test drive the vehicle to ensure the pull condition no longer exists.

Figure 7.



1	Front of Vehicle
2	Pulls Left
3	No. 1 Arm Attachment Inner Plate

9. Confirm the vehicle pull condition **NO** longer exists.