

SB-10044085-4132

Title Uneven rear tire wear, Correction of excessive negative camber
Ref No US15309.4.1 en-GB
Issuer -
Partner 3 US 7510 Volvo Cars North America
Func Group 6526
Func Desc control arm

Status Released
Status Date 2012-04-23
Issue Date 2012-04-23
Reference VIDA, VSTG, RTJ 19674

Attachment

File Name	File Size
Attachment TJ 15309.pdf	0.0204 MB

Vehicle Type

Type	Eng	Eng Desc	Sales	Body	Gear	Steer	Model Year	Plant	Chassis range	Struc Week Range
533							2007-2012		0000001-0284923	200637-201214
542							2006-2012		0000001-0131020	200549-201214
544							2004-2012		0000001-0579242	200339-201214
545							2004-2012		0000001-0695500	200347-201214

CSC Customer Symptom Codes

Code	Description
Q6	Tires/Improper tire wear

DTC Diagnostic Trouble Codes

Text

CSC = Customer Symptom Code

DTC = Diagnostic Trouble Code

NOTE! THIS DOCUMENT SUPERSEDES THE PREVIOUS RETAILER TECHNICAL JOURNAL 15309 DATED 12-16-2009. The recommended threshold values have been updated.

DESCRIPTION:

Excessively negative rear camber may cause uneven tire wear and this may be accompanied by abnormal road noise or ride. Refer to the camber angle specifications in RTJ 19674.

MATERIALS:

Description	Quantity	Part No.
Control arm, upper	1 or 2	31201356

PRODUCT MODIFICATION:

A control has been made available as a service part in order to correct excessive rear camber. See Photo 1 in the attachment. The control arm has a bushing offset of 2.5 mm (approx 0.1") which will make the camber angle 0.7 degrees less negative. For example, if the camber angle of one rear wheel was initially -2.6 degrees, it will be -1.9 degrees after the installation of the control arm on that side.

Note: A new cross member for the rear suspension was introduced in production from 2012 week 14, the attachment points for the upper control arms were moved outwards 1 mm which reduce the negative camber angle of 0.3 degrees.

SERVICE:

If the rear camber is still high after correcting the toe-in as good as possible, then it may be necessary to replace the upper control arm with a special service part.

- 1. First perform a wheel alignment test and correct the rear toe-in, if necessary.

Note! Perform the wheel alignment with an unloaded car. A heavy car will result in higher negative camber due to lower ride-height.

- 2. If the rear camber is much more negative on one side, for instance -2.8 degrees or more negative, first check and correct all rear suspension parts for possible impact damages, etc. Also, check the bushings on the original upper control arm. It is important that all involved suspension parts are OK before the service part is installed.
- 3. If the rear camber is still high after correcting the toe-in, then replace the upper control arm with the service part.
- 4. After installation is complete, re-check alignment.

Note! Rear Camber recommended threshold values for using the service part:

- 2.4 degrees (S40/V50/C30 standard, dynamic chassis)
- 2.6 degrees (C70, S40/V50/C30 DRIVE)
- 2.8 degrees (S40/V50/C30 Low sport, R-design)

See VIDA, Vehicle Details for the chassis type. Do not replace the upper control arm if the camber angle is less negative than the recommended threshold levels. If only one side is beyond this threshold, then only replace the control arm on that side!

Note: On vehicles where rear camber is already within specification, installing the special upper control arm will result in slightly reduced stability in the rear suspension. Therefore, it is important to not install this part if the rear camber is already within specification.

VOLVO STANDARD TIMES GUIDE (VSTG) INFO:

Operation number 99708-2 - Wheel angles calibrating, alignment adjust acc, TJ 15309 - 0.6 hrs

Operation number 60134-3 - Toe-ion adjust, rear wheels - See VSTG

Operation number 65211-2 - Control arm upper, 1 side, remove-install/replace - See VSTG

Operation number 65213-2 - Control arm upper, 2 sides, remove-install/replace - See VSTG

Operation number 60110-2 - Wheel alignment control - See VSTG

Use 99708-2 to establish if there is a problem and if necessary, claim 60134-3 to adjust rear toe. After rear toe is in spec:

If rear camber is OK, claim handling stops here.

If rear camber is not OK, use 65211-2 if one rear upper control arm needs to be replaced or 65213-2 if both rear upper control arms need to be replaced. After control arm replacement, use 60110-2 to check the vehicle on the alignment rack.

- Claims may be submitted under the new car warranty when there is a documented customer complaint using claim type: 01

- Labor times are valid at the time of release and are subject to change.

To view TJ attachment continue to next page:

Volvo Car Customer Service

TJ Instruction

TJ No 15309

Date

August-10
Issue 02

Title

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Photo 1