TOYOTA

Toyota Motor Sales, U.S.A., Inc.
19001 South Western Avenue, S207
Torrance, CA 90509-2991

TMS-NTC-13088
March 29, 2013

Recall Management Division
National Highway Traffic Safety Administration
1200 New Jersey Avenue, SE
Washington, DC 20590

Re: Toyota Safety Recall 12V-373 – Updated Remedy Instructions

To whom it may concern,

Please find attached Updated Remedy Instructions for Toyota Safety Recall 12V-373 on the following Toyota and Lexus vehicles:

- 2006 to Early 2011 Model Year RAV4
- 2010 Model Year HS250h

If you have any questions regarding this matter, please contact me at (310) 468-5316.

Sincerely,

Quality Compliance Assistant Manager

Attachments:
- Lexus 12V-373 (CLE) Updated Remedy Instructions
- Toyota 12V-373 (C0J) Updated Remedy Instructions

Original sent to Dealers 11/16/12, updated 3/28/13

IMPORTANT UPDATE MARCH 28, 2013

TECHNICAL INSTRUCTIONS

FOR

SAFETY RECALL CLE

REAR LOWER SUSPENSION ARM No.1

CERTAIN 2010 MODEL YEAR HS250h

Complete CLE Technical Video Supplement

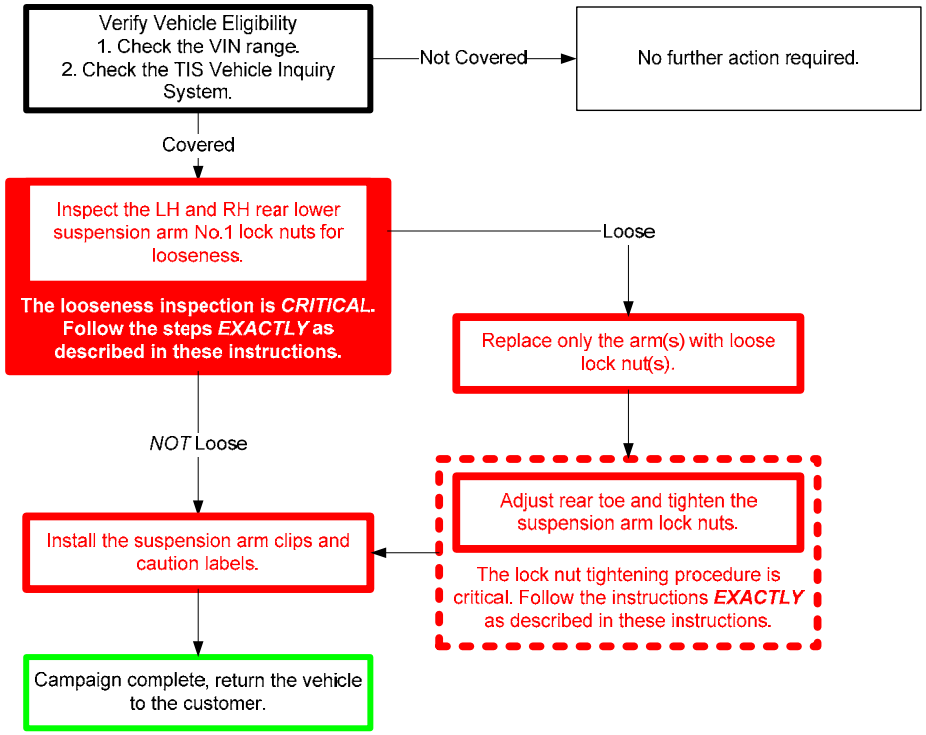
UPDATED MARCH 28, 2013

Updated 3/28/13

- **The entire inspection process has been updated to clarify existing inspection points (SECTION VI)**
- **The parts section has been updated to include detailed kit part contents (SECTION II)**

Previous versions of these Technical Instructions should be discarded

I. OPERATION FLOW CHART



II. PREPARATION

A. PARTS

Part Number	Part Description	Quantity
04002-60142 or 04002-60242	Clip and label kit*	1

*The kit above includes the following parts.

04002-50142 or 04002-50342	Clip with label for Rear lower suspension arm No.1**	2
–	Label for rear lower suspension arm No.2	4

****The clips are produced by two suppliers; therefore, there is two part numbers for the clip kits. The kit part numbers are interchangeable.**

Part Number	Part Description	Quantity
04002-36112	Rear Suspension Arm No.1 Kit*	1

*The kit above includes the following parts.

48710-12270	Rear Lower Suspension Arm No.1	1
90179-12027	Nut	1

***Parts will be placed on DOS, refer to the dealer letter for more information.**

B. TOOLS & EQUIPMENT

- Standard hand tools
- Torque wrench
- 22mm crowfoot
- 4 Wheel alignment machine

SST – This is an essential special service tool that the dealership should have.

Part Number	Part Name	Quantity
09960-20010	Ball Joint Puller Set	1

III. IDENTIFICATION OF AFFECTED VEHICLES

A. COVERED VIN RANGE

WMI	Year	VDS Range	
		VDS	Range
JTH	2010	BB1BA	A2000193-A2040350

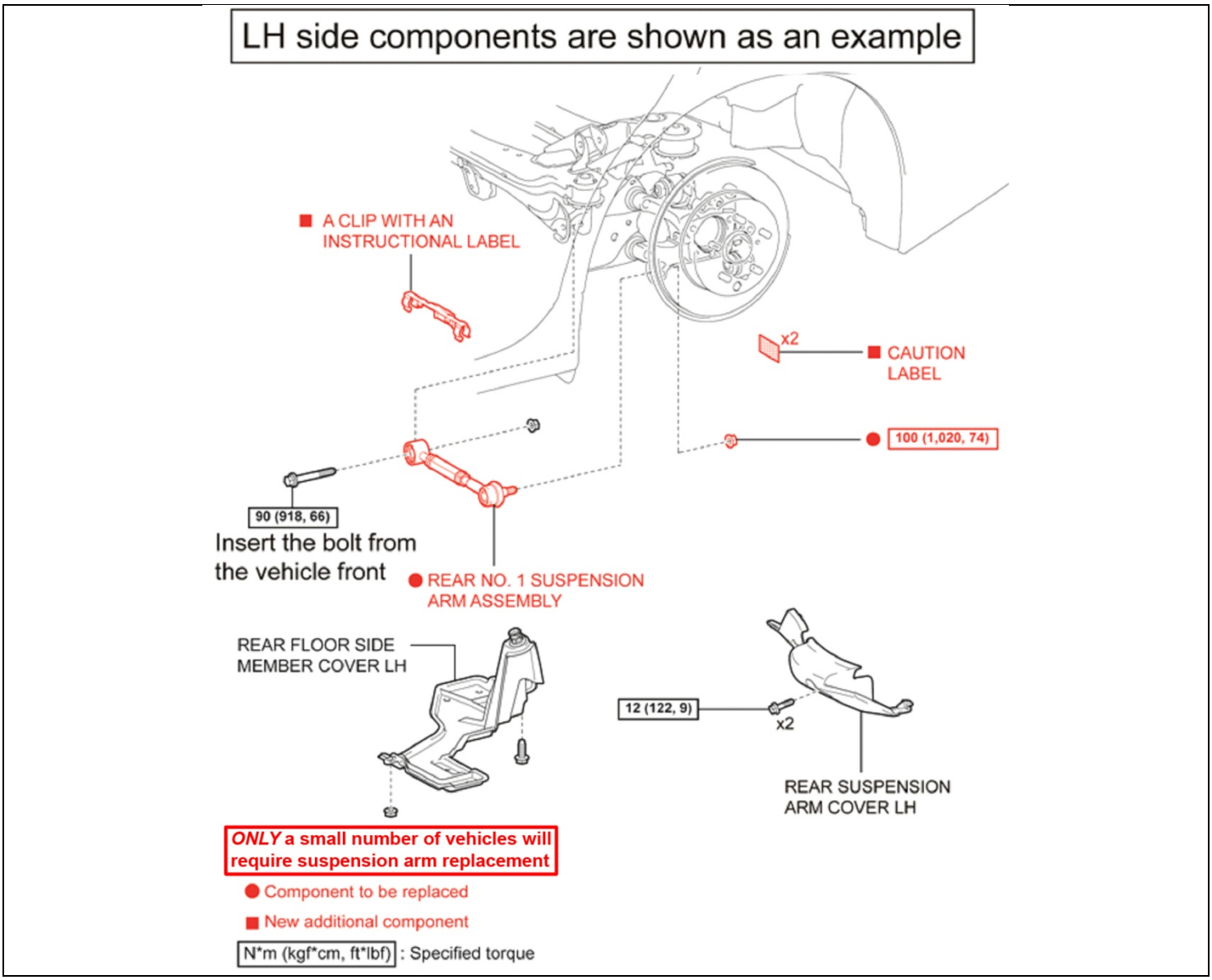
NOTE:

- Check the TIS Vehicle Inquiry System to confirm the VIN is involved in this Safety Recall, and that the campaign has not already been completed prior to dealer shipment or by another dealer.
- TMS warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer.

IV. BACKGROUND

In the Rear Suspension Arm No.1 Assembly ("arm"), if the nuts for adjusting the rear wheel alignment are not tightened following the proper procedure and torque specification when vehicle alignment service is performed, backlash may develop at the thread portion of the arm (shaft and turn-buckle), followed by formation of rust. If this occurs, threads may wear, causing the arm to separate, which could result in the loss of vehicle control.

V. COMPONENTS



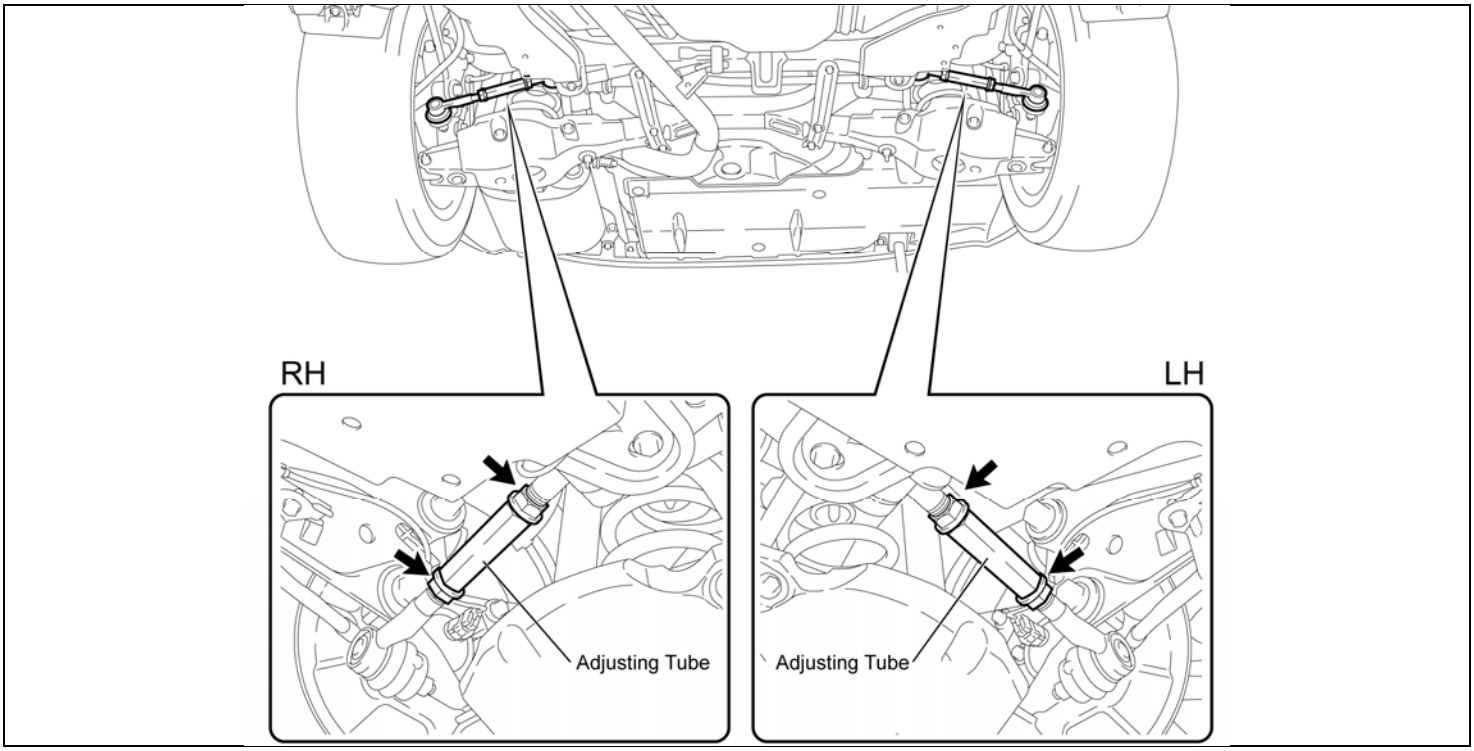
VI. REAR LOWER SUSPENSION ARM No.1 INSPECTION

- **Replace the suspension arm(s) if:**
  - **Looseness is found.**
  - **A gap is visible between the lock nut(s) and adjusting tube.**
- **The arm(s) that do not exhibit the above conditions *MUST* also be checked using a torque wrench as described in steps 2-4 and the video link below.**

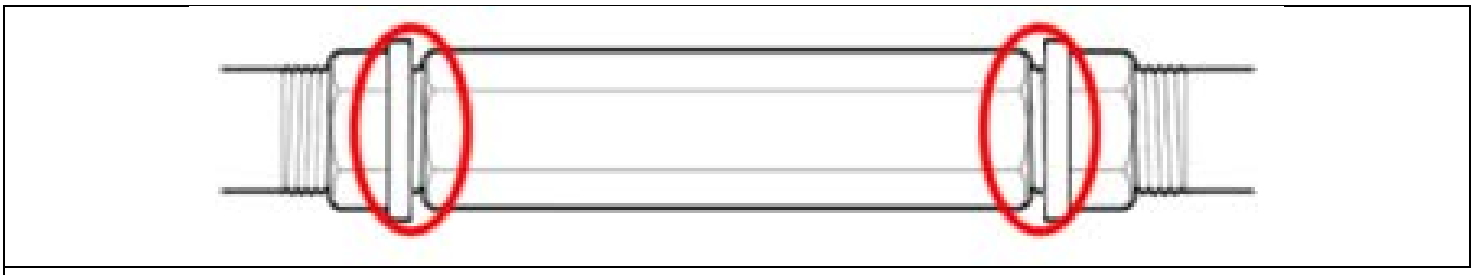
Video supplement: Introduction & Suspension Arm Inspection steps

1. CHECK FOR LOOSENESS VISUALLY AND BY HAND

a) Check visually and by hand to determine if any looseness is seen or felt in the suspension arm lock nuts or adjusting tube. Check the LH and RH arms.



b) Inspect for a gap between the lock nuts and the adjusting tube.



CONDITION	ACTION REQUIRED
Loose ***OR*** Gap	Replace the suspension arm(s) with looseness ***OR*** if a gap is found between the lock nut(s) and adjusting tube. Refer to **TIS** for instructions on suspension arm replacement. **NOTE:** • **To prevent stress on the new suspension arm bushing, apply a load to the suspension system to confirm the suspension arm bushing is aligned correctly when tightening by confirming that rear suspension arm No.1 is level with the ground.** • **Suspension arm adjustment and tightening procedure is critical. After replacing the arm, refer to SECTION VII. in these instructions for this procedure.**
NOT Loose ***AND*** ***NO*** Gap	Proceed to **STEP 2. PLACE MATCHMARKS ON SUSPENSION ARM**

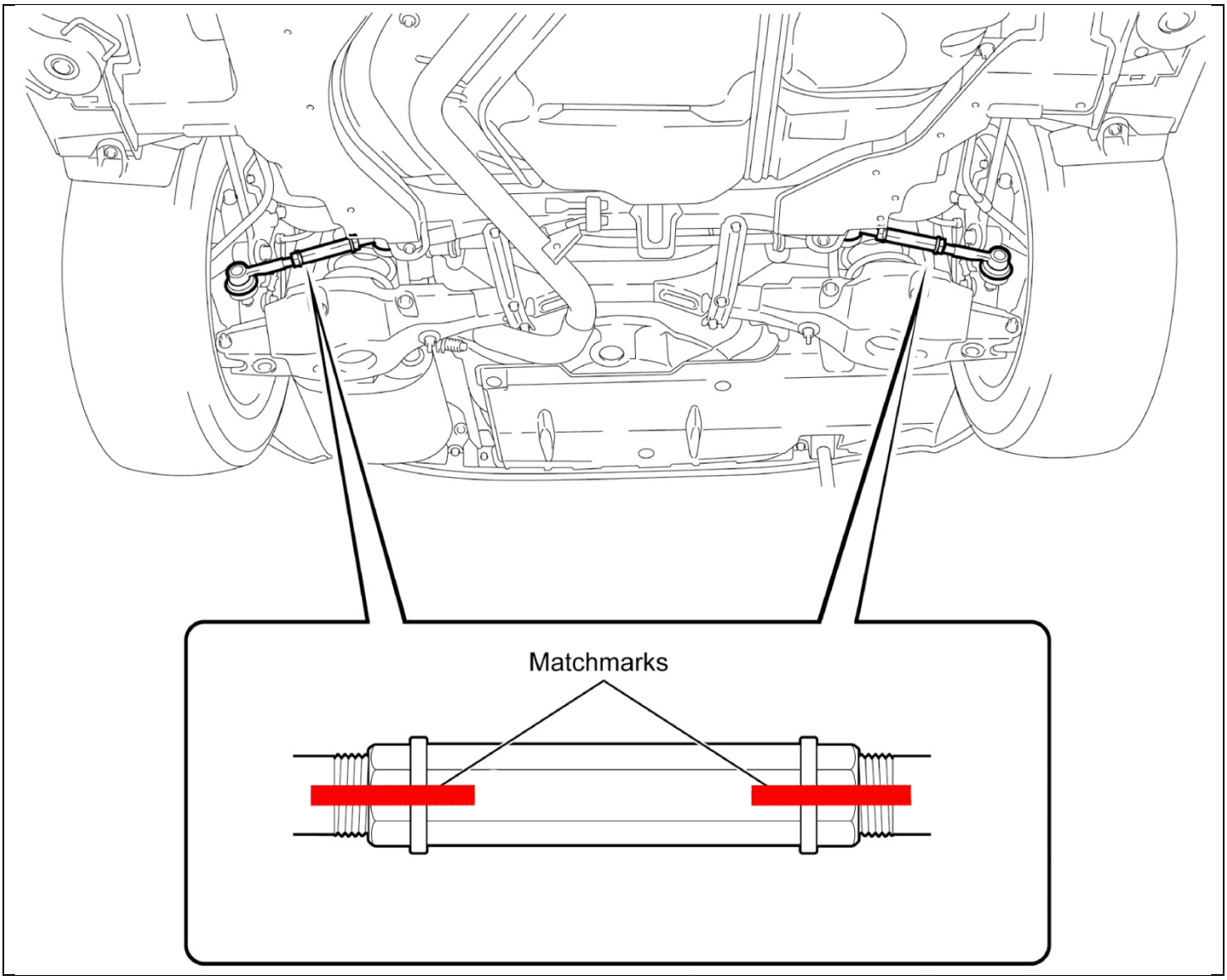
2. PLACE MATCH-MARKS ON SUSPENSION ARM

a) Place match-marks across the suspension arms as shown. Mark the arms that were not found loose during **STEP 1.**

b) Use these match-marks to determine if looseness is found in steps 3 and 4 when applying torque.

STOP

- **Match mark application is *CRITICAL*, confirm match marks extend from the suspension arm threads – over the lock nut – and onto the adjusting tube.**
- **Even slight movement of the match marks could be a sign of looseness, confirm the match marks are precise enough to allow for the inspection of slight movements in the components.**



3. CHECK THE ADJUSTING TUBE FOR LOOSENESS WITH TORQUE WRENCH
(This checks inboard lock nut for looseness)

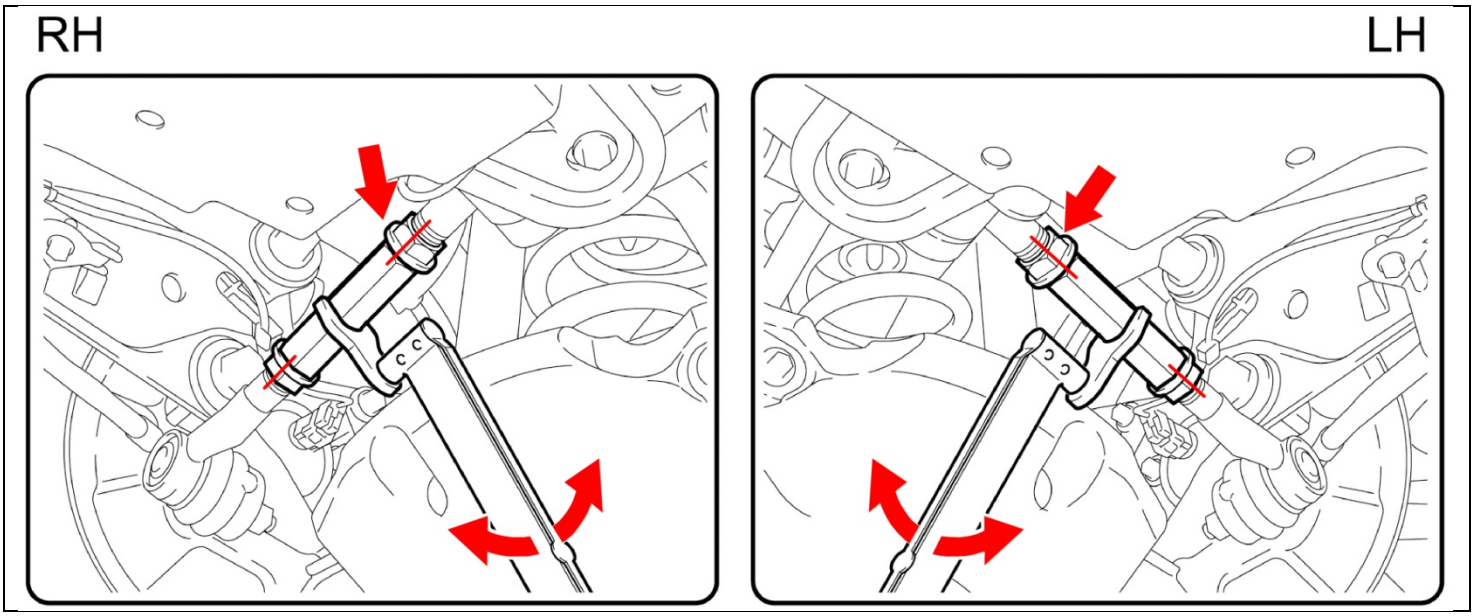
a) Check for looseness in the adjusting tube using a torque wrench.

b) Apply the specified torque to the adjusting tube ***in both directions***. Check the arms that were not previously found loose during **STEP 1.** Inspect ***INBOARD AND OUTBOARD*** match-marks to see if they become misaligned.

Torque: 15ft. lbf (20N·m)

- **Use a 22mm crowfoot attached to a 15 inch torque wrench. If a tool setup other than specified is used, refer to TIS for torque wrench calculation.**

- **Confirm the torque wrench is set correctly and that only the specified torque is being applied to the adjusting tube in both directions.**
- ***NEVER* apply torque to the inboard lock nut during inspection, inboard lock nut inspection is done by applying torque to the adjusting tube.**
- **Replace the suspension arm(s) if:**
  - **Looseness is found.**
  - **A gap is visible between the lock nut(s) and adjusting tube.**



CONDITION	ACTION REQUIRED
Loose	Replace the suspension arm(s) with looseness. Refer to **TIS** for instructions on suspension arm replacement. **NOTE:** • **To prevent stress on the new suspension arm bushing, apply a load to the suspension system to confirm the suspension arm bushing is aligned correctly when tightening by confirming that rear suspension arm No.1 is level with the ground.** • **Suspension arm adjustment and tightening procedure is critical. After replacing the arm, refer to SECTION VII. in these instructions for this procedure.**
NOT Loose	Proceed to **STEP 4. CHECK THE OUTBOARD LOCK NUT FOR LOOSENESS**

4. CHECK THE OUTBOARD LOCK NUT FOR LOOSENESS (lock nut closest to ball joint)

a) While holding the adjusting tube with a wrench, check for looseness in the outboard lock nut using a torque wrench with a 22mm crowfoot attached.

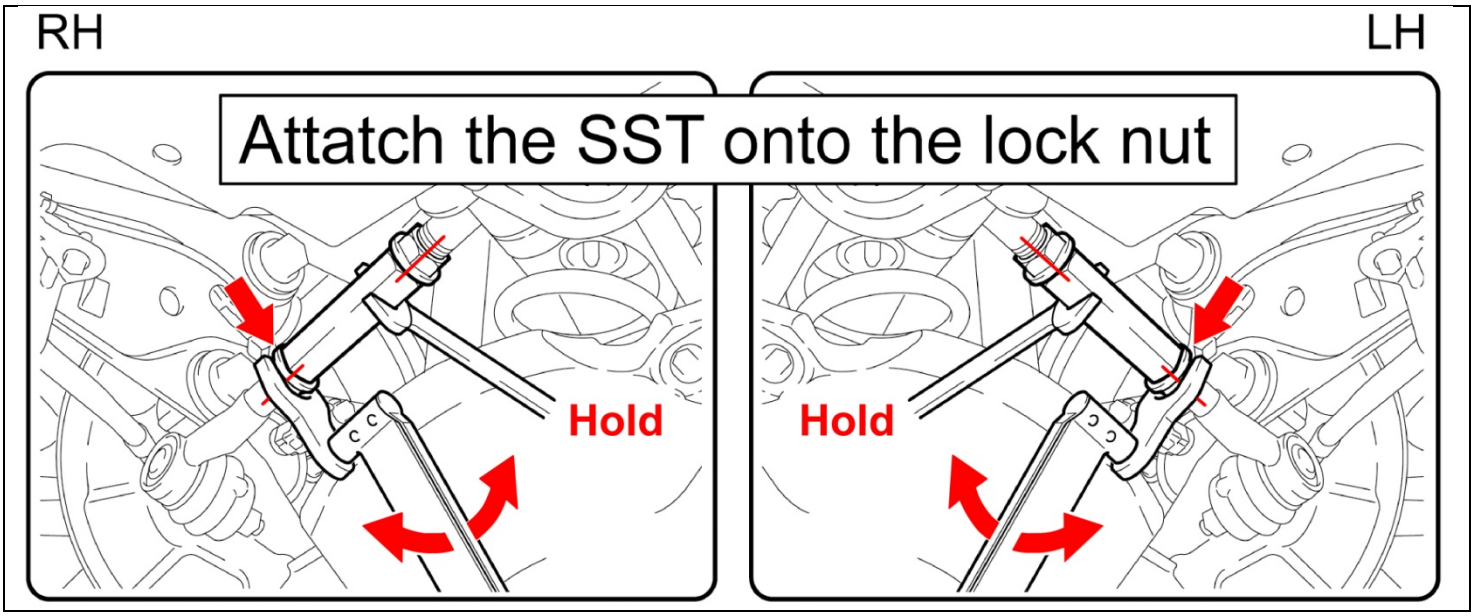
b) Apply the specified torque to the lock nut ***in both directions***. Check the arms that were not previously found loose during **STEPS 2-4.** Inspect ***INBOARD AND OUTBOARD*** match-marks to see if they become misaligned.

Torque: 15ft. lbf (20N·m)

- **Use a 22mm crowfoot attached to a 15 inch torque wrench. If a tool setup other than specified is used, refer to TIS for torque wrench calculation.**

STOP

- **Confirm the torque wrench is set correctly and that only the specified torque is being applied to the outboard lock nut in both directions.**
- **You *MUST* use a wrench to hold the adjusting tube when applying torque to the outboard lock nut.**
- **Replace the suspension arm(s) if:**
  - **Looseness is found.**
  - **A gap is visible between the lock nut(s) and adjusting tube.**



CONDITION	ACTION REQUIRED
Loose	Replace the suspension arm(s) with looseness. Refer to **TIS** for instructions on suspension arm replacement. **NOTE:** • **To prevent stress on the new suspension arm bushing, apply a load to the suspension system to confirm the suspension arm bushing is aligned correctly when tightening by confirming that rear suspension arm No.1 is level with the ground.** • **Suspension arm adjustment and tightening procedure is critical. After replacing the arm, refer to SECTION VII. in these instructions for this procedure.**
NOT Loose	Proceed to **SECTION VIII.SUSPENSION ARM CLIP AND CAUTION LABEL INSTALLATION**

Only perform this section if the suspension arm was found loose and replaced. If no suspension arm was found loose and replaced, the campaign is complete after completing SECTION VIII. SUSPENSION ARM CLIP AND CAUTION LABEL INSTALLATION

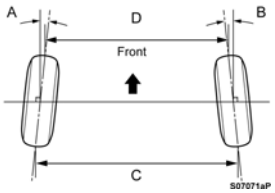
VII. SUSPENSION ARM ADJUSTMENT AND LOCK NUT TIGHTENING

Video Supplement: Suspension Arm Adjustment and Lock Nut Tightening steps

1. ADJUST REAR TOE

a) Adjust the rear wheel toe using an alignment machine.

Specification:
A+B: 0°11' +/- 0°05' (0.18° +/- 0.09°)
C-D: 2.0 +/- 1.0mm (0.08 +/- 0.04in.)



- **The tightening procedure for these lock nuts is critical, failure to tighten them in the correct order could cause them to become loose.**
- **Confirm the alignment machine has been updated with the latest software.**

VITAL STEPS

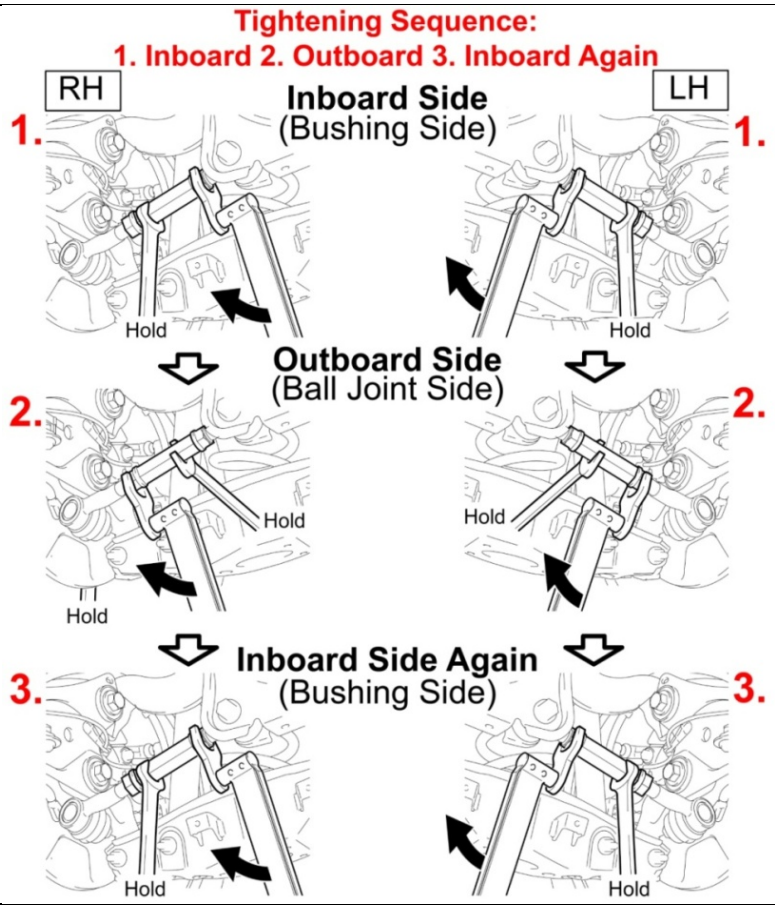
2. TIGHTEN THE LOCK NUTS EXACTLY AS DESCRIBED BELOW

Use a 22mm combination wrench and a 22mm crowfoot attached to a torque wrench
Tightening Sequence: 1. Inboard 2. Outboard 3. Inboard Again
Torque: 41ft. lbf (56N·m)

a) Tighten the inboard lock nut. Hold the adjusting tube steady and tighten the inboard lock nut to the specified torque.

b) Tighten the outboard lock nut. Hold the adjusting tube steady and tighten the outboard lock nut to the specified torque.

c) Tighten the inboard lock nut again. Hold the adjusting tube steady and tighten the inboard lock nut to the specified torque.



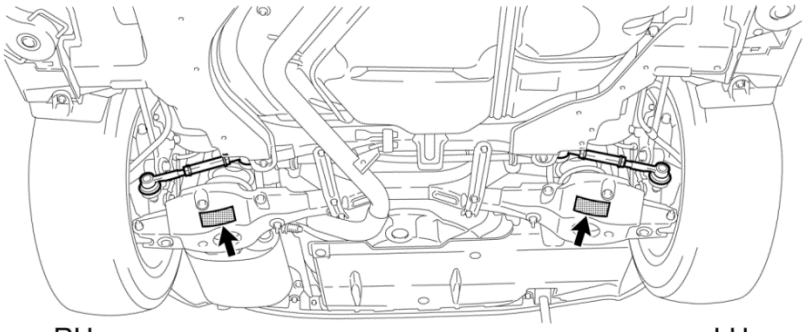
VIII. SUSPENSION ARM CLIP AND CAUTION LABEL INSTALLATION

Video Supplement: Clip and Label Installation steps

- **To confirm the caution labels adhere properly, clean the surfaces of suspension arm No.2 before applying the labels. It may be necessary to use steel wool and cleaning solution to clean the arm sufficiently.**
- **Confirm the label on the clip is facing toward the rear of the vehicle.**

1. INSTALL CAUTION LABEL TO THE FRONT SIDE OF SUSPENSION ARM No.2

a) Clean the front side of the LH and RH suspension arm.
b) Apply caution label on the LH and RH suspension arm.

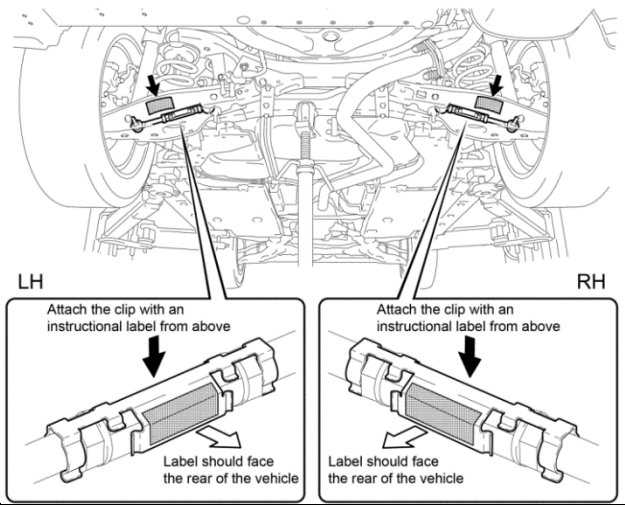


2. INSTALL CAUTION LABEL TO THE BACK SIDE OF SUSPENSION ARM No.2

a) Clean the back side of the LH and RH suspension arm.
b) Apply caution label on the LH and RH suspension arm.

3. INSTALL CLIP ON SUSPENSION ARM No.1

a) Install clip on the LH and RH suspension arm.
b) Confirm the label on the clip is facing toward the rear of the vehicle.



4. TEST DRIVE THE VEHICLE

NOTE: TEST DRIVE IS ONLY REQUIRED IF THE SUSPENSION ARE WAS REPLACED.

5. CAMPAIGN COMPLETE

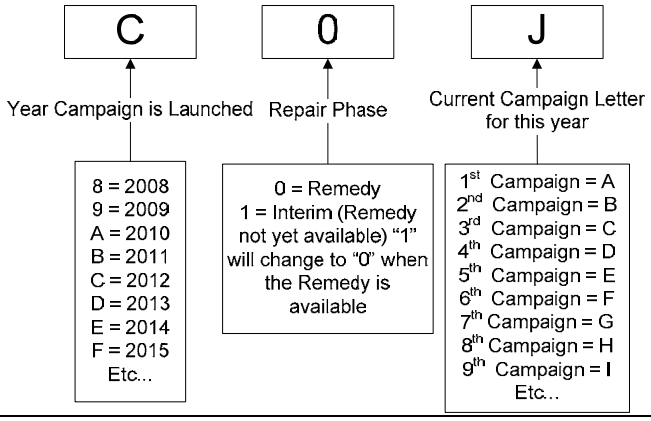
◄ VERIFY REPAIR QUALITY ►

- **Confirm *ALL* inspection steps are followed *EXACTLY* as described in these instructions**
- **Confirm the suspension arm clips and caution labels are installed securely**
- **If a suspension arm is replaced, confirm the lock nut tightening procedure is followed *EXACTLY* as described in these instructions**
- **Confirm the owner's manual supplement is in the glovebox**

If you have any questions regarding this update, please contact your regional representative.

IX. APPENDIX

A. CAMPAIGN DESIGNATION DECODER



Examples:
A0D = Launched in 2010, Remedy Phase, 4th Campaign Launched in 2010
B1E = Launched in 2011, Interim Phase, 5rd Campaign Launched in 2011
C1C = Launched in 2012, Interim Phase, 3rd Campaign Launched in 2012

B. CAMPAIGN PARTS DISPOSAL

As required by Federal Regulations, please make sure all campaign parts (original parts) removed from the vehicle are disposed of in a manner in which they will not be reused, ***unless requested for parts recovery return.***