# Service Bulletin

16-042

**August 6, 2016** 04526 Version 1

# Squeak and/or Pop from the Front Suspension While Turning

#### **AFFECTED VEHICLES**

Year	Model	Trim	VIN range
2014–16	MDX	ALL with 2WD	ALL
2014–16	MDX	ALL with SH-AWD®	ALL

#### **SYMPTOM**

There is a squeak and/or pop from the front suspension while turning the steering wheel.

#### **POSSIBLE CAUSE**

The upper spring rubber has become dislodged.

#### **CORRECTIVE ACTION**

Replace both upper spring rubbers.

### **TOOL INFORMATION**

Tool Name	Part Number	Quantity
Strut Nut Adapter	07AAA-SVAA100	1
Ball Joint Thread Protector	071AF-SZNA100	1
Ball Joint Thread Protector	07AAF-SDAA100	1
Ball Joint Remover	07MAC-SL00102	1
Ball Joint Remover	07MAC-SL00202	1

### **PARTS INFORMATION**

Part Name	Part Number	Quantity
Upper Spring Rubber	51404-T6Z-A01	2
Sway Arm Link Nut	90362-SZA-A00	2
Axle Nut	90305-S3V-A11	2
Tie Rod End Nut	90362-SZA-A00	2
Cotter Pin	94201-30220	2
Castle Nut	90365-STX-A00	2
Upper Damper Mount Nut	90307-STX-A01	6
Center Damper Nut	90212-TZ5-A01	2

**CLIENT INFORMATION:** The information in this bulletin is intended for use only by skilled technicians who have the proper tools, equipment, and training to correctly and safely maintain your vehicle. These procedures should not be attempted by "do-it-yourselfers," and you should not assume this bulletin applies to your vehicle, or that your vehicle has the condition described. To determine whether this information applies, contact an authorized Acura automobile dealer.

# **WARRANTY CLAIM INFORMATION**

The normal warranty applies.

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
4141E6	Replace the upper spring rubbers in the front damper assemblies (no alignment required).	3.2 hrs	06201	04201	16-042N	51404-T6Z-A01
	Includes test-drive.					
4141E6	Replace the upper spring rubbers in the front damper assemblies (with alignment).	3.2 hrs	06201	04201	16-042P	51404-T6Z-A01
	Includes test-drive.					
А	Alignment - add	0.4 hr				

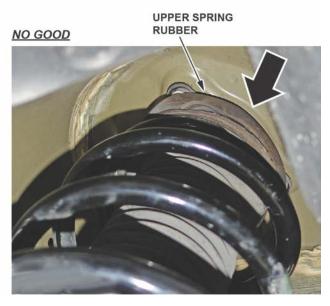
Skill Level: Repair Technician

## **DIAGNOSIS**

- 1. Raise the vehicle and remove the front wheels.
- 2. Visually inspect the upper damper mounting area.
  - If the spring rubber has not become dislodged, this bulletin does not apply. Continue with normal troubleshooting.
  - If the upper spring rubber has become dislodged, go to REPAIR PROCEDURE.

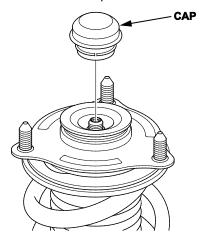
View looking up through the wheel well





## **REPAIR PROCEDURE**

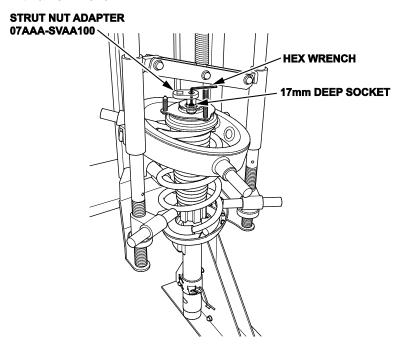
- 1. Remove the front damper assembly. Refer to the front damper/spring removal and installation procedure in the service information.
- 2. Remove the cap.



3. Compress the damper spring.

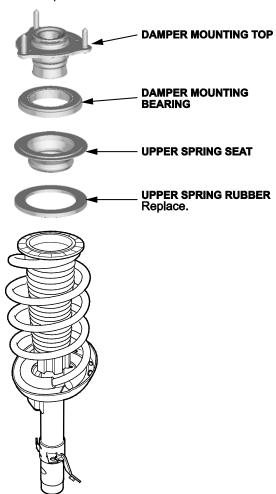
NOTE: Do not compress the spring more than necessary to remove the nut.

4. Remove the self-locking nut with the strut nut adapter and a 17 mm deep socket while holding the damper shaft with a hex wrench.

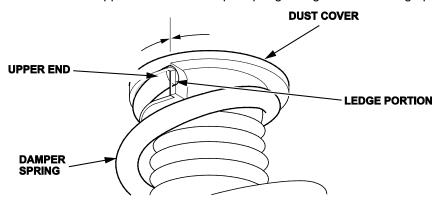


5. Release the pressure from the strut spring compressor.

6. Remove the damper mounting top, damper mounting bearing, upper spring seat, and the upper spring rubber from the damper.

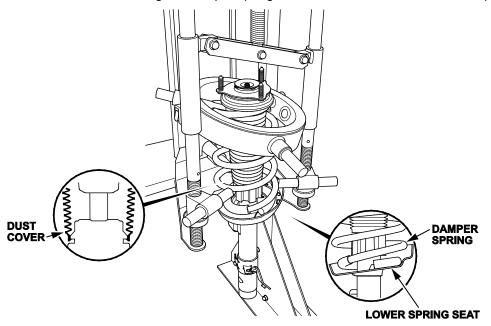


- 7. Replace the upper spring rubber, then reassemble the front damper assembly.
- 8. Make sure the upper end of the damper spring is aligned on the ledge portion of the dust cover.

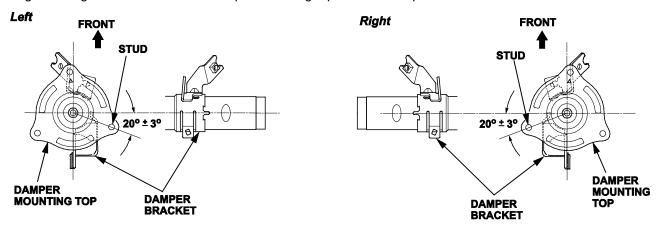


9. Make sure the bottom of the damper spring is aligned with the stepped part of the lower spring seat on the damper unit, then compress the spring.

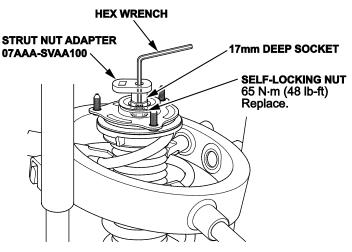
NOTE: After reassembling the damper/spring, install the dust cover onto the damper unit as shown.



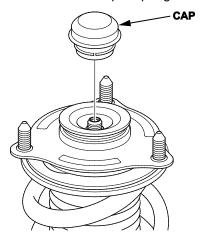
10. Align the angle of the stud on the damper mounting top and the damper bracket as shown.



11. Install the new self-locking nut. Hold the damper shaft using a hex wrench. Torque the self-locking nut using the strut nut adapter and a 17mm deep socket to 65 N-m (48 lb-ft).

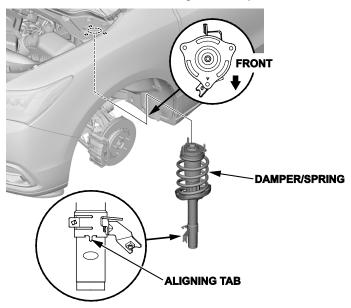


12. Remove the damper/spring from the strut spring compressor and install the cap.

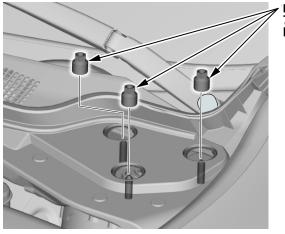


13. Install the damper/spring in the body with the aligning tab facing inside. Note the direction of the damper mounting base as shown.

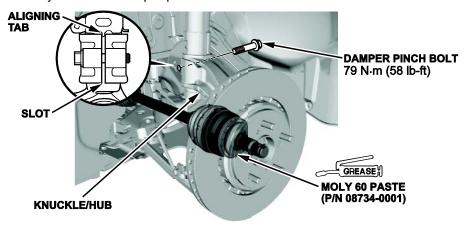
NOTE: Be careful not to damage the body.



14. Loosely install the new flange nuts.

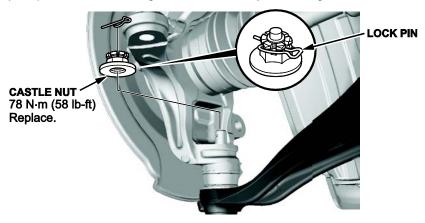


FLANGE NUTS 74 N·m (55 lb-ft) Replace. 15. Apply about 5 g (0.18 oz) of moly 60 paste (P/N 08734-0001) to the contact area of the outboard joint and the front wheel bearing. Install the knuckle/hub. Install the aligning tab on the damper unit into the slot of the knuckle. Loosely install the damper pinch bolt.

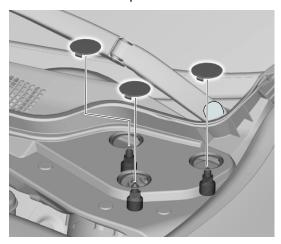


16. Connect the lower arm ball joint to the lower arm. Install a new castle nut and torque it to **78 N-m (58 lb-ft)**, then install the lock pin.

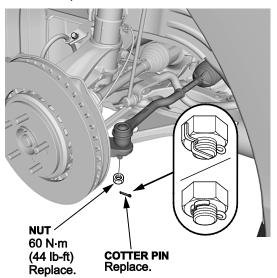
NOTE: Torque the castle nut to the torque specification, then tighten it only far enough to align the slot with the ball joint pin hole. Do not align the castle nut by loosening it.



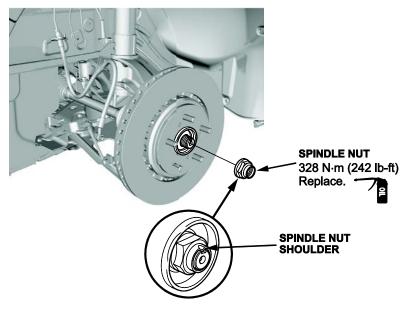
- 17. Load the suspension with the vehicle's weight and tighten all loosely installed mounting hardware to the specified torque. Torque the damper pinch bolt to **79 N-m (58 lb-ft)**. Torque the new upper damper flange nuts to **74 N-m (55 lb-ft)**.
- 18. Install the service caps.



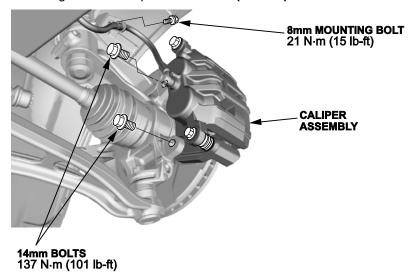
19. Connect the tie-rod end ball joint to the knuckle. Install the new nut and torque it to **60 N-m (44 lb-ft)**, then install a new cotter pin as shown.



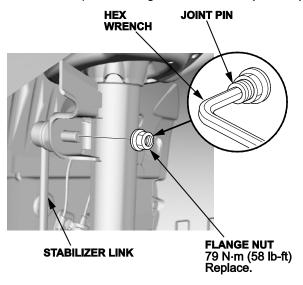
20. Apply a small amount of engine oil to the seating surface of a new spindle. Install the new spindle nut and torque it to 328 N·m (252 lb-ft). Use a drift to stake the spindle nut shoulder against the driveshaft.



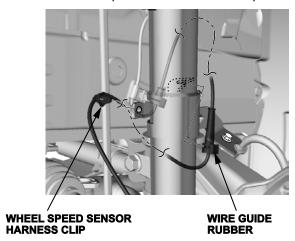
21. Install the caliper assembly and torque the mounting bolts to 137 N·m (101 lb-ft). Install the brake hose bracket mounting bolt and torque it to 21 N·m (15 lb-ft).



22. Connect the stabilizer link to the damper and tighten the new flange nut while holding the joint pin with a hex wrench. Torque the flange nut to **79** N·m (58 lb-ft).



23. Install the wheel speed sensor harness clip and the wire guide rubber.



- 24. Repeat steps 1 thru 23 for the opposite side.
- 25. Check wheel alignment and adjust as needed.

**END**