

Service Bulletin

23-022

June 9, 2023 Version 1

Warranty Extension: Moaning or Rubbing Noise from P-AWS RTC Actuators and/or P-AWS Indicator On With DTC C1600-94, C1611-13, or C1621-13

AFFECTED VEHICLES

Year	Model	Trim	VIN Range	
2014–19	RLX	ALL with P-AWS	Check the iN VIN status for eligibility.	

BACKGROUND

Due to manufacturing errors, abnormal noise may be heard from the rear when driving straight or making small side-to-side turning movements with the steering wheel. The MIL may also illuminate with DTC C1600-94 (PAWS unexpected behavior) and/or C1611-13/C1621-13 (PAWS actuator disconnection L&R).

Acura is extending the warranty coverage on the rear toe control (RTC) actuators on these vehicles to 10 years from the original date of purchase with no mileage limitation.

CLIENT NOTIFICATION

Owners of affected vehicles will be sent a notification of this campaign.

Do an iN VIN status inquiry to make sure the vehicle is shown as eligible.

CORRECTIVE ACTION

Do the inspection procedure and, if necessary, replace the RTC actuator(s).

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.

PARTS INFORMATION

Part Name	Part Number	Quantity	
Left RTC Actuator	52345-TY2-A15	1	
Right RTC Actuator	52340-TY2-A15	1	
Bolt-Washer (8mm x 16mm)	93403-08016-08	1 required if replacing one side	
		2 required if replacing both sides	
Inner Self-Locking Nut (12mm)	90213-SJ6-004	1 required if replacing one side	
		2 required if replacing both sides	
Outer Self-Locking Nut (12mm)	90370-SJA-000	1 required if replacing one side	
		2 required if replacing both sides	
Rear Control Arm Adjusting Bolt	90178-TY2-A01	1 required if replacing one side	
		2 required if replacing both sides	

WARRANTY CLAIM INFORMATION

Operation Number	Description	Flat Rate Time	Defect Code	Symptom Code	Template ID	Failed Part Number
4191L3	REPLACE LEFT RTC ACTUATOR— Includes DTC clear, VSA/ Steering position learn, register actuator and alignment.	1.3 hr	6R500	SEF00	B23022A	52345-TY2-A13
А	REPLACE RIGHT SIDE RTC ACTUATOR - Add	0.2 hr			B23022B	
4191L3	REPLACE RIGHT RTC ACTUATOR— Includes DTC clear, VSA/ Steering position learn, register actuator and alignment.	1.3 hr	6R500	SEF00	B23022C	52340-TY2-A13
А	REPLACE LEFT SIDE RTC ACTUATOR - Add	0.2 hr			B23022D	

Skill Level: Repair Technician

INSPECTION PROCEDURE

Noise Inspection

Drive the vehicle forward moving the steering wheel slowly side-to-side to confirm the noise.

Then, drive the vehicle slowly in reverse moving the steering wheel in the same way that caused the vehicle to make noise when moving forward (the actuators are not operated in reverse).

Did the noise stop in reverse?

YES - go to REPAIR PROCEDURE to replace RTC actuator(s) that are making noise.

NO – If the noise does not stop in reverse, this bulletin does not apply. Continue with normal troubleshooting.

NOTE: Use the ChassisEAR diagnostic tool to assist with isolating the source of the noise.

To Verify DTC

Connect the HDS and check for the following DTCs:

C1600-94 Precision All Wheel Steer System Unexpected Operation,

C1611-13 Left Rear Precision All Wheel Steer Actuator Circuit Open,

C1621-13 Right Rear Precision All Wheel Steer Actuator Circuit Open.

Are any of these DTCs Stored?

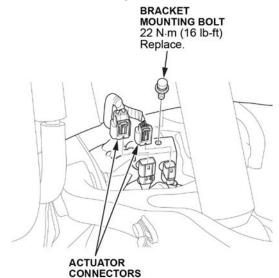
YES - go to REPAIR PROCEDURE.

- If C1611-13 is stored, replace left RTC actuator.
- If C1621-13 is stored, replace right RTC actuator.
- If C1600-94 is stored, replace both RTC actuators.

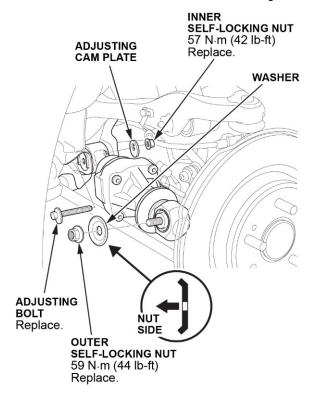
NO – This bulletin does not apply, continue with normal troubleshooting.

REPAIR PROCEDURE

- 1. Raise the vehicle on a lift and make sure it is securely supported.
- 2. Depending on the inspection results, remove one or both rear wheel(s).
- 3. Disconnect the RTC actuator connectors and then remove the bracket mounting bolt.

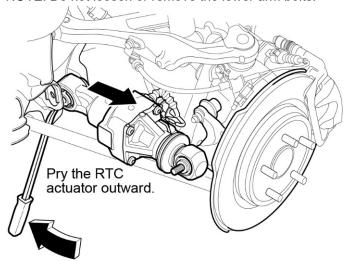


4. Remove the RTC actuator outer self-locking nut and washer.

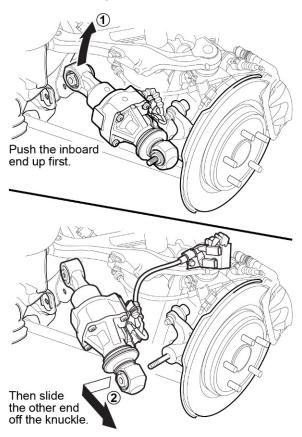


- 5. Mark the position of the adjusting cam plate and adjusting bolt in reference to the frame.
- 6. Remove the inner self-locking nut, the adjusting cam plate, and the adjusting bolt.
- 7. Pry on the RTC actuator to remove it from the inner mount.

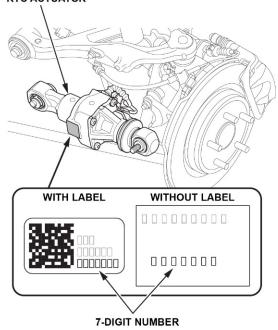
NOTE: Do not loosen or remove the lower arm bolts.



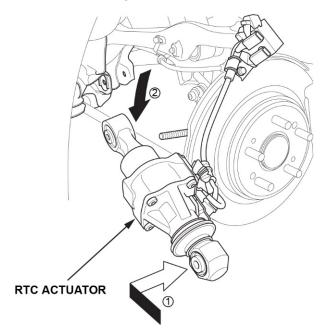
8. Remove the RTC actuator from the vehicle.



- 9. Repeat **steps 3 through 7** on the opposite side, if necessary.
- 10. Write down the **seven-digit number ID** of each new RTC actuator for the neutral position wheel memorization. **RTC ACTUATOR**

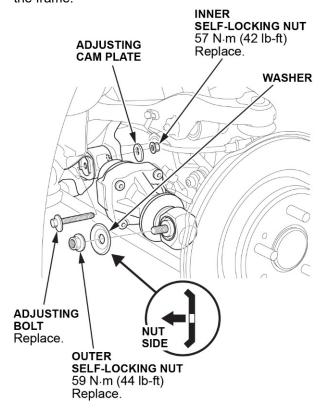


11. Install the new RTC actuator.



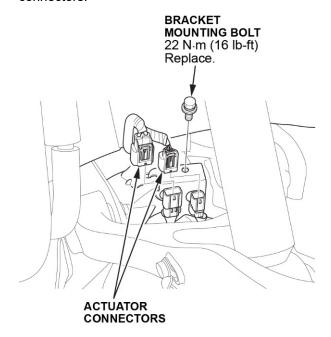
12. Loosely reinstall the original adjusting cam plate using a new inner self-locking nut and new adjusting bolt.

NOTE: Align the cam positions of the new adjusting bolt and the adjusting cam plate with the marked positions on the frame.



13. Loosely install the new outer self-locking nut and the original washer, while observing the correct orientation of the washer in the image above.

14. Install the new actuator harness bracket mounting bolt and torque it to 22 N·m (16 lb-ft), then reattach the actuator connectors.



- 15. Tighten the actuator nuts and bolts until they are snug, but do not tighten to final torque at this time.
- 16. Repeat steps 10 through 15 on the opposite side, if necessary.
- 17. Install the rear wheel(s).
- 18. With the vehicle's weight on the suspension, torque the new installed RTC actuator(s) inner nuts to **57 N·m (42 lb-ft)**.
- 19. With the vehicle's weight on the suspension, torque the new installed RTC actuator(s) outer nuts to **59 N·m (44 lb-ft)**.
- 20. Connect the HDS to the vehicle and do the Rear Toe Position Sensor Neutral Memorization. Select **Precision All Wheel Steer > Replacement > Continue > Actuator > Right or Left.** Then, enter the seven-digit number ID that you wrote down in **step 10**.

NOTE: If both RTC actuators were replaced, repeat the Rear Toe Position Sensor Neutral Memorization for the other side.

- 21. Do a wheel alignment.
- 22. Do the following procedures:
- VSA Sensor Neutral Position Memorization.
- · Steering Rack End Stop Position Learn.

END