# Quality Gonnection Dedicated to Quality Kia Vehicle Repairs



This repair will help correct a slow closing and/or noisy sunroof

Timing chain tensioner replacement may be needed for CVVT assembly

A needed alignment or something more serious?



### A partnership for safety

### We team up again with B.R.A.K.E.S. to provide driver training

ith driver safety as the goal, Kia Motors America (KMA) recently announced a multi-year renewal of its partnership with B.R.A.K.E.S. (Be Responsible and Keep Everyone Safe). Through classroom instruction and handson defensive driver training, Kia aims to reduce injuries and save lives by providing teens and their parents with the tools they need to be responsible behind the wheel.

In 2018, B.R.A.K.E.S. is hosting training in cities around the country. A sampling includes Atlanta, Ga.; Cleveland, Ohio; Chicago, Ill.; Charlotte, N.C; Memphis, Tenn.; Orlando, Fla.; San Diego, Calif.; St. Louis, Mo.; Scottsdale, Ariz.; and many more.

"Car crashes are the number-one cause of death among teens, but with Kia's help, we know we're making a difference," said multi-time-Top-Fuel-drag-racing-champion-turned-road-safety-advocate Doug Herbert. "It's impossible to know exactly how many lives our schools have saved over the last 10 years - we have trained nearly 30,000 teens plus their parents - but even if it was only one life, it would all be worth it. We're grateful for the ongoing

commitment and support from Kia, which enables us to continue making America's roads safer for everyone."

Kia serves as the Official Vehicle and a presenting sponsor of B.R.A.K.E.S. Kia's support helps B.R.A.K.E.S. offer free training for all attendees by offsetting costs through a financial donation and a 44-vehicle fleet, including Soul, Rio and Forte models.

"Kia Motors is committed to vehicle and road safety, and our partnership with B.R.A.K.E.S. is an important way for us to convert that commitment into action," said Saad Chehab, Vice President, Marketing Communications, KMA. "We congratulate the B.R.A.K.E.S. organization on a decade of saving lives and look forward to continuing our collaboration for years to come."

### **Advanced driver training**

B.R.A.K.E.S. provides participating teens and their parents with free hands-on, advanced driver training program taught by professional instructors, including current and former members of law enforcement, professional racers and stunt drivers. Each school includes four hours of training,



starting with a short, 45-minute classroom presentation followed by nearly three hours behind the wheel of new Kia vehicles. The program includes distracted driving awareness, panic braking, drop-wheel/off-road recovery, crash avoidance and car control/ skid recovery - all among the biggest causes of crashes for new drivers.

For safety's sake, please encourage your customers and their family members, as well as your family members, to attend one of the classes. Anyone wanting to register for a class or see the upcoming schedule can visit www.putonthebrakes.org/2018notification-list.

### Kia Motors America, Inc.

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All trademarks and tradenames are the property of their respective owners. 2019 Optima shown with optional features. Not all optional features available on all trims. Some features may vary. Expected availability fall 2018.

### IN THIS ISSUE



Here comes the sun

This repair will help correct a slow closing and/or noisy sunroof



Calming chain chatter



When a hydraulic rack won't track



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**Genuine Parts** 

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### Here comes the sun

This repair will correct a slow closing and/or noisy sunroof

AFFECTED VEHICLE PRODUCTION RANGE

Model	Production Range
Sorento (UMa)	October 27, 2014 to January 23, 2016

You may encounter some 2016MY Sorento (UMa) vehicles produced from October 27, 2014 through January 23, 2016 that exhibit a slow-to-close panoramic sunroof and/ or an abnormal noise when closing it. To help remedy either occurrence, follow the procedure in this article to clean, lubricate and replace the rear tilt levers.



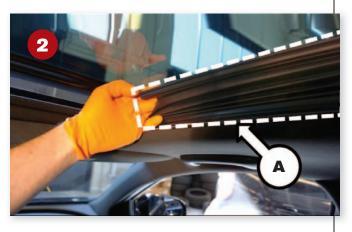
### **Service Procedure**

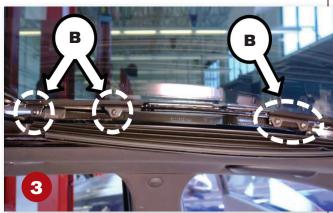
**1.** Inspect the operation of the panoramic sunroof and confirm the customer's concern before conducting this repair.

Notice: If the sunroof is inoperative, proceed to normal diagnosis, and once corrected, inspect for the "slow-to-close" and/or "abnormal noise when closing" concern, and apply the information in this article as necessary.

- 2. With the panoramic sunroof roller blind retracted, carefully remove the accordion covers (A) on the right and left side.
- **3.** Using a T25 Torx<sup>®</sup> socket, remove the four screws (B) on the right and left side.

Caution: Use caution not to scratch or damage the glass during removal of the screws.

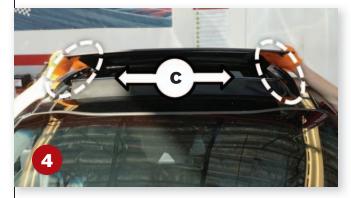




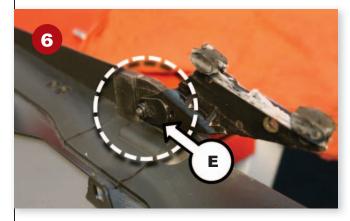
### REQUIRED PARTS

Part Name	Part Number	Quantity	Figure	Comments
Lubricant	81685 C5000FFF	1	R 47-401 KR  (8333286	This specific lubricant must be used. One container covers 30 vehicles.
Acid Brush	N/A	1		Sourced locally
Tilt Lever -	81651 C5000 (LH)	1		N/A
	81652 C5000 (RH)	1		N/A

### **Body/Collision**







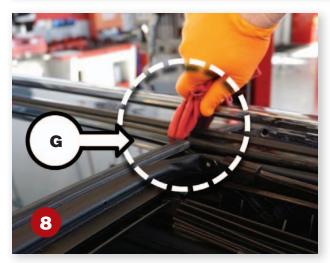
**4.** With the assistance of another person, remove the panoramic sunroof glass by sliding the glass towards the front of the vehicle until the sliders are out of the tracks (C).

Caution: Use caution not to scratch, dent or damage the glass during removal.

- **5.** Lay the glass on a soft, flat, protected surface with the tilt levers (D) facing up.
- **6.** Using an 8mm socket, remove the nuts securing the tilt levers on both sides (E). Replace the tilt levers with new parts and tighten the nuts to the specified torque.

Tightening torque:  $35.4 \sim 53.1$  in.ft  $(4 \sim 6 N.m)$ 





7. Lightly coat the tilt lever shoes (F) using the lubricant specified in the "Required Parts Chart" on page 9.

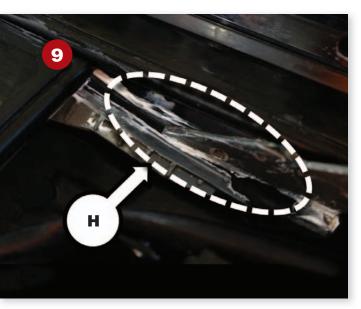
Caution: Failure to use the lubricant specified in the "Required Part" chart may result in an ineffective or repeat repair.

Do not use Kia Dampening Grease (P/N UM011-CHA052), as it is not compatible with the grease used by the factory.

**8.** Using a non-marring trim panel tool and a clean shop towel, clean the rear guide rails (G) on both sides until there are no foreign materials present on the rag.

Caution: Use a non-marring trim removal tool (Such as Snap-on® Part Number PBN5 or equivalent) to avoid damaging roof seals.

Failure to thoroughly remove any old grease or foreign material from the guides may result in an ineffective or repeat repair.



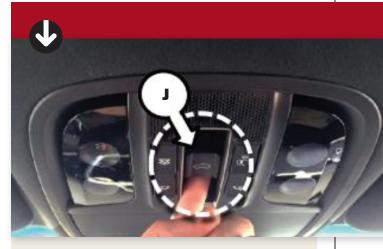


- 9. Using a clean brush, apply a sufficient amount of the specified lubricant to the entire length of both rear tracks (H). (Approx.15 grams of lubricant per track)
- **10.** With the assistance of another person, carefully reinstall the panoramic sunroof glass by inserting the tilt levers into the guide rail (I). Thoroughly clean the excess lubricant from the panoramic sunroof.

Notice: Ensure the glass and all other components contacted while performing this procedure are clean.

**11** Function-test the operation of the panoramic sunroof, confirming the customer's concern is corrected, and that the one-touch open/close is functioning.

Notice: If the one-touch open/close is not functioning, follow the reset procedure found in the next column under the "Panoramic Sunroof Reset Procedure." (III)



### **Panoramic Sunroof Reset Procedure**

- 1. Turn the ignition key to the ON position, and then close the panoramic sunroof completely and release the switch.
- 2. Press and hold the CLOSE button (J) for 10-15 seconds until the sunroof fully closes then retracts slightly. The sunroof operates as follows:

BLIND OPEN → GLASS TILT

Release the switch.

Perform step 3 within 5 seconds.

3. Press and hold the CLOSE button until the sunroof glass operates as follows:

GLASS CLOSE → OPEN → CLOSE

Release the switch.

4. Verify operation of the sunroof to confirm reset procedure is successful.

- TSBs may be updated from time to time. Please refer to TSB B0D125 at www.kiatechinfo.com for the latest procedures.
- All images are for illustration purposes only.



Timing chain tensioner replacement may be needed for CVVT assembly

A brief chattering or rattling noise from the engine on start-up — after a cold soak — may be evident for some 2014~16MY Cadenza (VG), produced from February 1, 2013 through January 7, 2016, and some 2014~2015MY Sorento (XMa) vehicles, produced from December 17, 2012 through December 11, 2014. If so, the timing chain tensioner may need to be replaced. This article addresses the replacement process.

Model	Production Date Range	
Cadenza (VG)	From February 1, 2013 through January 7, 2016	
Sorento (XMa)	From December 17, 2012 through December 11, 2014	



### REQUIRED PARTS

Model	Part Name	Part Number	Figure	
Cadenza (VG)	Timing Chain Tensioner	24410 3CGA2		
	Timing Chain Tensioner	24410 3CGA2		
	Intake CVVT	Previous Part Number		
Sorento (XMa)		24350 3CGAO		
		New Part Number	June 1	
		24350 3CGA1	Check the part number (A) engraved in the metal to identify the previous type and new one.	

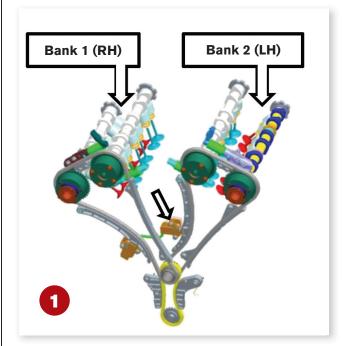


TSBs may be updated from time to time. Please refer to
TSB ENG148 at www.kiatechinfo.com for the latest procedures.

All images are for illustration purposes only.

Related Parts	Part Name	Comments
Gasket - Rocker Cover		
Gasket - Rocker Cover		
Gasket - Outlet, LH		
Gasket - Outlet, RH	Refer to your local	
Gasket -ETC Actuator	Kia dealer	
Gasket - Water Pump, RH		Metal
Gasket - Water Pump, LH		Rubber
Gasket - Surge Tank		

### Mechanical



### **Service Procedure**

Notice: This Service procedure should only be performed on engine bank 2 (LH), as shown.

- **1.** Refer to the "Engine Mechanical System → Timing System → Timing Chain" section in the applicable Workshop Manual at KiaTechInfo.com, to install the improved timing chain tensioner.
- **2.** For XMa vehicles, confirm that the latest intake CVVT is installed by referencing the part number.

Refer to the "Engine Mechanical System → Cylinder Head Assembly → CVVT & Camshaft" section in the applicable Workshop Manual at KiaTechInfo.com, to replace the intake CVVT.

Notice: Torque the intake CVVT retaining bolt with hand tools and a torque wrench. Do not use power/air tools.

Tightening torque: 47.4 - 56.4 lb-ft (64.7 - 76.5 Nm)

- 3. Once proper tensioner installation has been completed, reinstall all removed components by reversing the order of removal.
- 4. After confirming proper engine oil and coolant levels, start the engine and verify the rattle concern has been resolved. KIA

### **GOT A KIA ON THE LIFT?**





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Just sign up at www.KiaTechInfo.com, log in and pull up thousands of pages of documents, including:

- ► Service manual data
- ► Technical Service Bulletin data and other related materials
- Scan tool, reprogramming tools
- Technical training materials

And don't forget to use Genuine Kia Parts to keep Genuine Kia customers coming back.

### If it's not in the right box, it's not genuine.





Genuine Parts

From starters to alternators, oil filters to spark plugs, there is no substitute for genuine. The only way to assure that you are getting Genuine Kia parts, backed by the Kia Warranty, is to order them from your local Authorized Kia Dealer. Contact your local Kia dealer for assistance and delivery of the parts you need.

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## When a hydraulic rack won't track

Your customers may tell you they think they need an alignment because their vehicles wander and won't "stay on track." Could be. But if their vehicles also have some other symptoms, the problem might be a worn-out steering rack.

Besides the tracking issue, look for a dead spot in the steering, low or discolored power steering fluid, a power steering fluid leak under the vehicle, a burning smell or a grinding noise.

Finding some of — or all of — these issues may lead you to recommend replacing the steering rack. If so, we have you and your customers covered with Genuine Kia rack-and-pinion unit replacements, their complementary components and fluids, all of which are specifically engineered for Kia vehicles.

Now that's truly getting your customers back on track.



### **Genuine Parts**

Contact your local Kia dealer today for assistance and delivery of your parts.

Kia Genuine replacement parts (except battery) sold by an Authorized Kia Dealer under warranty are covered for the greater of (1) the duration of the New Vehicle Limited Warranty or (2) the first 12 months from the date of installation of the Kia Genuine replacement parts or 12,000 miles, whichever comes first. Labor charges not included when not installed by an Authorized Kia Dealer. Warranty is limited. See Kia's Replacement Parts and Accessories Limited Warranty for further details.