

Quality Connection

Dedicated to Quality Kia Vehicle Repairs

FALL 2017 VOL. 12 | NO. 3



2017 FORTE 5 SX

[Shown with optional features]

www.kia.com

A TIGHT FIT

New part improves hub vacuum sealing

GETTING CLOSURE

Striker adjustment alleviates trunk issues

THE SILENT TREATMENT

That's what your customers want for their vehicles



Genuine Parts

Quality recognition

Kia's reliability and vehicle satisfaction are touted

Continuing a multi-year string of quality and reliability awards and accolades, J.D. Power's 2017 Initial Quality Study (IQS) recently recognized Kia Motors as the highest-ranking nameplate in the United States for the second year in a row.

Kia's improvement marks the best nameplate performance within the last 20 years of the IQS study, driven by five segment awards — the most of any nameplate — for the Soul (Compact Multi-Purpose Vehicle), Forte (Compact Car), Cadenza (Large Car), Niro (Small SUV) and Sorento (Midsize SUV). The Kia Soul took home an IQS award for the third consecutive year while Kia's two newest models, Cadenza and Niro, were outstanding performers in their first model year, with the Cadenza earning the top score among all models ranked in the study. Together with the Optima and Sportage, each of the seven award eligible Kia models included in the 2017 IQS study finished first or second in their respective categories.

"When Kia beat out the entire industry in last year's J.D. Power Initial Quality Study many people wondered if we could

maintain such a lofty position. Today, the answer is loud and clear as Kia owns the top spot for the second straight year with more 2017 segment award winners than any other nameplate," said Michael Sprague, chief operating officer and EVP, Kia Motors America (KMA). "Our back-to-back chart-topping IQS performances reconfirm Kia's status as today's world-class automaker and reflect the exacting standards and craftsmanship our team members instill into every car, crossover and SUV Kia builds."

In addition to the IQS announcement, three of Kia's highly acclaimed models, the 2016 Optima midsize sedan, the 2016 and 2017 Cadenza premium sedan as well as the 2017 Sportage Compact CUV, were named segment winners in AutoPacific's 2017 Vehicle Satisfaction Awards in the midsize car, large car and compact crossover SUV categories, respectively.

"Kia is a leader in design, quality, technology and value, and the AutoPacific Vehicle Satisfaction Awards are another validation of our world-class products and their ability to meet and exceed customer expectations," said Orth Hedrick, vice president of product



The Cadenza and four other Kia models earned the prestigious J.D. Power's 2017 IQS awards.¹

planning, KMA. "As a two-time winner, Optima illustrates that if you buy a Kia, you are going to love it. With Cadenza and Sportage also winning their categories, Kia is delivering what buyers are looking for in any size of vehicle."

As for those who service our cars, we think you will find that they are designed and engineered to meet the highest standards making them easy to service and maintain.

Kia Motors America, Inc.

All trademarks and tradenames are the property of their respective owners. 2017 Kia Forte 5 SX shown on the cover and above with optional features. Not all optional features are available on all trims. Some features may vary.

¹ The Kia Cadenza received the lowest number of problems per 100 vehicles reflecting higher quality among large cars in the J.D. Power 2017 U.S. Initial Quality Study based on 77,419 total responses, evaluating 189 models, and measures the opinions of new 2017 vehicle owners after 90 days of ownership, surveyed in February-May 2017. Your experiences may vary. Visit jdpower.com/cars.

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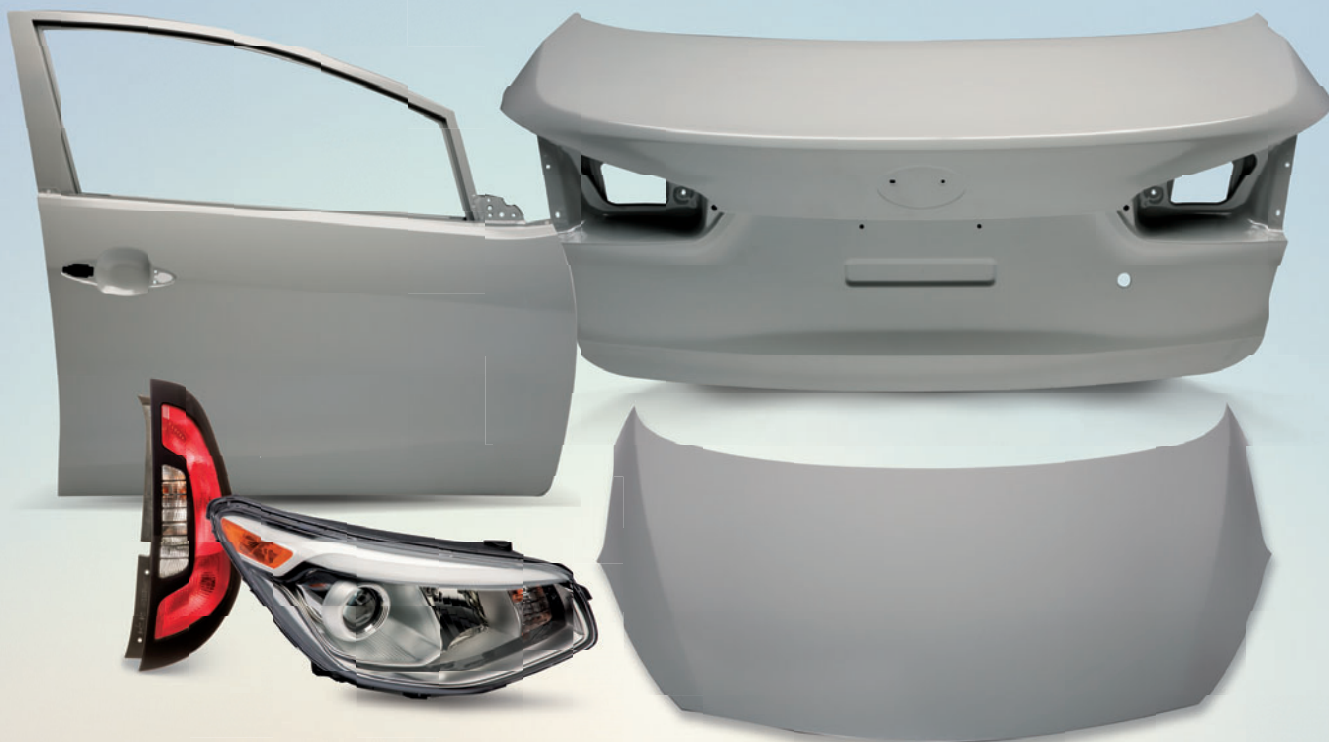
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The silent treatment

That's what your customers want for their vehicles

OUR COMMITMENT TO EXCELLENCE IS THE SUM OF OUR PARTS.

Kia is the highest ranked brand in initial quality for two years in a row.
Let's keep it going with Genuine Kia Parts.



2017 KIA CADENZA
"Highest Ranked Large Car In Initial Quality by J.D. Power"

2017 KIA FORTE
"Highest Ranked Compact Car In Initial Quality by J.D. Power"

2017 KIA NIRO
"Highest Ranked Small SUV In Initial Quality by J.D. Power"

2017 KIA SOUL
"Highest Ranked Compact Multi-Purpose Vehicle In Initial Quality by J.D. Power"

2017 KIA SORENTO
"Highest Ranked Midsize SUV In Initial Quality by J.D. Power"

The Kia Cadenza, Kia Forte, Kia Niro, Kia Sorento, and Kia Soul received the lowest number of problems per 100 vehicles reflecting higher quality in their respective segments in the J.D. Power 2017 U.S. Initial Quality (IQS) Study, based on 77,419 total responses, evaluating 189 models, and measures the opinions of new 2017 vehicle owners after 90 days of ownership, surveyed in February-May 2017. Your experiences may vary. Visit jdpower.com/cars.



Genuine Parts

A tight fit

New part improves hub vacuum sealing



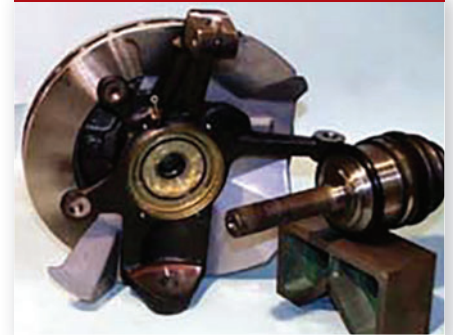
In order to improve hub vacuum sealing during 4WD operation for 1998-2001 Sportage 4WD vehicles, we recommend using a new inner seal, along with corresponding revisions to knuckles and CV shafts. A service kit is available from Kia to retrofit the new seal; installation instructions are described in this article.



NEW STYLE



PREVIOUS STYLE



Repair procedure

1. Raise the vehicle on hoist. Remove the front wheel/tire assembly.

Remove the two bolts attaching the brake caliper/anchor to the knuckle and remove the caliper/anchor assembly from the rotor. Secure the caliper/anchor assembly out of the way with wire or tie wraps.

2. Remove the two screws securing the brake rotor to the wheel hub and remove the rotor.

Disconnect the vacuum hose from the fitting on the knuckle.

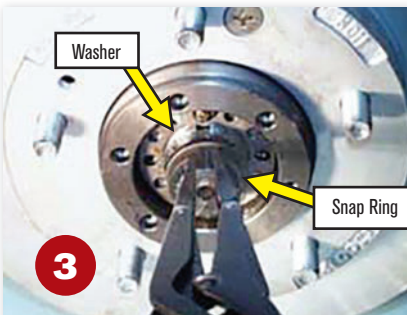
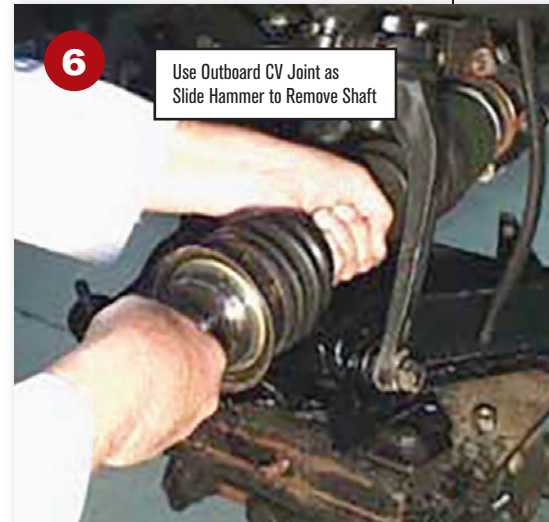
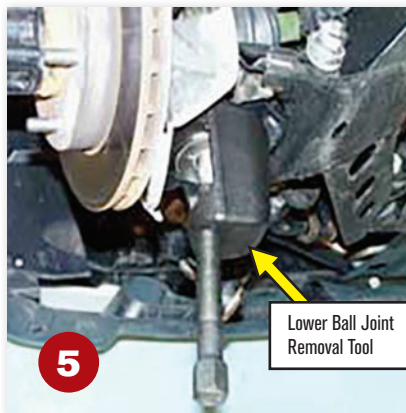
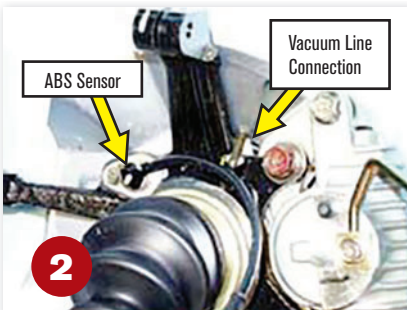
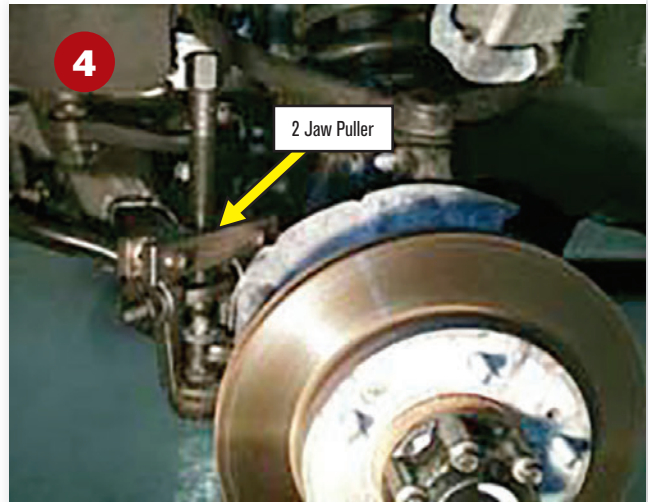
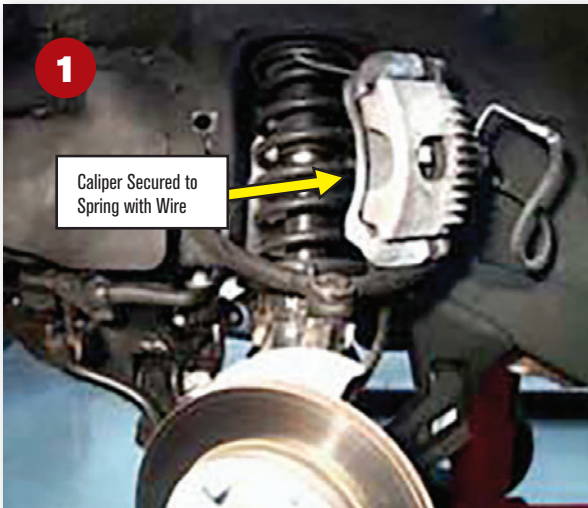
Remove the ABS sensor attaching the bolt and the sensor from the knuckle (if ABS equipped).

PART NUMBER DESCRIPTION

Description	Previous P/N	New P/N	Affected Vehicle Production Range
Knuckle/Hub Assy w/o ABS Knuckle/Hub Assy w/ABS	OK083 04 500 OK083 04 600	QK081 33 020 DQ QK082 33 020 EQ	1998, 1999, 2000 and some 2001 MY Sportage 4WD models with production dates between 9/1/97 and 10/21/00.

» TSBs may be updated from time to time. Please refer to TSB Vol. 2, Chassis, 007 at www.kiatechinfo.com for the latest procedures.

» All images are for illustration purposes only.



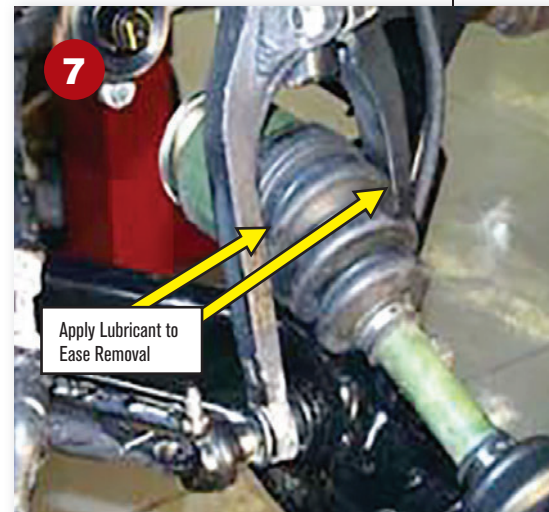
5. Remove the lower ball joint cotter pin and nut; then with a suitable puller (such as Snap-on® CJ119B), separate the ball joint from the knuckle.

Notice: Do not use a pickle fork type ball joint separator because seal damage will occur.

6. Remove the 10 mm pinch bolt and nut securing the upper ball joint to the knuckle.

Remove the knuckle/hub assembly from the vehicle.

Using a suitable jack under the lower control arm, load the suspension and raise the strut fork opening sufficiently to allow the drive shaft removal. Pull the CV shaft free from the front axle by using the outer part of the shaft as a slide hammer.



Notice: Apply lubricant to the CV boot edge and the fork edges to facilitate removal. Do not use undue force as damage to boot may occur.

Notice: Do not allow the caliper/anchor assembly to hang from the brake hose.

3. Remove the six bolts securing the vacuum locking hub to the wheel hub and remove the wheel hub.

Remove the snap ring and washer from the CV axle shaft. Discard the snap ring.

4. Remove the tie rod cotter pin and nut; then with a suitable puller (such as Snap-on® CJ82B), disconnect the tie rod end from the knuckle.

Notice: Do not use a pickle fork type tie-rod separator because seal damage will occur.

8

Mark Control Arm as Shown, at 1/8" from the Edge.



9

Grind Edge as Shown, to 1/8" Mark Made in Previous Step



10

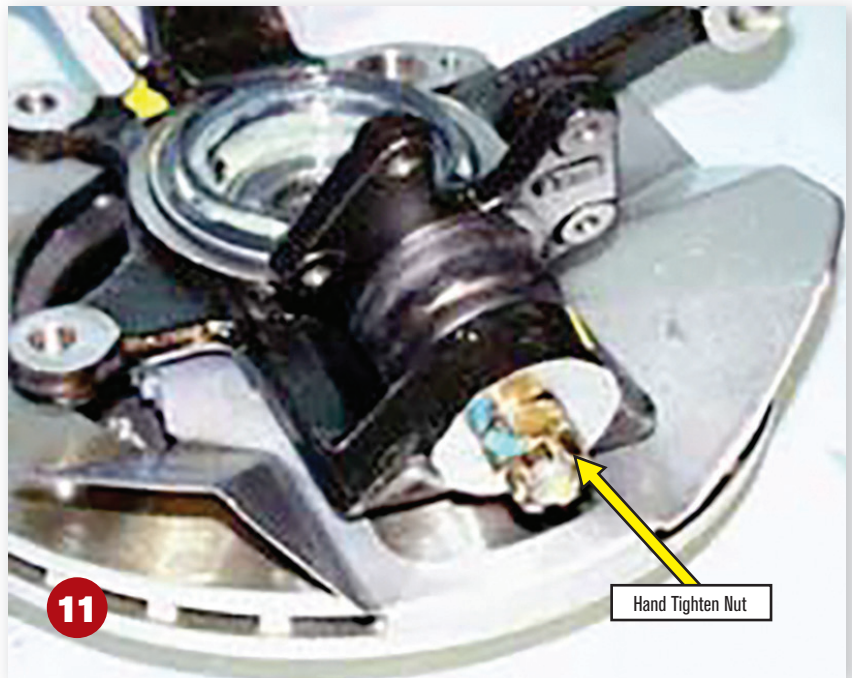
Use Outboard CV Joint as Slide Hammer to Install Shaft



8. Mark the edge of the lower control arm at 1/8-inch from edge as shown.

9. Remove the 1/8-inch of material marked in Step 8 by grinding the edge at an angle as shown. Touch up reworked area with black paint.

Notice: This material removal on the lower control arm is necessary to prevent



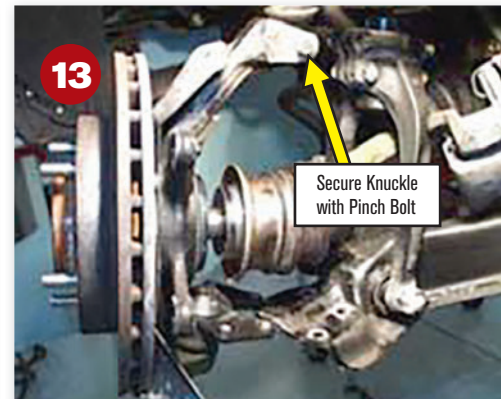
11

Hand Tighten Nut



12

Apply Grease to Both Sides



13

Secure Knuckle with Pinch Bolt

interference between the lower control arm and the new knuckle and/or the inner seal dust shield on the CV shaft.

10. Inspect the retaining ring on the output shaft of the front axle, replace if damaged. Position/rotate the new drive shaft to line up with the splines in the front axle output shaft, then install by pushing it in place, using the outer part of shaft as a slide hammer. Unload the suspension and remove the jack.

11. Remove four bolts and separate the old ball joint from the lower control arm. Install the ball joint on the new knuckle and hand tighten the attaching nut.

Notice: Installing the knuckle to the upper control arm first with the lower ball joint

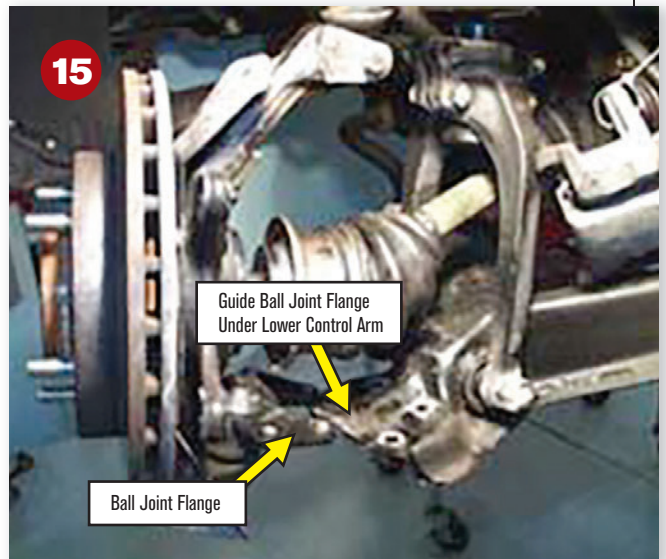
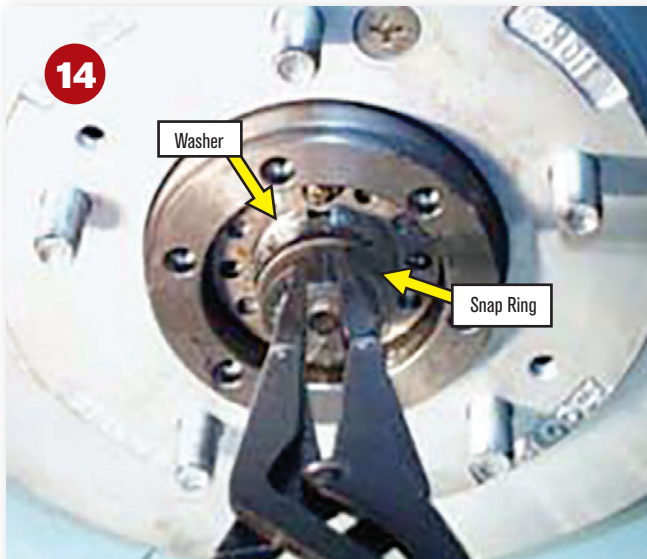
already installed on the knuckle will help prevent damage to the dust shield on the drive shaft and/or seal.

12. Apply grease to the inner bearing surface and to both sides of the new knuckle spacer (OK011-33-044, included in kit) and install onto the CV joint.

Apply grease to the inner seal in the new knuckle/hub assembly.

Notice: The spacer has a chamfer on the inside diameter; this chamfer must face the CV joint.

13. Install the knuckle/hub assembly by first installing it over the CV axle shaft, then insert the upper ball joint through the top of the knuckle. Retain with the 10 mm pinch bolt and nut.



Notice: Suspending the knuckle from the upper control arm before attaching the ball joint to the lower control arm will help prevent damage to the dust shield on the drive shaft and/or to the seal.

14. Make sure the CV axle shaft is inserted all the way into the hub, install the washer and secure with new the snap ring (P/N 0K-011-27-145, included in kit).

15. Lift the knuckle assembly up and guide the lower ball joint flange under the lower control arm and secure with four bolts. Torque the bolts to 16–19 lb - ft.

Tighten the upper ball joint pinch bolt to 36 lb - ft.

Tighten the lower ball joint nut to 110 lb - ft and install a new cotter pin.

Insert the tie-rod end into the knuckle, install the nut, tighten to 27 lb - ft, and install the new cotter.

Make sure there is no interference between the lower control arm and the knuckle or the inner seal dust shield when turning the steering from full left to full right. If there is interference, recheck/repeat Steps 8 and 9.

Install the ABS sensor into the knuckle and tighten the mounting bolt to 7 lb - ft (if ABS equipped).

Apply a small amount of oil to the O-ring on the vacuum locking hub.

16. Install the vacuum locking hub to the wheel hub and tighten the six bolts in two passes using crisscross pattern.

First pass: Tighten to 19 lb - ft

Second pass: Tighten to 23 lb - ft

Connect a handheld vacuum pump to the vacuum fitting on the knuckle and check for vacuum leakage. The hub should hold a vacuum of 20 in Hg for 10-20 seconds. If it does not, check for seal damage or mis-installation and excessive wheel bearing play.

17. Check the vacuum hoses, steel lines, vacuum canister and vacuum solenoid for restrictions, cracks, and contamination or rust. Clear with compressed air if any debris or restrictions are found. Replace any unserviceable parts.

Connect the vacuum hose to the fitting on the knuckle.

Install the brake rotor and the two retaining screws.

Install the brake caliper/anchor assembly and tighten the two mounting bolts to 72 lb - ft.

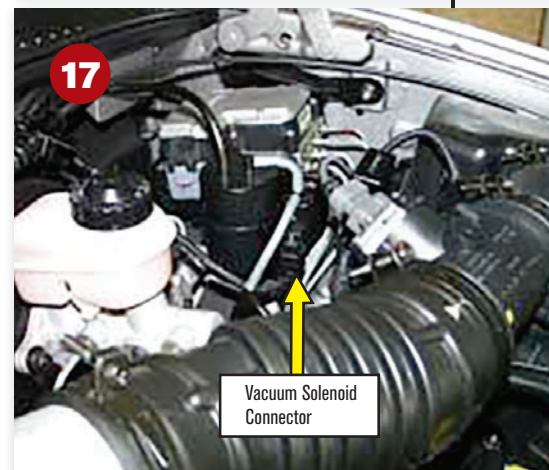
Install the wheel/tire assembly and tighten the lug nuts to 74 lb - ft.

Repeat the procedure for the other side of the vehicle.

Confirm that the vacuum solenoid harness connector is securely installed on the solenoid.

Notice: This connector may have been disconnected on vehicles modified for use with earlier style locking hubs.

Test the vehicle and verify the 4-wheel drive operation. **KIA**



Getting closure

Striker adjustment alleviates trunk issues

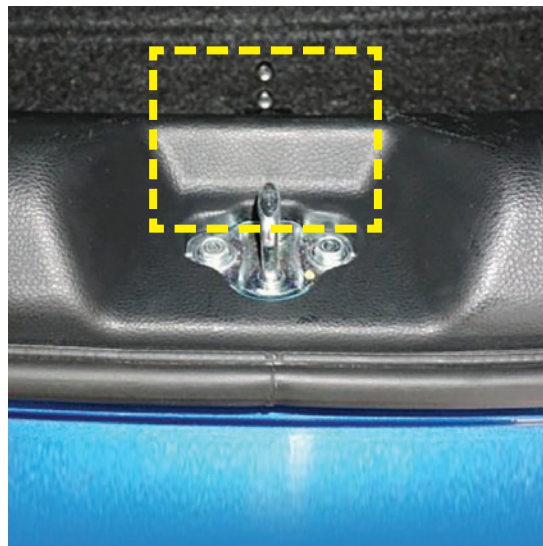
You may encounter a 2014MY Forte (YD), produced between February 1, 2013 through February 28, 2014, that exhibits a rattling noise from the trunk area and/or difficulty closing the trunk. If you do, following the procedures outlined in this article may resolve these issues.

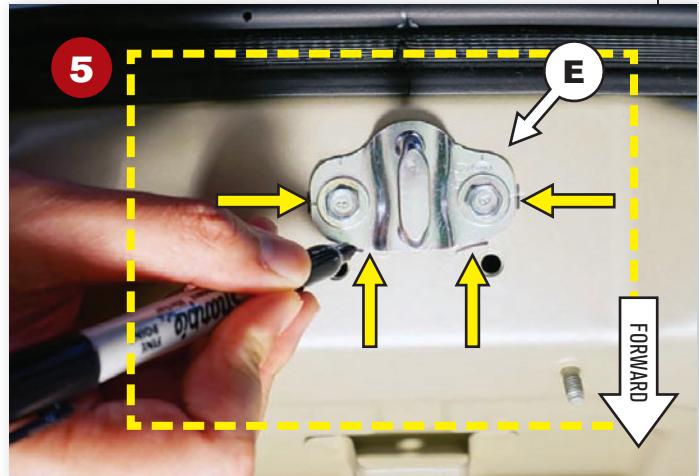
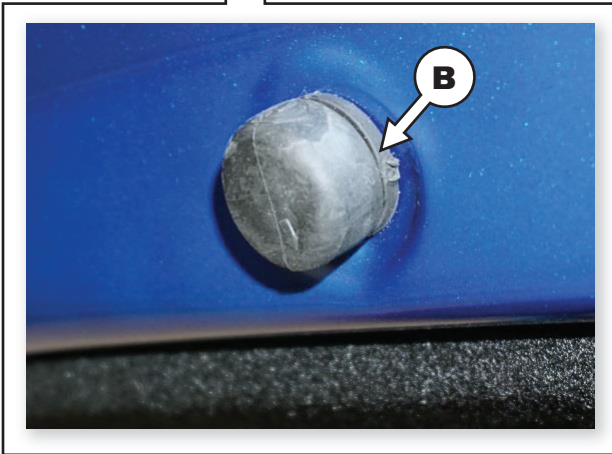
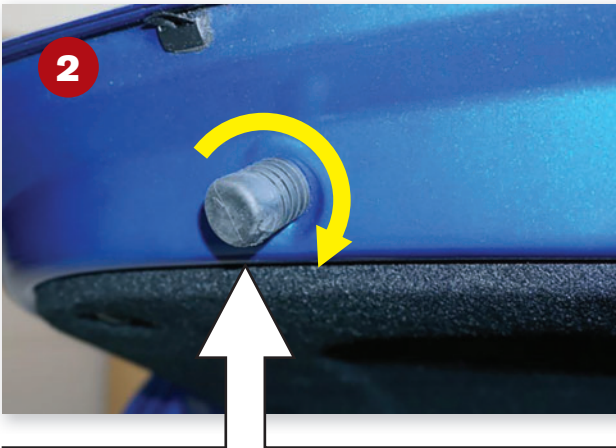
AFFECTED VEHICLE PRODUCTION RANGE

Model	Production Range
Forte (YD)	From February 1, 2013 through February 28, 2014

» TSBs may be updated from time to time. Please refer to TSB BOD122 at www.kiatechinfo.com for the latest procedures.

» All images are for illustration purposes only.





Service Procedure

1. Locate the two trunk rubber bumpers (A).

2. Check and adjust, if necessary, the height of the rubber bumper until only one adjustment line (B) is visible above the trunk surface.

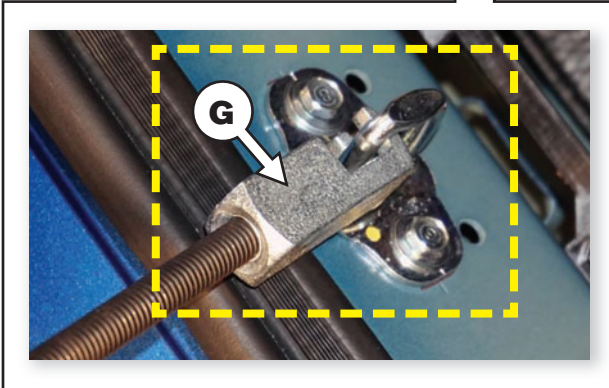
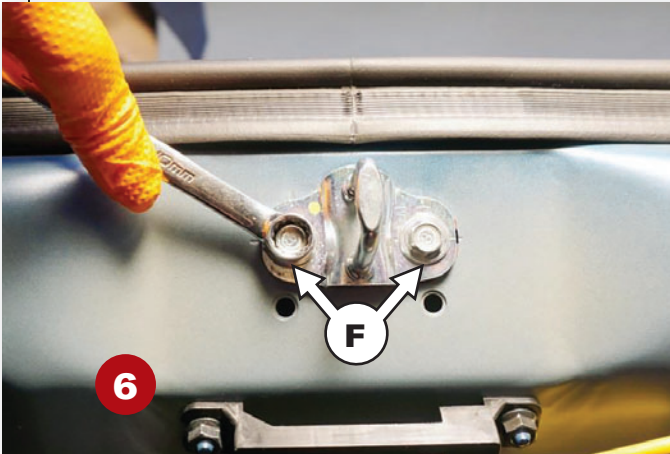
3. Remove the luggage compartment mat (C).

Caution; Use only non-marring trim removal tools (such as Snap-on® P/N PBN5 or equivalent) to avoid damaging trim

pieces. Wear disposable gloves to avoid soiling interior trim components.

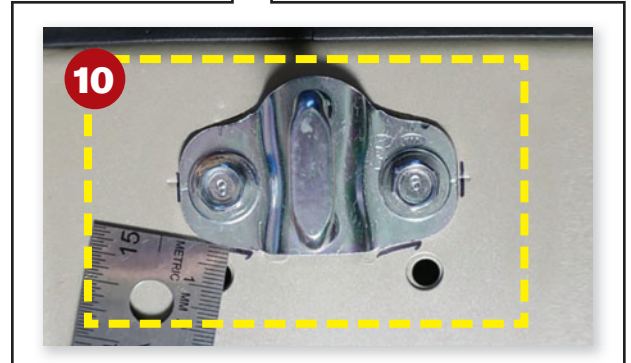
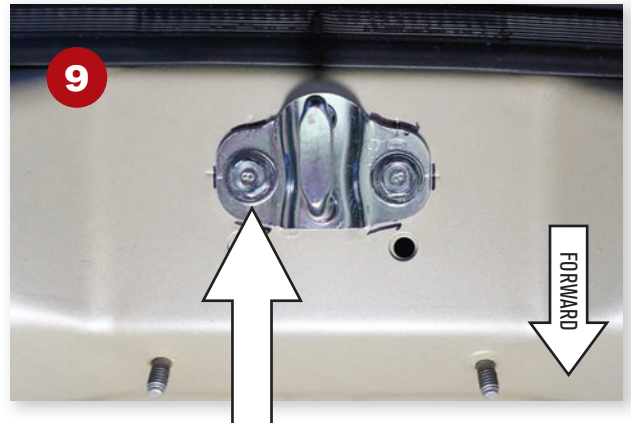
4. Carefully remove the trunk compartment trim (D).

5. Locate the striker and use a marker to make four reference marks (E) around the striker, as shown. Note: The reference marks will make it easier to measure striker movement after adjustment.



6. Loosen the two striker mounting bolts (F) by 1/3 of a turn. Note: Do not loosen the bolts past 1/3 of a turn. The bolts must remain tight.

7. Install a hook adaptor (G) onto the end of a slide hammer, or a similar tool, and install it onto the striker, as shown.



8. Use the slide hammer to pull straight back on the striker, as shown. Note: Do not allow the slide hammer to deviate laterally while adjusting the striker.

9. After completing the first pulling operation, use a ruler to measure the amount of striker adjustment, relative to the reference marks. Note: If more adjustment is required, repeat step 8 until the striker reaches the required adjustment. Required adjustment: 0.011" ~ 0.019" (0.27 ~ 0.49 mm)

10. After striker adjustment is complete, torque the striker mounting bolts to specification. Tightening Torque: 5.1 ~ 8.0 lb-ft (6.9 ~ 10.8 Nm)

11. Reinstall all removed components by reversing the order of removal. 



Reliability like no other.

Nothing compares with genuine when you expect reliability.

Designed to meet the demands of Kia's specifications, look no further than Genuine Kia collision parts. Going with Kia is the best way to ensure easy installation, precision fitting, durable reliability and value. Backed by the Kia warranty,* our parts give added confidence when you're on the road or away from it.



Genuine Parts

* Kia Genuine collision parts 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. 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.



The silent treatment

That's what your customers want from their vehicles.

And Genuine Kia mufflers are engineered to the highest standards to achieve that.

Sometimes it's obvious that the vehicles you service need a new muffler.

Even if the noise could be tolerated, how about the leakage of exhaust gases?

And it's not just the noise or fumes that customers need to worry about. The muffler is a critical part

of an emissions system. When it is compromised, vehicle efficiency might be compromised in terms of performance and gas mileage.

Inspect your customer's vehicles and advise them about the condition of their mufflers (and entire exhaust system, for that matter). If there is excessive corrosion or damage to a muffler, recommending a replacement could be in order.

Nothing speaks louder than helping silence your customers' vehicles.



Genuine Parts

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

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** 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. 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.