| | GROUP | MODEL |
|---|---|---|
| KIA | **Safety Recall Campaign** | **2006~2012MY Sedona (VQ)** |
| | NUMBER | DATE |
| | **SC100 (Rev 2, 03/06/2014)** | **December 2013** |

# VOLUNTARY SAFETY RECALL CAMPAIGN

**SUBJECT:** FRONT LOWER CONTROL ARM INSPECTION, REPLACEMENT OR APPLICATION OF PREVENTATIVE ANTI-CORROSION MATERIAL (SC100)

## * NOTICE

**This bulletin has been revised to include additional information. New/revised sections of this bulletin are indicated by a black bar in the margin area.**

This bulletin provides the procedure to inspect for corrosion damage and, if necessary, replace or apply additional anti-corrosion protection to the front lower control arms of some Sedona (VQ) vehicles, built from the start of production (SOP) through August 14, 2012. The affected vehicles are currently registered, or were originally sold, in states where heavy amounts of road salt are used for de-icing in the winter months. The 21 states which are known to use heavy amounts of road salt are: CT, DC, DE, IA, IL, IN, MA, MD, ME, MI, MN, MO, NH, NJ, NY, OH, PA, RI, VT, WI and WV. To correct this concern and improve customer satisfaction, Kia is launching this safety recall campaign to inspect and, if necessary, replace or apply additional anti-corrosion protection to the front lower control arms, on all affected vehicles.

## * NOTICE

**IMPORTANT For Dealers and Customers Not Immediately affected By This Campaign.**

**This campaign is primarily being conducted regarding owners whose vehicles in the affected VIN range are owned and maintained in states where significant amounts of road salt are applied. However, the objective of this campaign is to ensure that all vehicles experiencing such corrosion damage as described in this bulletin are repaired without charge to the customer, regardless of their current location. As a result, additional customer vehicles not currently listed may need to be inspected and/or repaired as a result of this campaign. Possible situations and dealer responses include:**

**(1) A customer who has not received a recall repair notice now resides in a salt belt state. Advise KMA and promptly conduct the campaign repair.**

**File Under: <Voluntary Safety Recall Campaign>**

**Circulate To:** ☒ **General Manager** ☒ **Service Manager** ☒ **Parts Manager** ☒ **Service Advisor(s)** ☒ **Technician(s)** ☒ **Body Shop Manager** ☒ **Fleet Repair**

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**(2) During normal maintenance or repairs for a vehicle located outside of the salt belt states, the dealer identifies that a vehicle has corrosion damage which appears to warrant a campaign repair. Contact the District Parts and Service Manager for approval before conducting the campaign repair.**

**(3) A customer currently living outside a salt belt state alleges a potential corrosion condition or simply requests a repair or an inspection. Promptly conduct an inspection at no charge to the customer. If the dealer identifies that the vehicle has corrosion damage which appears to warrant a campaign repair, contact the District Parts and Service Manager for approval before conducting the campaign repair.**

**★ NOTICE**

**There is no charge to the vehicle owner for this repair. Under applicable law, you may not sell or otherwise deliver any affected Sedona (VQ) until it has been repaired pursuant to the procedures set forth in this bulletin.**

**★ NOTICE**

**To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service > Warranty Coverage >Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.**

**Inspection Procedure:**

**⚠ WARNING**

**To prevent possible injury, make sure to wear eye and ear protection while performing the procedures described within. In addition, a dust mask should be worn to prevent inhaling any airborne rust particles or chemical vapors.**

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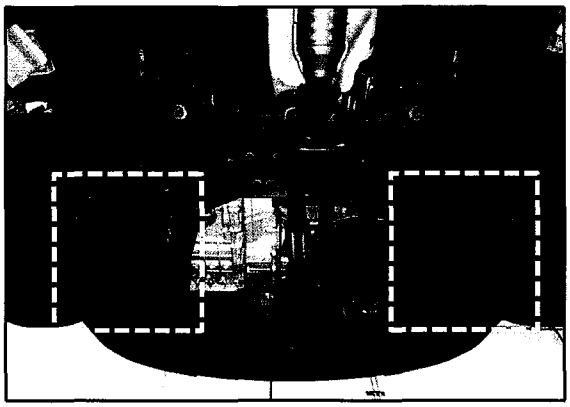
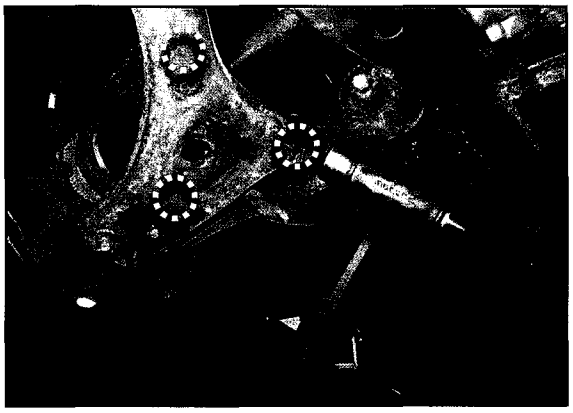
1. Place the vehicle on a lift and inspect the condition of the lower control arms. If any perforations or open cavities are present on either control arm, proceed to the Service Procedure on Page 5. If not, proceed to step 2.



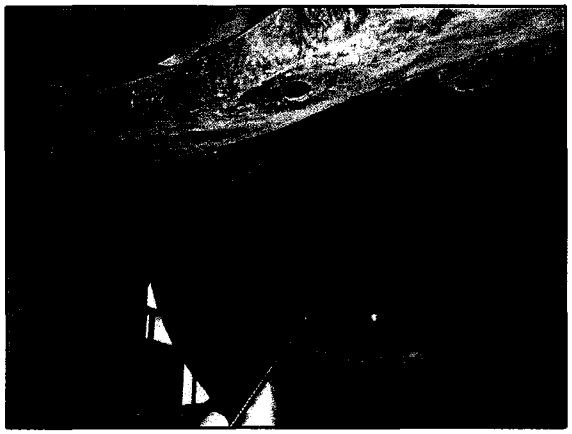
**★ NOTICE**

**Make sure to perform steps 2, 3, 4 and 5 on both lower control arms.**

2. Use a hammer to strike the lower control arm at multiple spots. Check for weak spots in the metal and overall integrity of the lower control arm. If the lower control arm fails, proceed to the Service Procedure on Page 5. If overall integrity is confirmed, proceed to step 3.



3. Insert a magnetic pick up tool inside the lower control arm to remove any loose rust flakes.

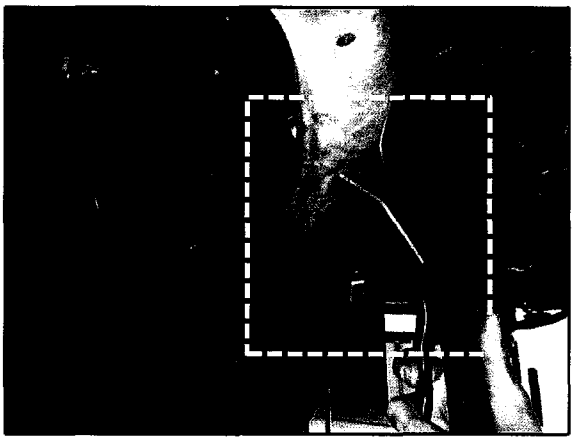


**⚠ WARNING**

**Wear eye protection to prevent possible injury from flying debris. In addition, a dust mask should be worn to prevent inhaling any airborne rust particles or debris.**

SUBJECT: FRONT LOWER CONTROL ARM INSPECTION, REPLACEMENT OR APPLICATION OF PREVENTATIVE ANTI-CORROSION MATERIAL (SC100)

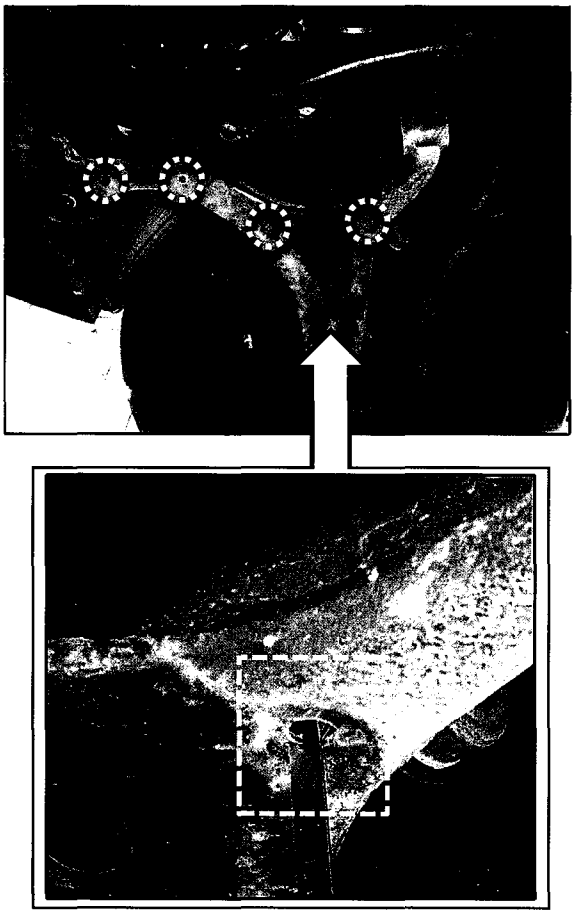
4. Remove any remaining debris from the inside of the lower control arm using an air gun. Make sure to insert the nozzle in multiple holes and rotate it in all directions to completely remove any foreign material or rust flakes.



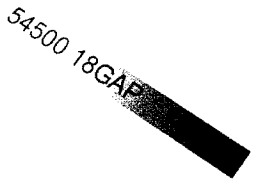
**★ NOTICE**

**Repeat step 4 a total of three (3) times per lower control arm.**

5. After removing all loose rust flakes from inside the lower control arm, use the SST gauge (see below) to check the material thickness at all holes in the lower control arm, as shown.



**★ NOTICE**




SST P/N: 54500 18GAP

6. If the gauge can be inserted over the material's edge, proceed to the Service Procedure on Page 5.

7. If the gauge cannot be inserted over the material's edge, and the lower control arm passed the visual inspection and the hammer strike test, proceed to the Reconditioning Procedure on Page 8.

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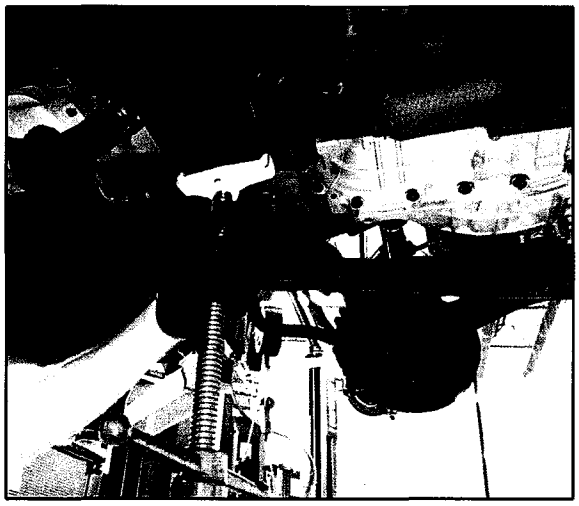
**Service Procedure:**

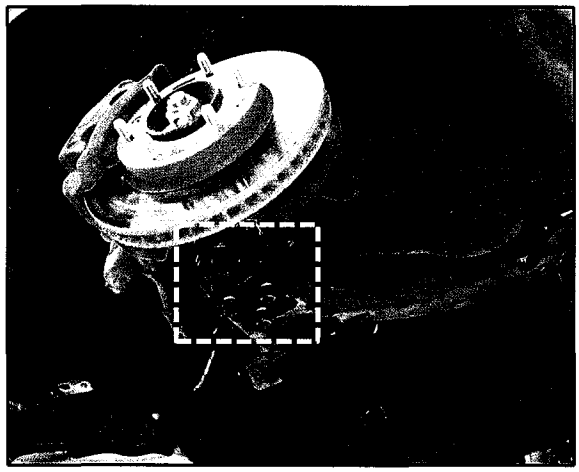
1. Remove the front wheels.

2. Place a transmission jack under the sub-frame for support.

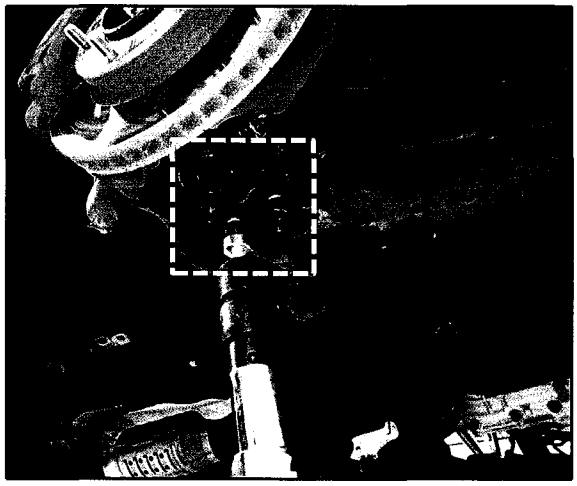


3. Loosen but do not remove the three (3) nuts securing the lower control arm to the ball joint.

   **Tightening torque:**
   **65.1 ~ 86.8 lb-ft (90 ~ 120 Nm)**



4. Remove the rear bolt and nut and from the lower control arm. Then, use a mallet or air hammer to remove the two (2) front "wheel-stud" type bolts and the nuts.

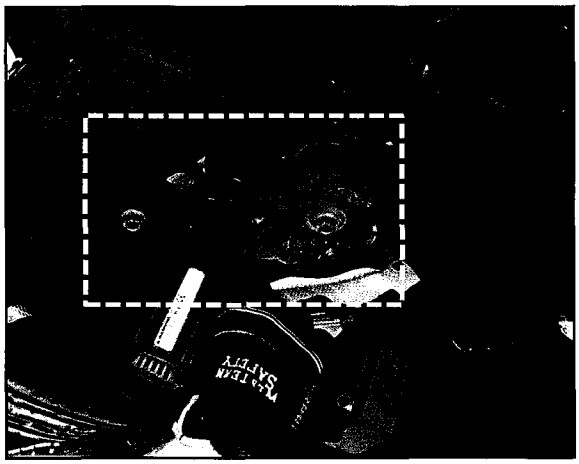


**★ NOTICE**

**Make sure to use the bolts and nuts included with the replacement parts kit when reinstalling the lower control arm to the ball joint.**

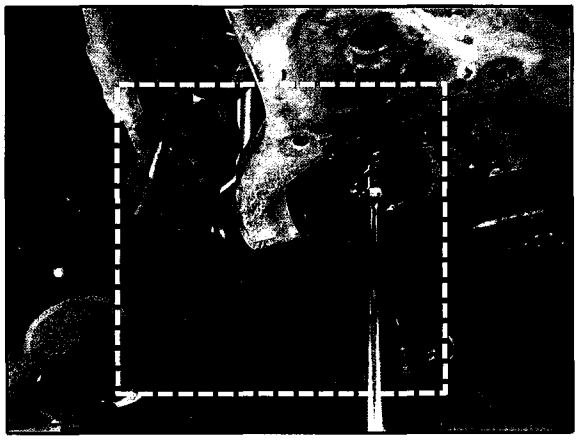
5. Remove three (3) bolts securing the sub-frame and the sub-frame bracket.

   **Tightening torque:**
   **115.7 ~ 130.2 lb-ft (156.9 ~ 176.5 Nm)**



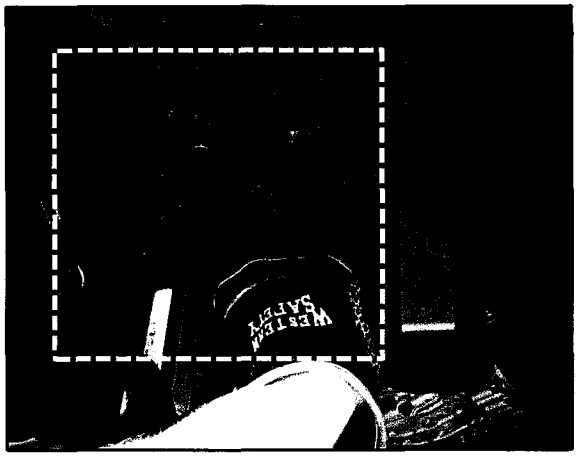
6. Remove the bolt and nut securing the rear mounting location for the lower control arm.

   **Tightening torque:**
   **115.7 ~ 130.2 lb-ft (156.9 ~ 176.5 Nm)**

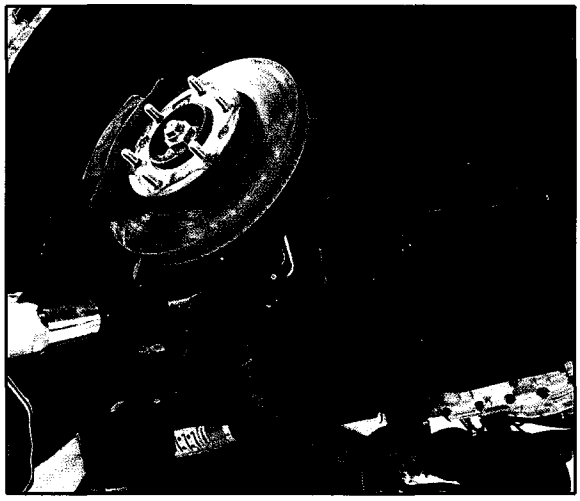


7. Remove the bolt securing the front mounting location for the lower control arm.

   **Tightening torque:**
   **115.7 ~ 130.2 lb-ft (156.9 ~ 176.5 Nm)**



8. Use an air hammer with a chisel bit to remove the lower control arm from the ball joint.



**⚠ WARNING**

**To avoid possible injury, make sure to support the lower control arm prior to removing it from the ball joint.**

9. Perform the reinstallation of the lower control arms in the following sequence:
   1. Front mounting location.
   2. Ball joint mounting location (use new hardware included with kit).
   3. Rear mounting location.
   4. Sub-frame bracket and bolts.

10. Reinstall all other removed components.

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**Reconditioning Procedure:**

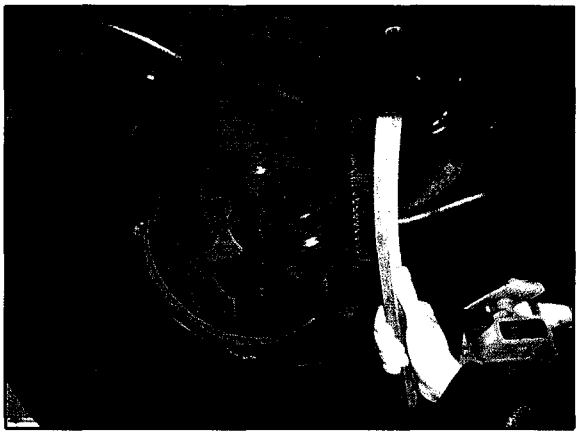
**⚠ WARNING**

**To avoid possible injury, this procedure must be performed in a well-ventilated area and safety glasses must be worn at all times. In addition, do NOT smoke and avoid open flames while applying cavity wax and underbody coating, as they are highly flammable!**

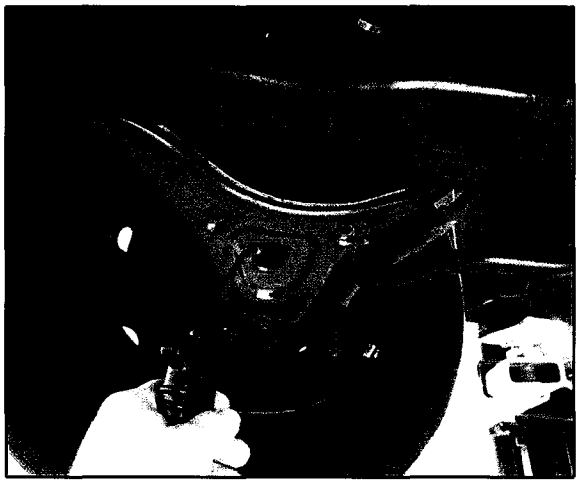
**★ NOTICE**

**This procedure should only be performed in temperatures above 32° F (0° C). Ensure that all surfaces are completely dry and free of moisture before applying cavity wax or underbody coating.**

1. Use a metal bristle brush to remove any surface rust from the lower control arms.



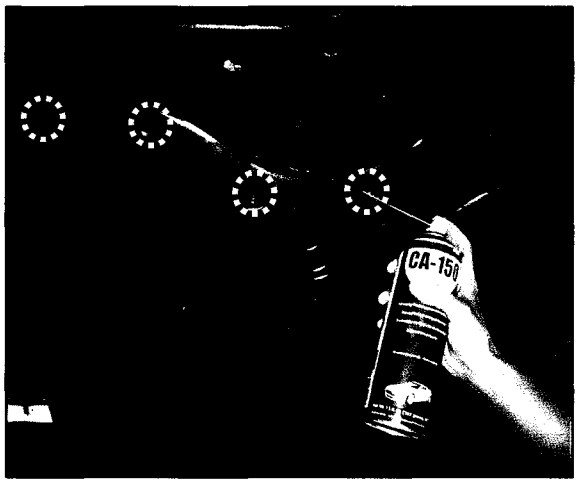
2. Use shop air to remove any loose dust from the lower control arm surfaces.



**⚠ WARNING**

**Wear eye protection to prevent possible injury from flying debris. In addition, a dust mask should be worn to prevent inhaling any airborne rust particles or debris.**

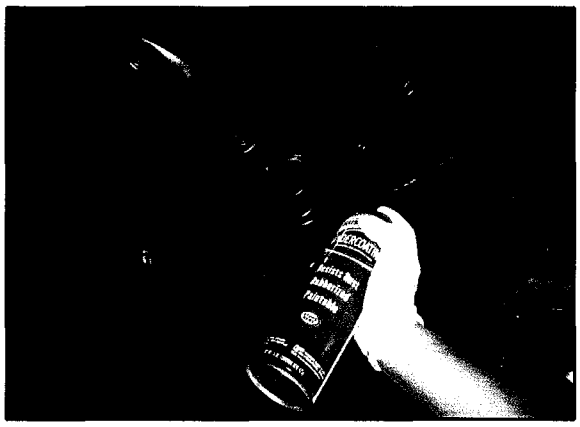
3. Spray cavity wax into every hole in the lower control arm, as shown. To evenly apply cavity wax, turn the nozzle in all directions while spraying and make sure to use ONLY half (½) of the contents in each can per lower control arm.




**⚠ WARNING**

**Cavity wax is extremely flammable! Do NOT smoke and avoid any open flames during application, to avoid possible injury.**

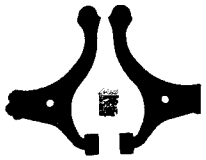
4. Spray underbody coating onto the upper and lower surfaces of the lower control arm. Avoid over-spraying other parts of the vehicle.



**⚠ WARNING**

**Underbody coating is extremely flammable! Do NOT smoke and avoid any open flames during application, to avoid possible injury. In addition, latex gloves and a dust mask should be worn to prevent skin contact with the underbody coating and inhaling any vapors.**

REQUIRED PARTS:

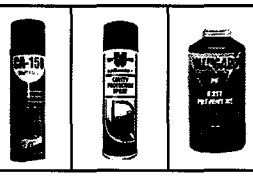
| Part Name | Part No. | Qty. | Figure | Comments |
|---|---|---|---|---|
| Left Lower Control Arm | 54500 4D102QQK | 1 |  | Includes Replacement bolts for ball joint mounting location |
| Right Lower Control Arm | | | | |

SUBJECT: FRONT LOWER CONTROL ARM INSPECTION, REPLACEMENT OR APPLICATION OF PREVENTATIVE ANTI-CORROSION MATERIAL (SC100)

REQUIRED TOOLS:

| Part Name | Part No. | Qty. | Figure | Comments |
|---|---|---|---|---|
| Thickness Gauge | 54500 18GAP | 1 |   | Shipped to Dealer (can be reordered through Kia SST Program) |

REQUIRED PARTS:

| Part Name | Part No. | Qty. | Figure | Comments |
|---|---|---|---|---|
| Cavity Wax | UM011 CH057 (CA-150)<br>UM013 CH061 (Wurth)<br>UM014 CH062 (ValuGard) | 1 |  | Limit one (1) can per vehicle (Order through Kia Chemicals) |
| Underbody Coating | UM010 CH044 | 1 |  | Limit one (1) can per vehicle (Order through Kia Chemicals) |

AFFECTED VEHICLE PRODUCTION RANGE:

| Model | Production Date Range |
|---|---|
| Sedona (VQ) | From SOP through August 14, 2012 |

WARRANTY CLAIM INFORMATION:

| Claim Type | Causal P/N | Qty | N Code | C Code | Repair Description | Labor Op Code | Op Time | Replacement P/N | Qty |
|---|---|---|---|---|---|---|---|---|---|
| R | 54500 4D101 | 0 | N56 | C05 | (SC100) Control Arm (FRT/Lower/ LH/RT) Inspection & Wax Apply | 131110R0 | 0.4 M/H | UM011 CH057*<br>UM013 CH061*<br>UM014 CH062* | 1 |
| | | | | | | | | UM010 CH044 | 1 |
| R | 54500 4D102 | 0 | N56 | C05 | (SC100) Control Arm (FRT/Lower/LF/RT) Inspect and Replace | 131110R1 | 1.2 M/H | 54500 4D102QQK | 1 |

***Only one part number can be claimed.**

## ★ NOTICE

**To assure complete customer satisfaction, always remember to refer to WebDCS Warranty Coverage (validation) Inquiry Screen (Service > Warranty Coverage >Warranty Coverage Inquiry) for a list of any additional campaigns that may need to be performed on the vehicle before returning it to the customer.**