

GROUP	MODEL
Voluntary Service Campaign	2012-2017MY Rio (UB) 2017-2018MY Forte (YD/YDm)
NUMBER	DATE
SC264	May 2023

# **VOLUNTARY SERVICE CAMPAIGN**

SUBJECT:

# APPLICATION OF ADDITIONAL ANTI-CORROSION MATERIAL (SC264)

This bulletin provides information to apply additional anti-corrosion material to the underbody components on certain 2012-2017MY Rio (UB) and 2017-2018MY Forte (YD/YDm) vehicles produced within the date ranges shown below and originally sold or currently registered in one of the 28 states where heavy amounts of road salt are used. The 28 states where heavy amounts of road salt are used are: AK, CT, DC, DE, IA, IL, IN, KS, KY, MA, MD, ME, MI, MN, MO, ND, NE, NH, NJ, NY, OH, PA, RI, SD, UT, VT, WI and WV.

Model	Production Date		
Forte (YD)	July 25, 2017 to April 30, 2018		
Forte (YDm)	May 9, 2016 to July 23, 2018		
Rio (UB)	June 21, 2011 to March 31, 2017		

Corrosion can occur due to a combination of environmental conditions and lack of proper underbody maintenance, especially on vehicles in states where heavy amounts of road salt are used if the materials used for ice/snow removal are not regularly flushed from the underbody of the vehicle. Follow the procedure outlined in this publication to apply a cavity wax and undercoating spray in the indicated locations. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.

#### **NOTICE**

To assure complete customer satisfaction, always remember to refer to KDealer+ Warranty Coverage (validation) Inquiry Screen (Service  $\rightarrow$  Warranty Coverage  $\rightarrow$  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.

#### SUBJECT:

# APPLICATION OF ADDITIONAL ANTI-CORROSION MATERIAL (SC264)

<u>Note</u>: Please remind all customers of the instructions in their Owner's Manual (shown below), to regularly have the underbody of their vehicles washed when road salt is being used in their area.

#### "Underbody maintenance"

"Corrosive materials used for ice and snow removal and dust control may collect on the underbody. If these materials are not removed, accelerated rusting can occur on underbody parts such as the fuel lines, frame, floor pan and exhaust system, even though they have been treated with rust protection. Thoroughly flush the vehicle underbody and wheel openings with lukewarm or cold water once a month, after off-road driving and at the end of each winter. Pay special attention to these areas because it is difficult to see all the mud and dirt. It will do more harm than good to wet down the road grime without removing it. The lower edges of doors, rocker panels, and frame members have drain holes that should not be allowed to clog with dirt; trapped water in these areas can cause rusting."

#### **Anti-Corrosion Material Application:**

### **■** NOTICE

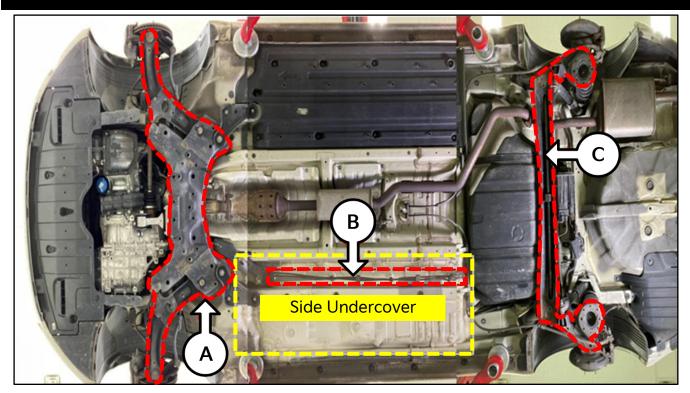
The procedure illustrated below is broken down into Preparation, Cleaning, Cavity Wax Application, and Undercoat Application for the areas listed below. Images shown in the procedure are for reference only purposes and will vary by model.

#### **NOTICE**

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 improve customer satisfaction by applying additional anti-corrosion protection, 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 an Owner Notification under this campaign and now resides in a salt belt state. Advise Kia America and promptly conduct the campaign repair.
- 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.





#### Affected Areas for Application of Anti-Corrosion Material

A: Sub Frame / Front Lower Arms

B: Fuel / Brake Tube

C: Torsion Axle Complete

Other: Two-way Brake Tube Connector / Flexible Brake Hose / Fuel Tank Band / Parking Cable Bracket

# **MARNING**

Do not eat, drink, or smoke while using these products. Keep away from heat, sparks, open flames, hot surfaces, and other ignition sources. Avoid breathing mist, vapors, spray. Wash thoroughly after handling. Wear protective gloves, protective clothing, eye protection, face protection.

Use with adequate ventilation. Respiratory: Level of exposure needs to be determined. If required, use a particulate filter, a NIOSH-approved air purifying respirator with organic vapor cartridge or a supplied air respirator. Filters should be replaced when breathing becomes labored. Cartridges should be replaced when odors pass through. Refer to MSD sheets (Links: Cavity Wax, Undercoating) for additional information and important warnings. All warnings provided by the MSD sheet are hereby incorporated by reference.

#### Preparation:

If vehicle undercarriage has significant road salt residue, an undercarriage carwash is recommended. After an undercarriage wash, allow vehicle to dry or use compressed air. These procedures 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 undercoating.

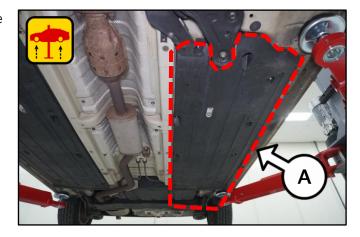


#### Cleaning:

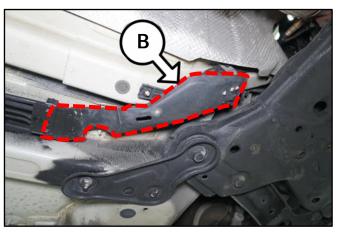
1a. Lift vehicle on hoist and remove the driver side undercover (A).



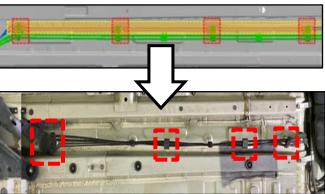
Refer to Material Safety Data Sheet (MSDS) at your local dealer.



1b. Remove the protection cover (B).



2. Remove the brake line retaining clips as shown.



- 3. On vehicles equipped with a splash shield, remove the splash shield prior to starting the procedure.
- 4. Remove any rust scales or contaminants from the following components by hammering with a small hammer and remove any surface rust with a wire brush.

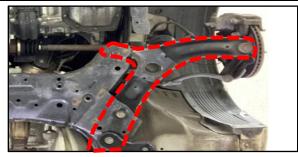
# **ACAUTION**

- Do NOT strike with a hammer the fuel/brake lines or protector, parking brake cable, or wiring harnesses. Use a wire brush only.
- Use care when striking with a hammer to not cause dimpling or damage.





Sub-Frame



Front Lower Arms (LH/RH)



Torsion Axle Complete



Fuel Tank Bands

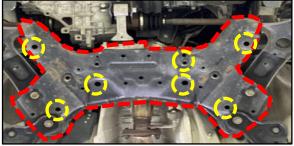


Parking Brake Cable Brackets

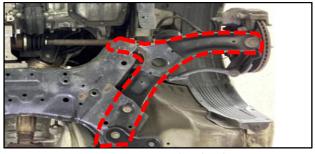
5. After hammering and wire brushing is completed, use an air gun to blow compressed air into all service holes and areas of the chassis components noted below to remove any additional rust scales or contaminants.

### **NOTICE**

When using compressed air to remove rust scale and contaminants, be sure to rotate the air nozzle inside the service holes to completely remove debris that may be lodged in cavities.



Sub-Frame



Front Lower Arms (LH/RH)



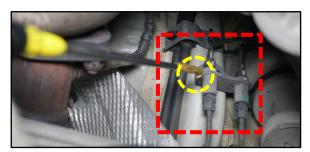


Torsion Axle Complete



Fuel & Brake Tube Lines

Note: Be sure to remove all debris that may have collected between the fuel/brake lines.



Two-way Brake Tube Connector



Flexible Brake Hose



Parking Brake Cable Brackets



Fuel Tank Bands

### **Cavity Wax Application:**

# **MARNING**

Do not eat, drink, or smoke while using this product. Keep away from heat, sparks, open flames, hot surfaces, and other ignition sources. Avoid breathing mist, vapors, spray. Wash thoroughly after handling. Wear protective gloves, protective clothing, eye protection, face protection. Refer to Material Safety Data Sheet (MSDS) in your local dealer.

Use with adequate ventilation. Respiratory: Level of exposure needs to be determined. If required, use a particulate filter, a NIOSH-approved air purifying respirator with organic vapor cartridge or a supplied air respirator. Filters should be replaced when breathing becomes labored. Cartridges should be replaced when odors pass through. Refer to MSD sheets (Links: Cavity Wax, Undercoating) for additional information and important warnings. All warnings provided by the MSD sheet are hereby incorporated by reference.

### **■** NOTICE

To prevent excessive vaporization of the cavity wax, use an inline air pressure regulator and adjust the pressure to the wax gun to 70-90 PSI max. (Labels on older cavity wax bottles may still call for 90-120 PSI; disregard and adjust pressure to 70-90 PSI max).

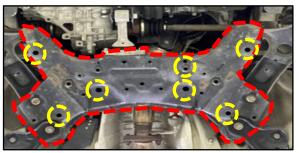
### **NOTICE**

- 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 undercoating.
- Using expired product may result in a poor spray pattern and/or insufficient cavity wax application. Discard any such product (following all applicable local/state/federal regulations). An expiration date has been added to the cavity wax so that any expired wax can be easily identified and discarded. The undercoating has a manufacturing date code printed on the bottom of the can. Undercoating should be discarded two years after the manufacturing date. In case of questions, please contact the Kia Chemical Program through https://www.kdealer.com.
- 1. Using Quick Disconnect fittings suitable for the dealer's air supply system, install the in-line pressure regulator to a conveniently located wall air outlet and adjust the pressure to 70-90 PSI. Connect the air hose to the regulator, and connect the other end of the hose to the Kia Injection Gun (06700 10100), used to apply the cavity wax.
- 2a. Insert the wax injection gun nozzle deeply into all service holes.
- 2b. Then slowly pull out the nozzle while spraying the cavity wax inside of the components shown below. Note: Rotate the nozzle while spraying to achieve an even coating of wax inside.

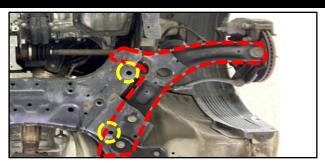


Click here to view a tutorial reference on wax application used in SC141.





Sub-Frame



Front Lower Arms (LH/RH)



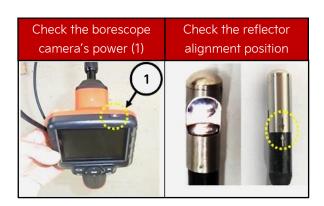
Torsion Axle Complete

 After applying cavity wax to components, use the borescope (1K545 4D200QQK) to check for proper wax coating through the component service holes.

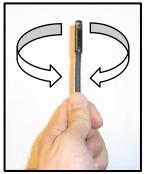




4. Power up and calibrate the display orientation direction by gripping the probe and turning as required. (Apply and align the 90-degree angle adapter, as needed, for picture quality.)









5. Once the camera and display are properly oriented, bend the probe just behind the camera to help maintain orientation during inspection.

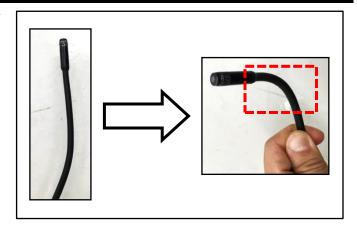
### **■ NOTICE**

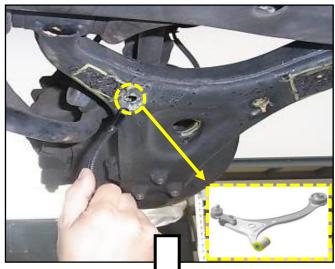
If it is difficult to view the inside of the arm with the camera due to flexibility of the scope wand, use the 90-degree lens attachment.





Always ensure the camera lens and 90-degree adaptor are cleaned with a fresh paper towel and rubbing alcohol inspection prior to and image capturing.





Rotate the camera in order to check all angles for proper wax application inside the inspected components, and to obtain your images that will be used for warranty claim submission.



Note: See examples below of "before" and "after" wax application.







### **Undercoating Spray Application:**

# **MARNING**

Do not eat, drink, or smoke while using this product. Keep away from heat, sparks, open flames, hot surfaces, and other ignition sources. Avoid breathing mist, vapors, spray. Wash thoroughly after handling. Wear protective gloves, protective clothing, eye protection, face protection.

Use with adequate ventilation. Respiratory: Level of exposure needs to be determined. If required, use a particulate filter, a NIOSH-approved air purifying respirator with organic vapor cartridge or a supplied air respirator. Filters should be replaced when breathing becomes labored. Cartridges should be replaced when odors pass through. Refer to MSD sheets (Links: Cavity Wax, Undercoating) for additional information and important warnings. All warnings provided by the MSD sheet are hereby incorporated by reference.

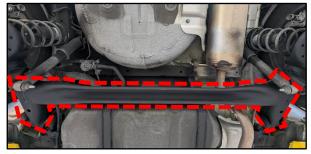
1. Using undercoating spray, be sure to completely coat the Sub Frame, Front Lower Arms, Fuel/Brake Tube Line, and Torsion Axle Complete.



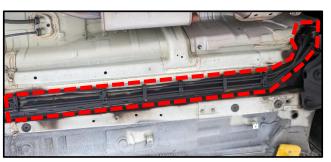
Sub-Frame



Front Lower Arms (LH/RH)



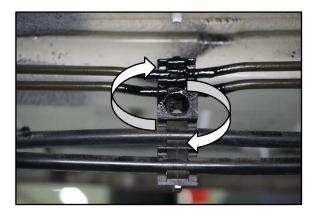
Torsion Axle Complete



Fuel & Brake Tube Lines

# ■ NOTICE

Be sure to thoroughly spray undercoating on all sides of fuel and brake tube lines (above and below).





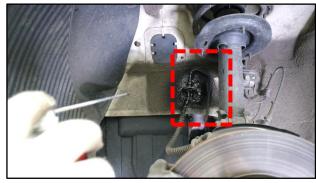
2. Spray undercoating on the Two-way Brake Tube Connector, Flexible Brake Hose, Fuel Tank Bands, and Parking Brake Cable Brackets.

# **ACAUTION**

Be careful NOT to spray undercoating onto the brake calipers or friction surfaces during application as it may reduce brake performance when operating.



Two-way Brake Tube Connector



Flexible Brake Hose



Parking Brake Cable Brackets



Fuel Tank Bands

3. Be sure to <u>completely coat</u> the four (4) brake hose anchor clips on both sides, front and rear of the vehicle.





- 4. If previously removed, reinstall the splash shield.
- 5. Assemble the fuel and brake tube clips and side under cover in the reverse order of removal.

# **NOTICE**

Allow cavity wax and underbody coating to cure for a <u>least</u> 1 hour prior to vehicle being driven, especially during rain or snow conditions.



### AFFECTED VEHICLE RANGE:

Model	Production Date Range			
Forte (YD)	July 25, 2017 to April 30, 2018			
Forte (YDm)	May 9, 2016 to July 23, 2018			
Rio (UB)	June 21, 2011 to March 31, 2017			

### **REQUIRED TOOL:**

Tool Name	Part Number	Figure	Comments		
Wax Injection Gun & Nozzle	06700 10100				
Wax Application Hose	06700 10110				
Borescope Kit	1K545 4D200QQK		Initial supply was auto shipped to Dealers for SC141.		
Air Pressure Regulator	IRCR37121600		For replacements, contact Snap-On Business Solutions		
Respirator (Organic/ N95 Particulate)	SSC366150		at (888) 542-1011		
Cartridge for Respirator (6pk)	SSC100100				
Filter for Respirator (12pk)	SSC106000				
Hammer	-				
Air Gun	-		Locally Sourced		
Brush	-				



#### **REQUIRED PART:**

Part Name	Part Number Figure		Qty.	Comments	
Kia Frame Rust Preventative	UM090 CH041	PS/ PROTEIN PR	1	Limit one (1) can per vehicle (Order through Kia Chemicals)	
Undercoating Spray	UM010 CH044		3	Limit three (3) cans per vehicle (Order through Kia Chemicals)	

#### WARRANTY INFORMATION:

N Code: N99 C Code: C99

Model	Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
UB		65110 1W301	0	(SC264) Application of Anti-Corrosion Material	220107R0	0.8 M/H	UM090 CH041	1
YD	V	65100 A7200			220107R0		UM010 CH044	3
YDm	65100	65100			220M13R0		UM090 CH041	1
ווטוז		A7000					UM010 CH044	3

### **NOTICE**

VIN inquiry data for this repair is provided for tracking purposes only. Kia retailers should reference SC264 when accessing the KDealer+ system.

