

Revision History

2017-09-12

- Initial release

**THIS LIMITED SERVICE CAMPAIGN EXPIRES
SEPTEMBER 12, 2018**

**TECHNICAL INSTRUCTIONS FOR
REAR WHEEL ARCH CORROSION
CERTAIN 2014-2015 MODEL YEAR IS250 & IS350
CERTAIN 2015 MODEL YEAR RC350 & RC-F**

The repair quality of covered vehicles is extremely important to Lexus. To ensure that all vehicles have the repair performed correctly technicians are required to currently hold at least one of the following certification levels, and have successfully completed the specified course.

Technician Certification	Lexus Academy Courses	Lexus Academy Video
Technician	No additional courses	Wheel Arch Inspection and Wax Application Procedure Video

It is the dealership's responsibility to select technicians with the above certification level or greater to perform this recall repair.

I. BACKGROUND

In the subject vehicles, the inner portion of the rear fender arch may experience water intrusion due to improper sealer application. If this occurs, corrosion can form causing rust spots, blistering, or perforation of the rear fender arch. This condition is most likely to occur in areas with heavy road salt application.



II. AFFECTED VEHICLES

The vehicle must be structurally sound and capable of having the campaign remedy applied. Vehicles that do not have sufficient structural integrity to have the campaign remedy applied must be repaired, at the owner's expense, before the campaign remedy is applied.

If the vehicle has current body damage or previous body repair to the affected area(s), this campaign cannot be completed.

1. VIN ELIGIBILITY AND CAMPAIGN COMPLETION

1.1 CANADIAN RETAIL SOLD UNITS OR USA RETAIL SOLD UNITS CURRENTLY IN CANADA

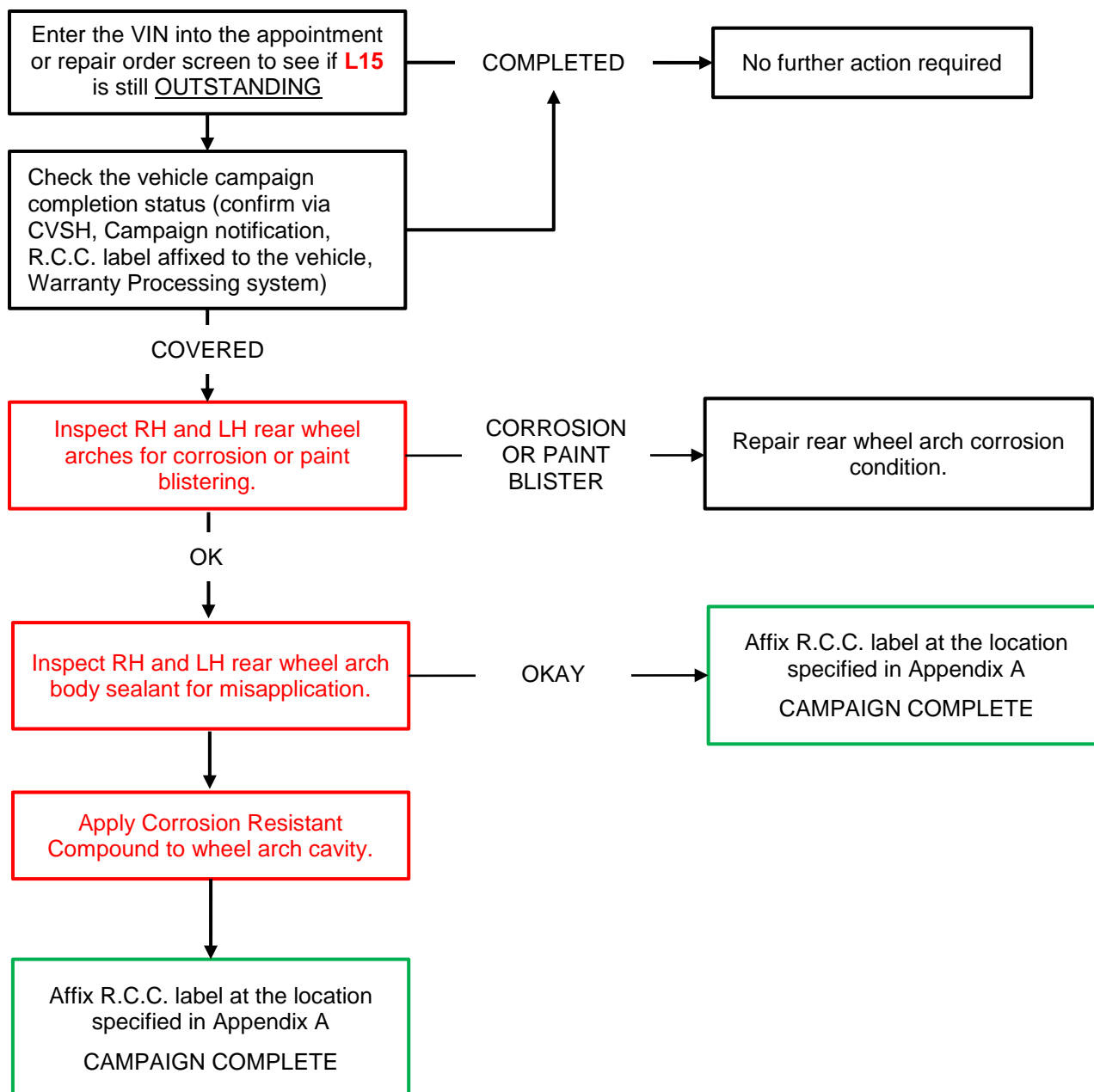
Use a combination of the methods below to determine BOTH (1) vehicle eligibility, and (2) campaign completion status.

METHOD	APPLICABLE MARKET VEHICLE	VEHICLE ELIGIBILITY	CAMPAIGN COMPLETION STATUS	WARRANTY CLAIM FOR COMPLETED CAMPAIGN
TIS Vehicle Inquiry VIN search	CA or US	O	O	-
Warranty Processing System	CA or US	-	-	O
CVSH	CA	O	O	O
Automatic Campaign Inquiries on Dealer Management Systems (DMS)	CA	O	-	-
Existence of the R.C.C. label on the vehicle	CA	-	O	-

TCI warranty will not reimburse dealers for repairs conducted on vehicles that are not affected or were completed by another dealer, (this includes vehicles remedied by dealers in the United States).

III. OPERATION FLOW CHART

The flow chart is for reference only. DO NOT use it in place of the full technical instructions. Follow ALL steps as outlined in the full technical instructions to confirm the campaign is completed correctly.



IV. PREPARATIONS

1. PARTS


This kit contains enough material to perform the wax repair on 14 wheel arches. It is anticipated that about 1/2 of the arches will have misapplied sealant. Only order kits as needed because supply is extremely limited.

Part Number	Part Description	Quantity
04006-35253	Wheel Arch Corrosion Kit	1 kit per 14 arches sprayed
*The kit above includes the following parts.		
	Wax (NOX-RUST 712AM Aerosol)	1
	Nozzle (for Wax)	5
	Safety Pin	1
	Stainless Steel Trace Wire	1
	Body Sealant (Super X Black No. 8008)	1

2. TOOLS & EQUIPMENT

2.1. CAMPAIGN SPECIAL SERVICE TOOLS

This scale was provided to the dealership prior to the launch of L15. This scale is necessary when performing this repair. **Do not lose this tool!**

	Tool Name	Quantity
	Wax Application Confirmation Scale	1

Any dealer wishing to order additional scales must source them at their own cost. Replacement Scales can be purchased directly from Würth Canada Limited via by calling 1-800-263-5002.

2.2. OTHER TOOLS

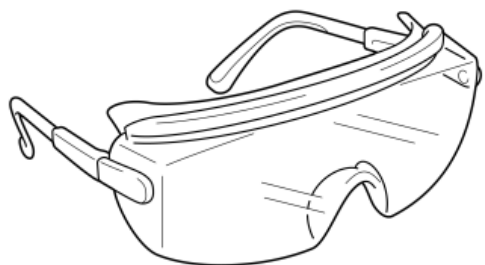
- Standard hand tools
- Safety Glasses
- Marker Pen
- Torque wrench
- Stopwatch
- Protective tape
- Protective Gloves

V. PRECAUTIONS FOR ALL OPERATIONS



PRECAUTIONS WHEN RAISING VEHICLE USING A LIFT OR JACK

- Refer to the respective repair manual and follow the instructions within the Introduction section to ensure safety when working.
- Ensure the safety of all personnel near the lift or jack, including yourself, before beginning work. Also announce all lift and jack operations out loud to prevent any personnel from being caught or harmed in any way.



WEAR PROTECTIVE EYEWEAR

- Wear protective eyewear when working under vehicle or where there is any risk of flying parts or debris.

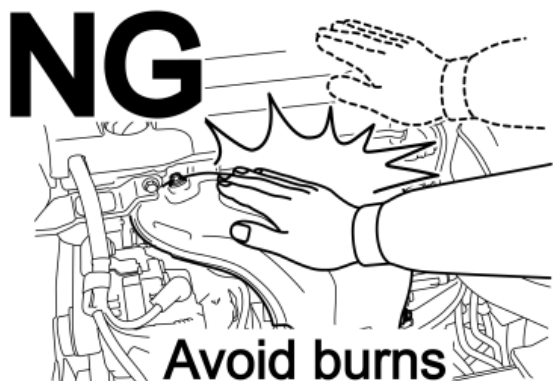
Wear protective eyewear

C20150002E



DO NOT USE BRAKE CLEANER AS STAIN REMOVER

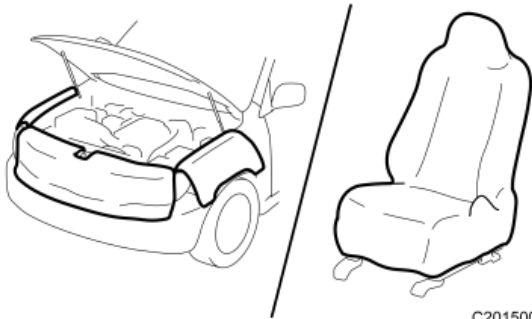
- Do not spray brake cleaner onto any clothes since it is a flammable solvent that vaporizes easily. Do not use it near cigarettes or stoves as this can cause serious burns and injuries.



AVOID BURNS

- If the engine is hot, wear protective gloves to prevent burns.

Protect the vehicle



C20150005E

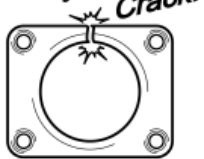
PROTECT THE VEHICLE

- A fender cover, a grill cover, seat covers tape etc. must be used to protect the vehicle from dirt or scratches.

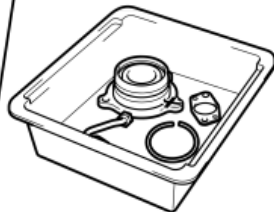
NOTICE:

The protective measures listed above may not be shown in some illustrations to allow easy identification simple and easy to read.

Destroy



Mark



Replacement parts box

C20150006E

HANDLING OF REMOVED PARTS

- Destroy or mark and then store removed parts in a separate container so as to not be assembled again in error.
- Check the removed parts when performing the completion inspection.

NOTICE:

The parts shown in the illustration to the left are examples only and differ from the actual replacement parts.

NG



C20150007E

DO NOT BREAK PARTS WHEN WORKING INSIDE ENGINE COMPARTMENT

- Do not break parts by carelessly placing hands inside and leaning on the engine compartment while being preoccupied by work.

CHECK!

NG



C20150008E

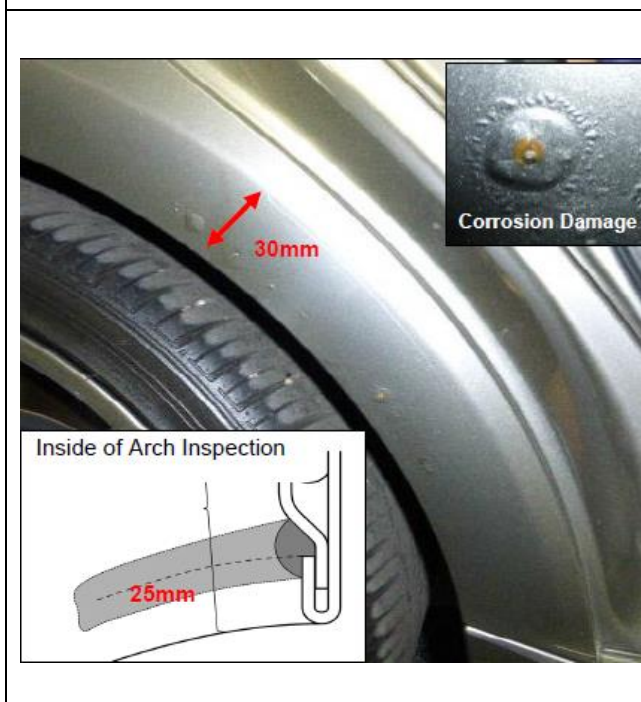
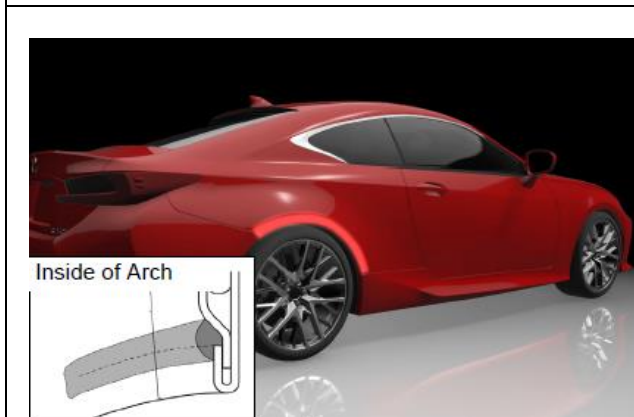
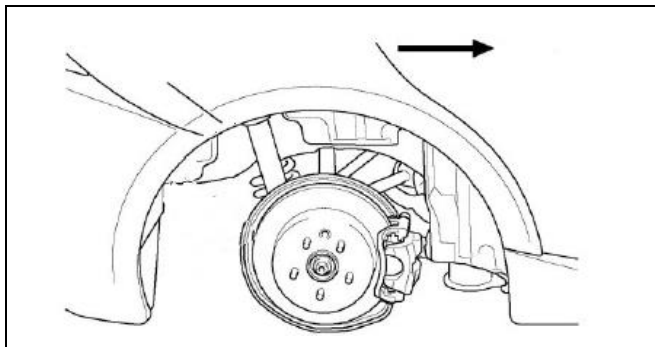
CHECK INSIDE ENGINE COMPARTMENT BEFORE ENGINE START-UP

- Check that all necessary parts are installed.
- Check that no tools or pieces of cloth are left inside the engine compartment.

VI. REAR WHEEL ARCH INSPECTION

WHEEL ARCH INSPECTION PROCEDURE VIDEO

1. INSPECT THE WHEEL ARCH PAINTED SURFACE



1.1. LIFT AND REMOVE REAR WHEELS

1.2. CLEAN THE RH AND LH REAR WHEEL ARCH

- 1.2.a. Clean both the interior and exterior painted surface of the RH and LH rear wheel arches in the highlighted area prior to performing the paint area inspection.



Ensure you clean the wheel arch well, especially the body sealant on the inner portion of the wheel well. This must be clean to perform the body sealant inspection.

1.3. INSPECT RH AND LH REAR WHEEL ARCH PAINT SURFACES

- 1.3.a. Inspect the first 30 mm of the exterior painted RH and LH wheel arch surface for paint blistering, bubbling or corrosion damage.
- 1.3.b. Inspect the first 25 mm of the interior wheel arch painted surface for paint blistering, bubbling or corrosion damage.

OK: CONTINUE WITH SEALANT INSPECTION

NG: ARCH REQUIRES BODY REPAIRS

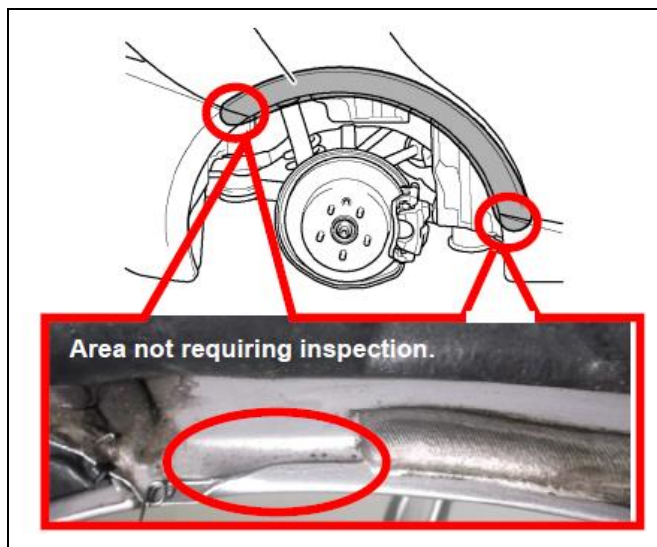
Note:

- It is anticipated that very few vehicles will have corrosion damage.
- If corrosion damage is found, body repair will be required. Only the wheel arch displaying corrosion damage should be repaired.

2. INSPECT THE WHEEL ARCH BODY SEALANT



It is critical that this inspection is performed properly, ensure to follow all steps and inspect the entire rear wheel arch body sealer. It is possible for the seam sealer to be misapplied in multiple locations on one arch.



2.1. SEALANT INSPECTION AREA

- 2.1.a. Inspect the sealant along the inner wheel arch as shown by the gray area.

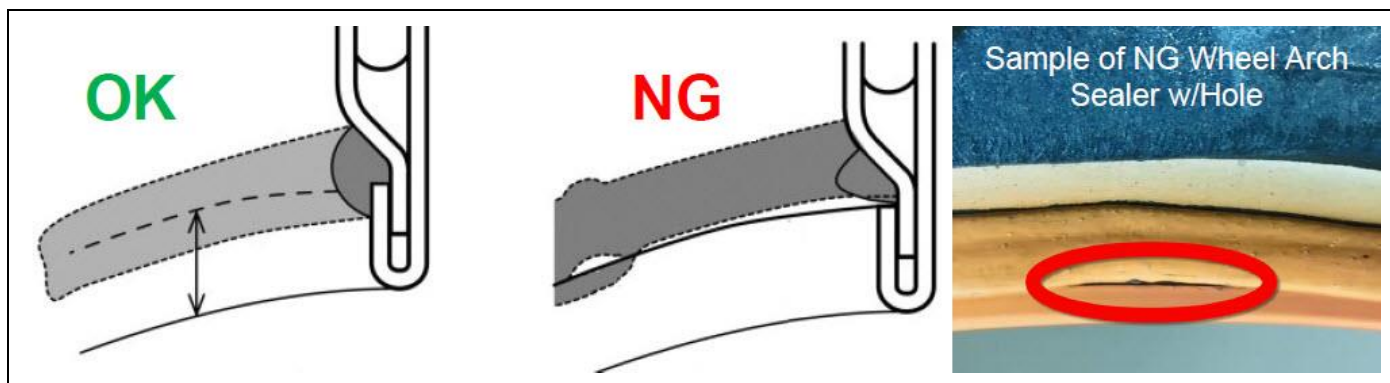
Note: The two areas at the end of the wheel arch circled in red do not have to be inspected. This area has a different sealant that is not affected by this issue.

2.2. INSPECT THE WHEEL ARCH BODY SEALANT APPLIED INSIDE THE WHEEL WELL



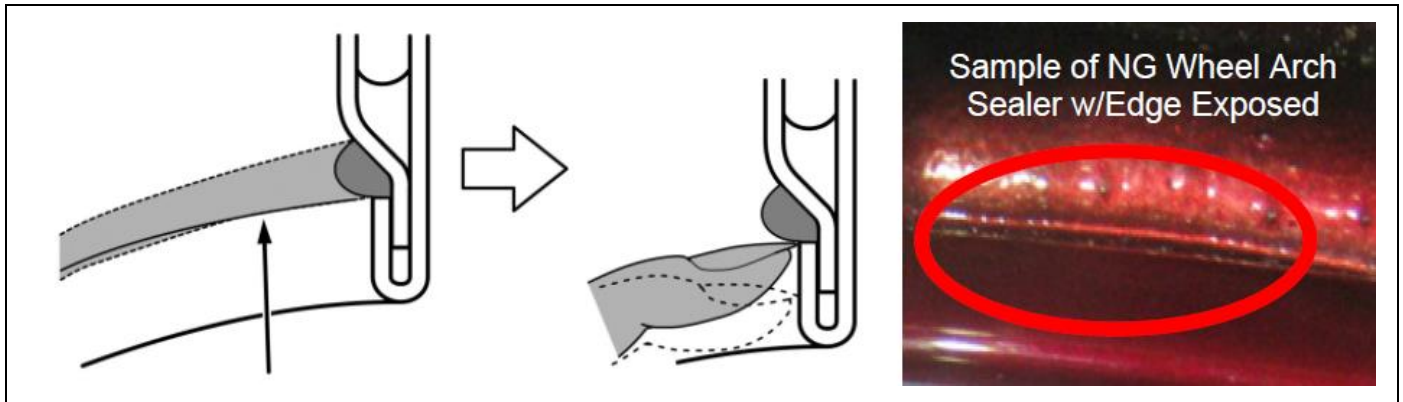
Take your time when inspecting the wheel arch, it can be very difficult to find misapplied sealant. The sealant was sprayed with paint and is the same colour as the body.

- 2.2.a. Using a lamp visually inspect the sealant application along the inner wheel well hemming of both wheel arches and ensure it is sealed along the entire surface.
- 2.2.b. If sealant misapplication is seen, mark that area with a piece of tape.



2.3. REINSPECT THE WHEEL ARCH USING YOUR FINGER NAIL

- 2.3.a. In some cases it will be hard to see if the sealer is misapplied, in this case gently use your finger nail to see if it can catch an exposed edge of the wheel arch hem.
- 2.3.b. If an edge is found, mark the area with a piece of tape.



2.4. WHEEL ARCH SEALANT JUDGEMENT

OK: (0 Misapplied Locations Found) → NO WAX APPLICATION REQUIRED

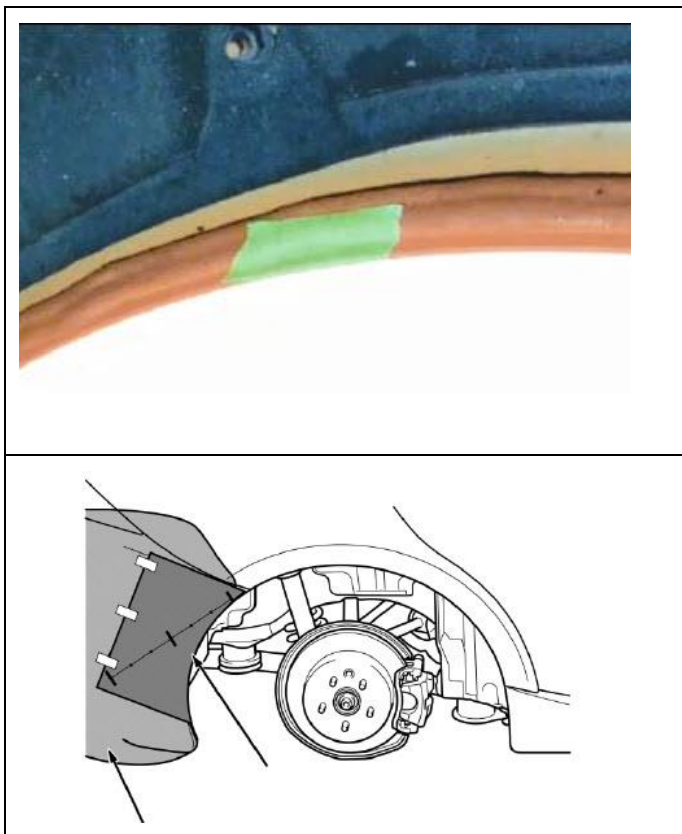
NG: (1 or more Misapplied Locations Found) → WAX APPLICATION REQUIRED

Note: Each rear wheel arch should be inspected independently. It is possible to have 0, 1, or 2 arches that require wax application.

VII. WHEEL ARCH WAX APPLICATION PROCESS

WHEEL ARCH WAX APPLICATION PREPARATION VIDEO

3. WAX APPLICATION PREPARATION



3.1. COVER DEFECTIVE HOLES

- 3.1.a. Using masking tape, seal all holes in the sealant.

Note:

- Masking tape will plug the hole and stop wax from leaking during wax application.
- If leaking wax is found during application, there is another hole. Locate the hole and apply tape.

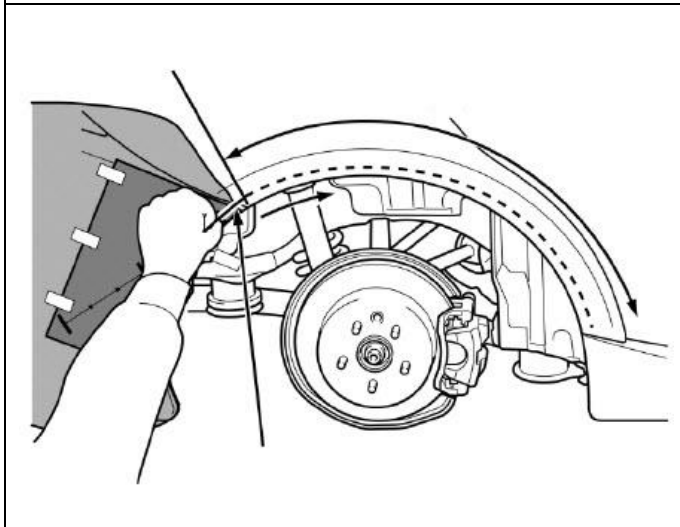
3.2. PROTECT REAR BUMPER

- 3.2.a. Apply masking paper or cover the bumper to avoid scratching the painted surface.
- 3.2.b. Adhere the wax application pattern paper (**See Appendix C**) onto the rear bumper as shown.



3.3. WHEEL ARCH PREPARATION

- 3.3.a. Using the provided safety pin, pierce a hole in the sealant.
- 3.3.b. Move the needle in and out several times to ensure the hole does not close up after removing the safety pin.



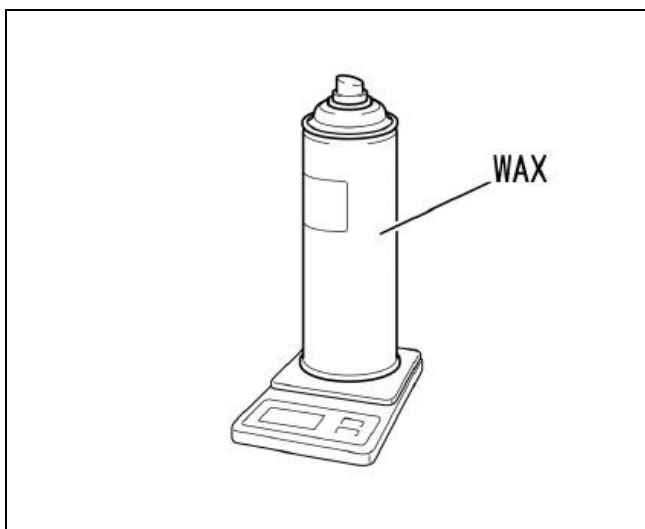
3.4. CONFIRM WHEEL ARCH PATHWAY

- 3.4.a. Using the provided stainless steel wire, insert the wire through the pierced hole in the sealant.
- 3.4.b. Insert the wire into the wheel arch and confirm the path is clear for the spray wand.
- 3.4.c. The stainless steel wire should be able to be inserted a minimum of 500 mm (19.6 in.).

Stainless steel wire length	About 630mm
Wheel arch IS series	About 612mm
Wheel arch RC series	About 636mm

4. WAX APPLICATION

[WHEEL ARCH WAX APPLICATION VIDEO](#)

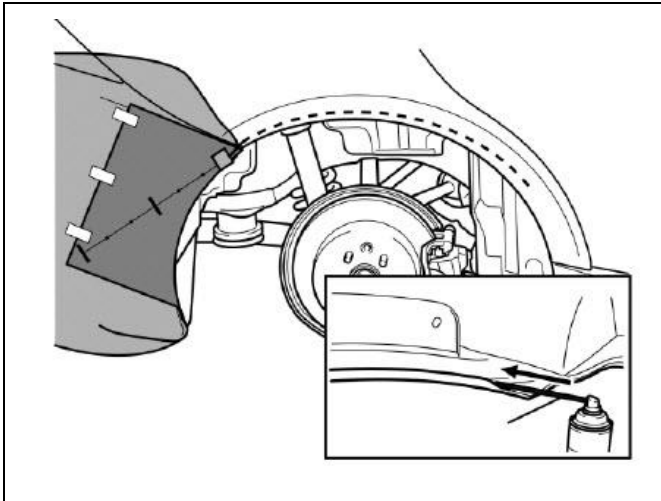


4.1. CONFIRM REMAINING WAX AMOUNT

- 4.1.a. Measure the weight of the wax can.
- 4.1.b. Note the starting wax amount.

Note:

The minimum can weight is 175 grams. The can must weigh 175 grams or more in order to have enough pressure and material to apply the wax in the wheel arch. If less than 175 grams, dispose of the wax can in accordance with your local regulations.



4.2. INSERT NOZZLE FOR WAX

- 4.2.a. Carefully insert the nozzle completely into the wheel well arch.

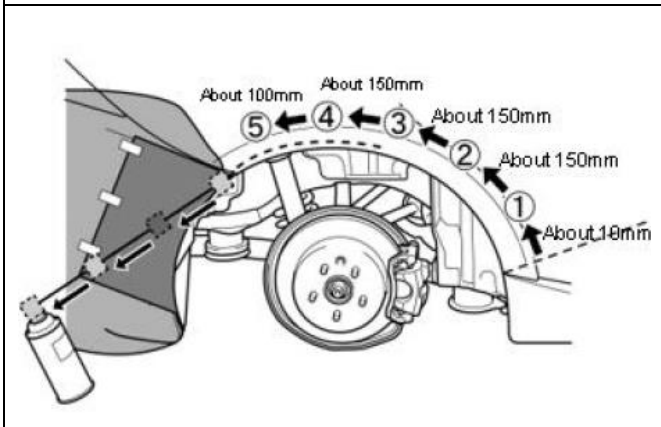


The nozzle is extremely easy to bend, if the nozzle is bent it **MUST** be replaced because it will restrict the flow of wax during the application process

Wax Nozzle	About 850mm
Wheel arch IS series	About 612mm
Wheel arch RC series	About 636mm

4.3. APPLY WAX

- 4.3.a. Connect nozzle to wax can.
- 4.3.b. After confirming the nozzle is completely inserted into the wheel arch, pull it out 10 mm (this is location number 1).
- 4.3.c. Apply wax for 15 seconds at each of the corresponding locations shown.



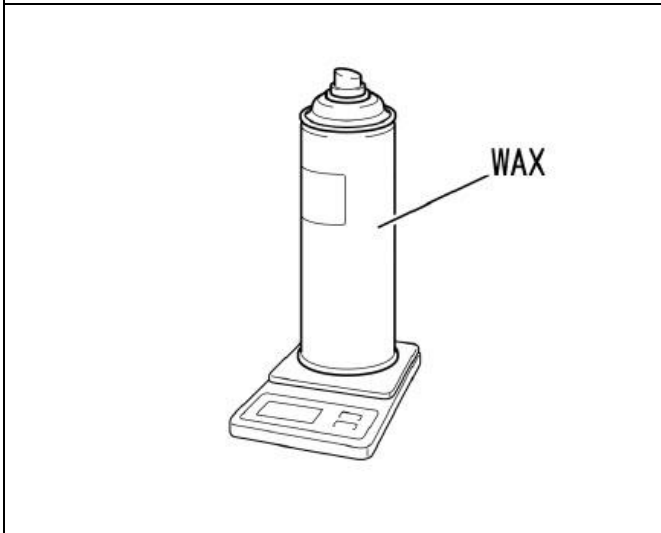
4.4. MEASURE APPLIED AMOUNT

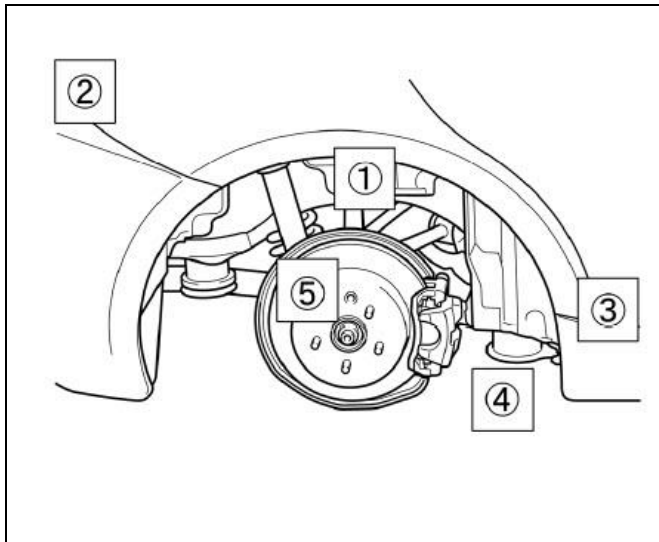
- 4.4.a. Measure the weight of the wax can.
- 4.4.b. Note the ending wax can weight.
- 4.4.c. Subtract the original weight by the remaining weight of the can and ensure it is greater than 11 grams.

Sample: 541 grams – 532 grams = 18 grams

Note: If the amount applied is less than 11 grams, repeat the procedure.

- 4.4.d. Repeat the wax application process on the other arch if required, based on the inspection result.





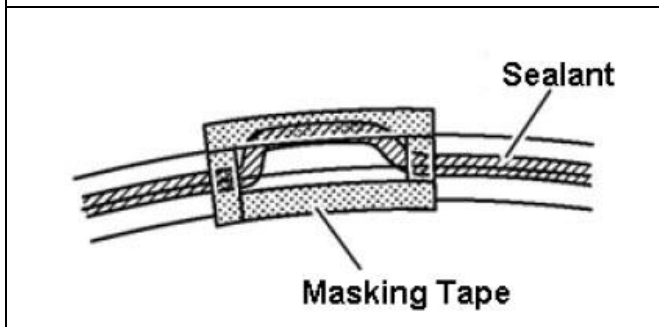
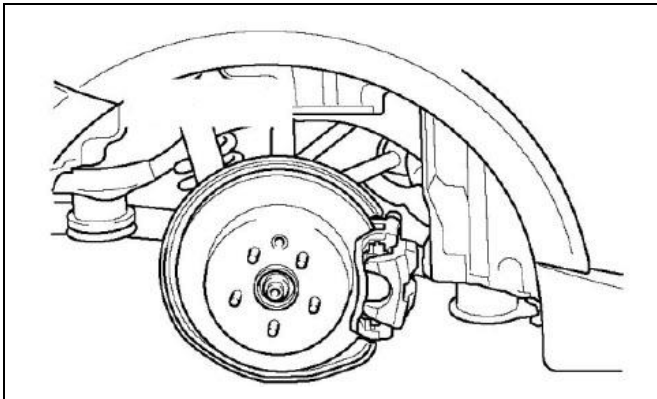
4.5. CONFIRM NO WAX OVERSPRAY

4.5.a. Confirm that during the application process, no wax over sprayed onto the following key components:

1. In wheel arch
2. Gap between bumper and quarter panel
3. Gap between rocker panel and quarter panel
4. Dripping on floor
5. Brake disc and hub bolts

4.5.b. If wax over spray is found on any parts, clean and degrease the parts.

5. APPLY BODY SEALANT



5.1. PREPARE FOR SEALANT APPLICATION

- 5.1.a. Peel off all masking tape used to seal defect holes in sealant.
- 5.1.b. Degrease area around defective holes where tap was removed and around the wax nozzle entrance hole.
- 5.1.c. Apply tape around the defective hole as shown.

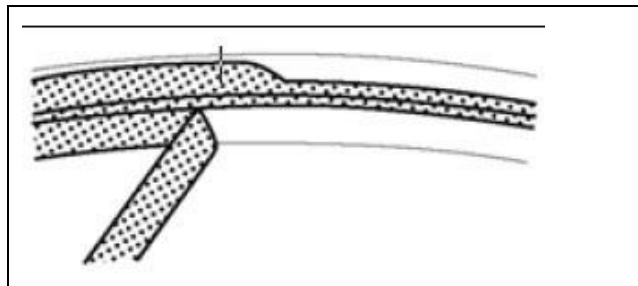
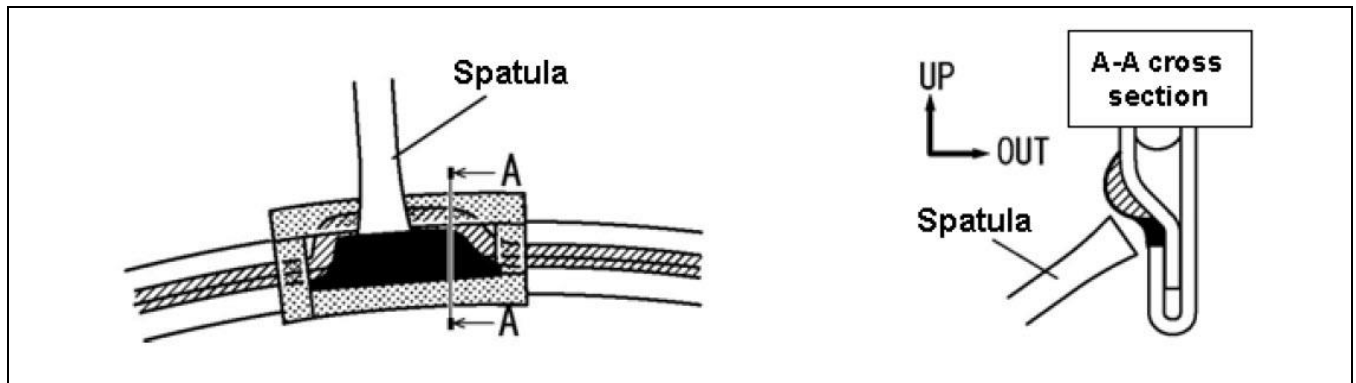
5.2. APPLY SEALANT

- 5.2.a. Using the supplied Super-X-Body Sealant and the provided spatula, apply sealant to the defective hole as shown.
- 5.2.b. Use the spatula to smooth out the sealant and ensure that it remains inside the wheel well arch.

Note: If sealant comes into contact with bumper or other undesirable surfaces wipe off immediately with absorbent cotton.



Ensure that you also apply sealant to the hole that was pierced during step 3.3.



- 5.2.a. Immediately remove the masking tape after applying sealant.
- 5.2.b. Let the body sealant set for 10 minutes.
- 5.2.c. Repeat procedure for all defective holes and the wax nozzle entrance hole.

VIII. REASSEMBLE VEHICLE

6. REMOVE MASKING AND TEMPLATE FROM REAR BUMPER

7. REINSTALL THE REAR WHEELS

TORQUE SPEC: 76 FT. LBS (103 NM, 1050 KGF-CM)

8. CONFIRM BODY SEALANT APPLIED IS NOT VISIBLE FROM THE OUTSIDE OF THE WHEEL WELL

9. APPLY R.C.C LABEL AS PER APPENDIX A.

VERIFY REPAIR QUALITY

- Confirm the wheel arch inspection was performed properly
- Confirm the wax application, if required, had the adequate amount of wax applied
- Confirm all holes in sealant were resealed using the body sealant

IX. APPENDIX A – R.C.C. COMPLETION LABEL INSTALLATION

Apply the R.C.C. Completion label only when the campaign has been completed.

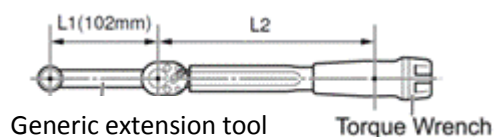
- Write in RCC # L15
- Write in the repair date
- Write in your dealer code
- Affix the R.C.C. Completion Label to the left front door jamb near the production ID label.

R.C.C. NO.	DATE
TOYOTA CANADA INC.	
DLR. CODE DU. CONC.	
C0004-1917B-1C	

Additional R.C.C. Completion Labels packaged in 4-sheets of 25 may be ordered through your facing PDC, (P/N C0004-1917B-1C).

X. APPENDIX B – EQUIVALENT TORQUE CALCULATION

To calculate the equivalent torque value, use the formula below, with T = standard torque specified for the fastener (this will vary from case to case).



$$T' = T \times \frac{L2}{(L1 + L2)}$$

T'	New torque setting {N*m (kgf*cm, ft.*lbf)}
T	Standard torque {N*m (kgf*cm, ft.*lbf)}
L1	Fulcrum length of SST or extension tool {mm(in.)}
L2	Fulcrum length of torque wrench {mm(in.)}

Example:

Assume that you are using an extension wrench that has a fulcrum length of 102 mm (L1 = 102 mm), and a torque wrench with a fulcrum length of L2 = 160 mm. Let's also assume that the standard torque (T) in this example is 25 Nm.

To calculate the equivalent torque (T'), plug the numbers into the formula.

$$T' = T \times \frac{L2}{(L1 + L2)}$$

$$T' = 25Nm \times \frac{160mm}{(102mm + 160mm)}$$

$$T' = 25Nm \times \frac{160mm}{262mm}$$

First adding 102 mm and 160 mm we get 262 mm. We then divide 160 mm by 262 mm.

$$T' = 25Nm \times 0.6177$$

$$T' \approx 15Nm$$

Therefore, the torque wrench should be set at approximately 15 Nm.

XI. APPENDIX C – PATTERN PAPER (for nozzle movement work)

- This is a measure of the nozzle movement amount
- **Copy, use and paste as shown in the figure**

Left side

Right side

150mm

150mm

150mm

150mm