

GROUP	MODEL
BOD	2016MY Optima (JFa)
NUMBER	DATE
164	February 2017

## TECHNICAL SERVICE BULLETIN

SUBJECT: SERVICE ACTION: PANORAMIC SUNROOF

INSPECTION AND REPAIR (SA270)

This bulletin provides information on some 2016MY Optima (JFa) vehicles, produced from September 28, 2015 to August 8, 2016, which may exhibit a buzzing noise that may increase with intensity in conjunction with the HVAC fan speed, a popping or clicking noise when driving over bumps or turning, and/or a loose folding cover, depending on the vehicle production date. For details regarding each type of inspection/repair, refer to its respective section below. Before conducting the procedure, verify that the vehicle is included in the list of affected VINs.

Service Action No.	<b>Production Date Range</b>	Procedures	Page
SA270A	September 28, 2015 to March 7, 2016	<ul> <li>Decorative Cover Lubrication</li> <li>Weather Strip Inspection/Repair</li> <li>Folding Cover Inspection/Replacement</li> </ul>	2-6
SA270B	February 28, 2016 to July 5, 2016	<ul> <li>Weather Strip Inspection/Repair</li> <li>Folding Cover Inspection/Replacement</li> </ul>	7-9
SA270C	June 21, 2016 to August 8, 2016	Folding Cover Inspection/Replacement	10-11

## \* NOTICE

A Service Action is a repair program without customer notification that is performed during the warranty period. Any dealer requesting to perform this repair outside the warranty period will require DPSM approval.

Repair status for a VIN is provided on WebDCS (Service  $\rightarrow$  Warranty Coverage  $\rightarrow$  Warranty Coverage Inquiry  $\rightarrow$  Campaign Information). Not completed Recall / Service Action reports are available on WebDCS (Consumer Affairs  $\rightarrow$  Not Completed Recall  $\rightarrow$  Recall VIN  $\rightarrow$  Select Report), which includes a list of affected vehicles.

This issue number is **SA270**.

File Under: <Body>

Circulate To: ☐ General Manager ☐ Service Manager ☐ Parts Manager

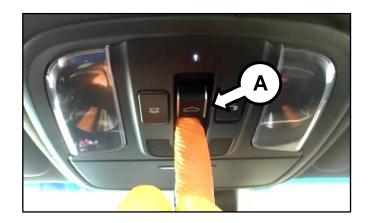
☑ Service Advisors ☑ Technicians ☑ Body Shop Manager ☑ Fleet Repair

## Service Procedure (SA270A):

1. Follow the three procedures outlined on pages 2 through 6 of this bulletin.

#### **Decorative Cover Lubrication Procedure:**

 Open sunroof shade only using the sunroof switch (A) at the overhead console.



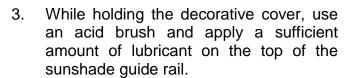
2. Using a 90° pick, at the rear of the sunroof assembly, carefully detach the rear part of the decorative cover (B).



Use caution not to damage the headliner when removing the decorative cover.

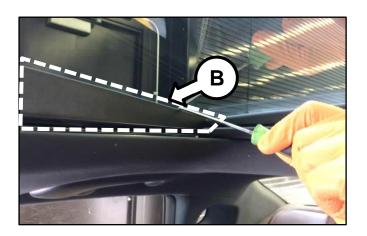


Use caution not to damage the decorative cover as it will require replacement of the complete sunroof assembly and is not warrantable.



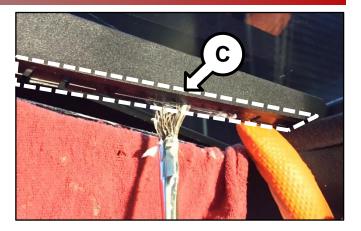
## \* NOTICE

Protect the headliner as necessary to avoid lubricant contamination.

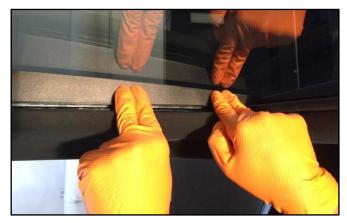




4. Lubricate the bottom of the decorative cover (C).



5. Carefully reattach the decorative cover by pushing the cover in until it snaps into place.



6. Thoroughly clean the excess lubricant from the decorative cover.

# \* NOTICE

Ensure the headliner and sunroof glass are clean and free of lubricant.



7. Repeat steps 2-6 for the other side.

## **Weather Strip Inspection and Repair Procedure:**

1. Inspect the weather strip (A).

If the weather strip is loose (B), experiencing a fluttering noise, proceed to the next step.

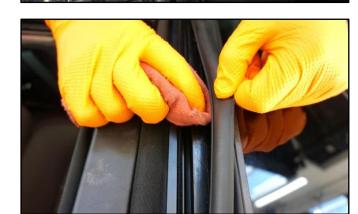
If the weather strip is adhered (C) with a uniform gap between the strip and the sunroof frame, no further action is required. Proceed to the next procedure on page 3 of this bulletin.

 Partially remove the affected area of weather strip and clean the contact surface between the strip and sunroof frame using alcohol or a general purpose adhesive cleaner.

## \* NOTICE

Failure to thoroughly clean old adhesive or foreign material from the contact surface may result in an ineffective or repeat repair.

Apply a thin bead of adhesive to the weather strip.





 Push the weather strip down onto the sunroof frame and apply pressure for approximately 30 seconds until the weather strip has properly adhered to the sunroof frame.



5. After ensuring that the adhesive has cured, open and close the sunroof several times to confirm proper installation of the weather strip.

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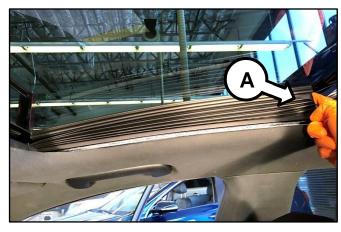
#### **Folding Cover Inspection and Replacement Procedure:**

1. With the sunroof in the tilt position, carefully, with light pressure, pull the rear of the folding cover (A) inwards.

If the folding cover does not easily detach, no further action is required. Ensure the folding cover is securely attached to the slide rails then return the sunroof to the closed position.

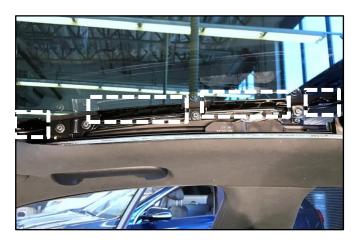
If the folding cover is easily detachable from the slide rail, proceed to the next step.

2. Completely remove the folding cover (B) and separate it the sliding bracket (C).

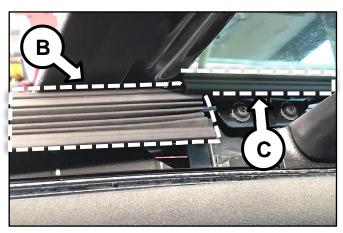




3. Reinstall in the sliding bracket to the upper sliding rail (C) without the folding cover (B) attached. Ensure the sliding bracket is completely secured at all four (4) locations shown.



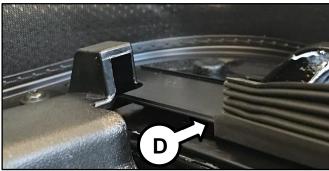
 Completely open the sunroof the insert the rolled edge at the top rear of the new improved folding cover (B) into the sliding bracket (C) attached to the sliding rail.

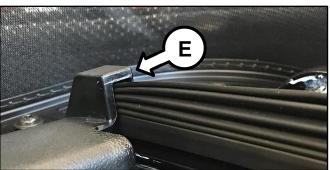


5. Attach the bottom front of the folding cover to the lower sliding rail (D) then insert the front end of the folding cover into the opening (E).



Use caution not to unfold the folding cover when inserting the front end into the opening.





6. Ensure complete attachment of the bottom of the folding cover to the lower sliding rail.



7. Repeat steps 1 through 7 of this procedure for the other side's folding cover.



8. Verify proper operation of the sunroof and ensure there is no damage to the folding cover.

## Service Procedure (SA270B):

1. Follow the two procedures outlined on pages 7 through 9 of this bulletin.

## **Weather Strip Inspection and Repair Procedure:**

1. Inspect the weather strip (A).

If the weather strip is loose (B), experiencing a fluttering noise, proceed to the next step.

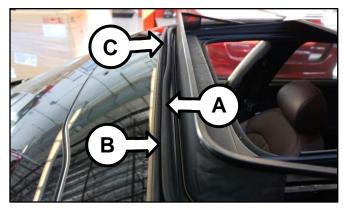
If the weather strip is adhered (C) with a uniform gap between the strip and the sunroof frame, no further action is required. Proceed to the next procedure on page 3 of this bulletin.

 Partially remove the affected area of weather strip and clean the contact surface between the strip and sunroof frame using alcohol or a general purpose adhesive cleaner.

## \* NOTICE

Failure to thoroughly clean old adhesive or foreign material from the contact surface may result in an ineffective or repeat repair.

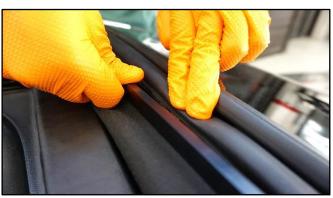
3. Apply a thin bead of adhesive to the weather strip.







4. Push the weather strip down onto the sunroof frame and apply pressure for approximately 30 seconds until the weather strip has properly adhered to the sunroof frame.



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 After ensuring that the adhesive has cured, open and close the sunroof several times to confirm proper installation of the weather strip.

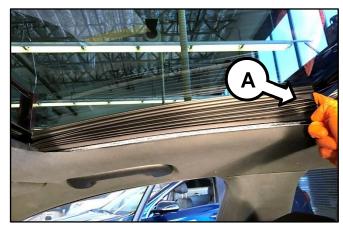
## **Folding Cover Inspection and Replacement Procedure:**

 With the sunroof in the tilt position, carefully, with light pressure, pull the rear of the folding cover (A) inwards.

If the folding cover does not easily detach, no further action is required. Ensure the folding cover is securely attached to the slide rails then return the sunroof to the closed position.

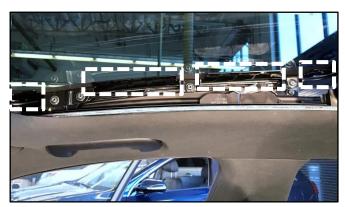
If the folding cover is easily detachable from the slide rail, proceed to the next step.

2. Completely remove the folding cover (B) and separate it the sliding bracket (C).

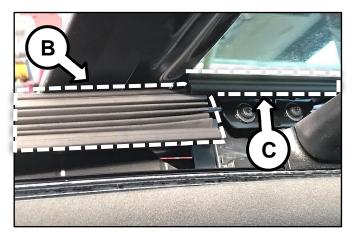




 Reinstall in the sliding bracket to the upper sliding rail (C) without the folding cover (B) attached. Ensure the sliding bracket is completely secured at all four (4) locations shown.



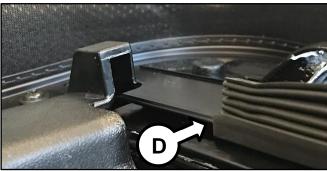
 Completely open the sunroof then insert the rolled edge at the top rear of the new improved folding cover (B) into the sliding bracket (C) attached to the sliding rail.

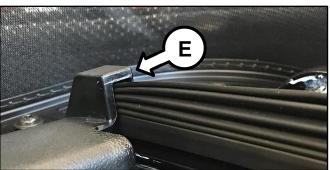


5. Attach the bottom front of the folding cover to the lower sliding rail (D) then insert the front end of the folding cover into the opening (E).



Use caution not to unfold the folding cover when inserting the front end into the opening.





6. Ensure complete attachment of the bottom of the folding cover to the lower sliding rail.



Repeat steps 1 through 7 of this procedure for the other side's folding cover.



8. Verify proper operation of the sunroof and ensure there is no damage to the folding cover.

## Service Procedure (SA270C):

1. Follow the procedure outlined on pages 10 through 11 of this bulletin.

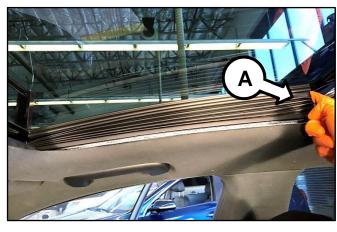
## Folding Cover Inspection and Replacement Procedure:

 With the sunroof in the tilt position, carefully, with light pressure, pull the rear of the folding cover (A) inwards.

If the folding cover does not easily detach, no further action is required. Ensure the folding cover is securely attached to the slide rails then return the sunroof to the closed position.

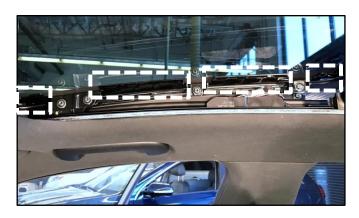
If the folding cover is easily detachable from the slide rail, proceed to the next step.

2. Completely remove the folding cover (B) and separate it the sliding bracket (C).

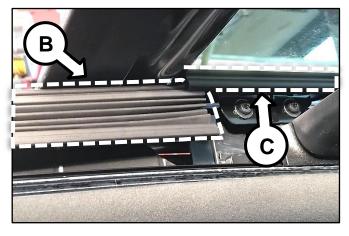




 Reinstall in the sliding bracket to the upper sliding rail (C) without the folding cover (B) attached. Ensure the sliding bracket is completely secured at all four (4) locations shown.



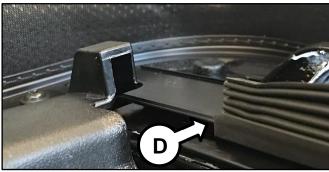
4. Completely open the sunroof then insert the rolled edge at the top rear of the new improved folding cover (B) into the sliding bracket (C) attached to the sliding rail.



5. Attach the bottom front of the folding cover to the lower sliding rail (D) then insert the front end of the folding cover into the opening (E).



Use caution not to unfold the folding cover when inserting the front end into the opening.





6. Ensure complete attachment of the bottom of the folding cover to the lower sliding rail.



Repeat steps 1 through 7 of this procedure for the other side's folding cover.



8. Verify proper operation of the sunroof and ensure there is no damage to the folding cover.

#### AFFECTED VEHICLE RANGE:

Model	Service Action No.	Production Date Range
	SA270A	September 28, 2015 to March 7, 2016
Optima (JFa)	SA270B	February 28, 2016 to July 5, 2016
	SA270C	June 21, 2016 to August 8, 2016

#### **REQUIRED TOOLS:**

Service Action No.	Part Name	Figure	Comments
<b>SA270A</b> (Decorative Cover Lubrication)	Acid Brush		Sourced locally
	90° Pick		Sourced from tool vendor

## **REQUIRED PART:**

Service Action No.	Part Name	Qty.	Figure	Figure
SA270A (Decorative Cover Lubrication)	Lubricant	1	AR 47-401 KR  K333286	One container will cover at least 100 vehicles  Maximum order quantity 1 per dealer

# \* NOTICE

<u>DO NOT</u> order additional lubricant if it has already been acquired as this lubricant is also utilized for TSB BOD125.

#### **REQUIRED PART:**

Service Action No.	Part Name	Figure	Figure
SA270A & SA270B (Weather Strip	Gorilla Super Glue	STORY OF THE PROPERTY OF THE P	Sourced locally  One 20g bottle will cover at least 10 vehicles
Repair)	3M Adhesive Cleaner	General Purpose Adhesive Cleaner	Sourced locally  One quart  will cover at least  100 vehicles

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#### **REQUIRED PART:**

Service Action No.	Part Name	Part Number	Figure
SA270A, SA270B, & SA270C	Folding Cover (LH)	81673 D4000QQK	
(Folding Cover Replacement)	Folding Cover (RH)	81674 D4000QQK	

#### WARRANTY INFORMATION:

**SA270A** (DECORATIVE COVER, WEATHER STRIP, AND FOLDING COVER)

N CODE: N99 C CODE: C99

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.	
	V 81610 D4010 0		Decorative Cover Lubrication, Weather Strip Inspection, & Folding Cover Inspection	160A46R0	0.4 M/H	N/A	0	
				Decorative Cover Lubrication, Weather Strip Repair, & Folding Cover Inspection	160A46R1	0.6 M/H	N/A	0
		81610 D4010 0 Decc Wes	Decorative Cover Lubrication, Weather Strip Inspection, & Folding Cover Replacement (One)	160A46R2	0.6 M/H	81673 D4000QQK 81674 D4000QQK	1	
V			Decorative Cover Lubrication, Weather Strip Inspection, & Folding Cover Replacement (Both)	160A46R3	0.7 M/H	81673 D4000QQK 81674	1	
			Decorative Cover Lubrication, Weather Strip Repair, & Folding Cover Replacement (One)	160A46R4	0.7 M/H	D4000QQK 81673 D4000QQK 81674 D4000QQK	1	
			Decorative Cover Lubrication, Weather Strip Repair, & Folding	160A46R5	0.8	81673 D4000QQK	1	
			Cover Replacement (Both)	130/110/10	M/H	81674 D4000QQK	1	

NOTE: Use sublet code X1 for reimbursement of lubricant, super glue, and adhesive cleaner (\$1.70 maximum).

WARRANTY INFORMATION:

**SA270B** (WEATHER STRIP AND FOLDING COVER)

N CODE: N99 C CODE: C99

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.	
			Weather Strip Inspection & Folding Cover Inspection	160A47R0	0.3 M/H	N/A	0	
				Weather Strip Repair & Folding Cover Inspection	160A47R1	0.4 M/H	N/A	0
		81614 D4000  Weather Strip Inspection & Folding Cover Replacement (Both)  Weather Strip Repair & Folding Cover Replacement (One)  Weather Strip Repair & Folding Cover Replacement (One)		160A47R2	0.4 M/H	81673 D4000QQK 81674 D4000QQK	1	
V			0 Weather Strip Inspection &	160A47R3	0.4 M/H	81673 D4000QQK	1	
			Folding Cover Replacement (Both)	160A47R3		81674 D4000QQK	1	
			160A47R4	0.4 M/H	81673 D4000QQK 81674 D4000QQK	1		
			Weather Strip Repair & Folding	40044705	0.5	81673 D4000QQK	1	
				160A47R5	M/H	81674 D4000QQK	1	

WARRANTY INFORMATION:

**SA270C** (FOLDING COVER ONLY)

N CODE: N99 C CODE: C99

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.	
	V 81673 D4000 0 Folding Cover Replacement (One)			Folding Cover Inspection	160A48R0	0.3 M/H	N/A	0
V		D4000 0	Folding Cover Replacement (One)	160A48R1	0.3 M/H	81673 D4000QQK 81674 D4000QQK	1	
			160A48R2	0.4 M/H	81673 D4000QQK	1		
					81674 D4000QQK	1		

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