

GROUP	MODEL
BOD	2016-2017MY Optima (JFa)
NUMBER	DATE
300	March 2021

TECHNICAL SERVICE BULLETIN

SUBJECT: WINDOW REGULATOR DRUM GEAR REPLACEMENT

This bulletin provides the procedure to replace the window regulator drum gear on some 2016-2017MY Optima (JFa) vehicles, produced from September 01, 2015 through July 31, 2016, which may exhibit an inoperative window regulator due to a drum gear separating and/or breaking. To correct this concern, follow the procedure outlined in this bulletin to install the improved drum gear to the affected window regulator.



Window Regulator Drum Gear

Printed TSB copy is for reference only; information may be updated at any time. Always refer to KGIS for the latest information.

Circulate To:

☒ General Manager

■ Service Manager

☑ Parts Manager

☒ Service Advisors

☑ Technicians

☑ Body Shop Manager

☑ Fleet Repair

Replacement Procedure:

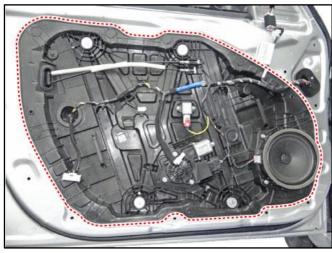
- 1. Remove the following parts from the door with the affected window regulator:
 - Delta cover
 - Door trim
 - Power window motor

For all removal steps, refer to the following chapters in the applicable Shop Manual on KGIS:

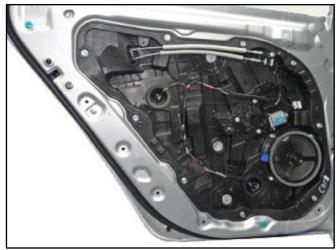
"Body (Interior and Exterior) → Front Door OR Rear Door:

- <u>Trim</u> → Repair procedures"
- Window Glass → Repair procedures"
- Module → Repair procedures"

Front Door



Rear Door



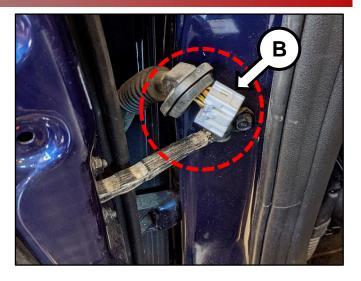
2. Front Door Only:

Disconnect the side view mirror connector and wiring harness (A).

Note: The harness is tucked inside the body pillar. Use a pick or similar tool to easily access and disconnect.

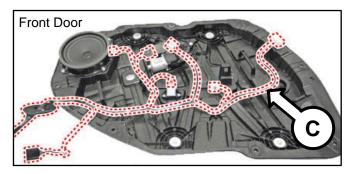


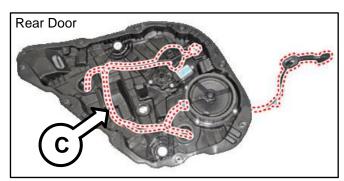
3. Disconnect the door harness main connector (B).



Disconnect the door module wiring harness (C), referring to the "Body (Interior and Exterior) → Front Door OR Rear Door → Module → Repair procedures" chapter in the applicable Shop Manual on KGIS.

Note: It is **not** necessary to remove the speaker or the side impact sensor.





KIA

SUBJECT:

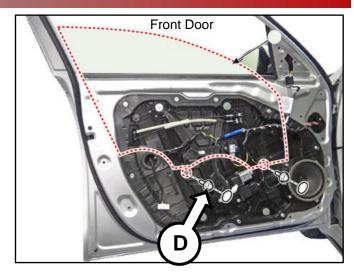
WINDOW REGULATOR DRUM GEAR REPLACEMENT

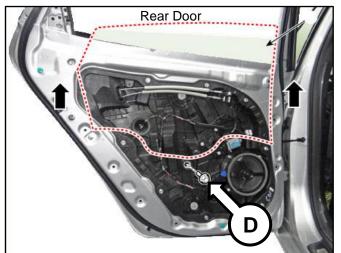
5a. Loosen the door window glass mounting bolts (D).

Torque specification for bolts (D): 5.8 - 8.7 lb.ft (7.8 - 11.8 N.m 0.8 - 1.2 kgf.m)



- Do <u>not</u> remove the window glass from the door.
- Be careful <u>not</u> to damage or scratch the window glass.



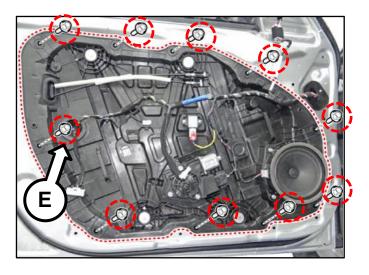


5b. Hold the door window glass securely in place using tape or rubber padded clamp.

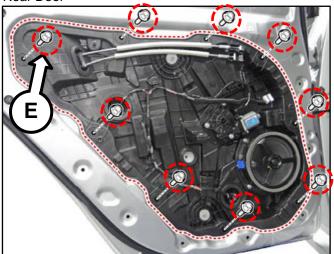


Remove the window regulator retaining 6a. bolts (E) for each door:

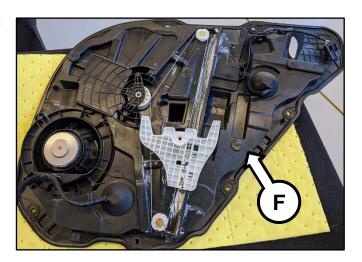
> Front Door: Ten (10) bolts Rear Door: Nine (9) bolts



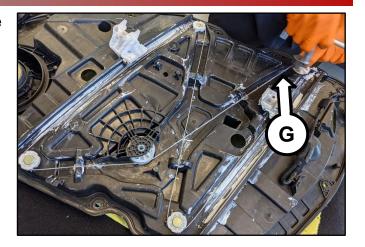
Rear Door



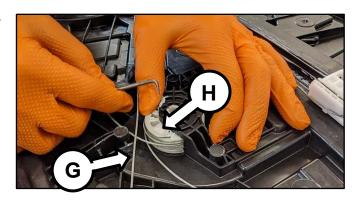
6b. Remove the window regulator assembly (F) and place on a clean work table.



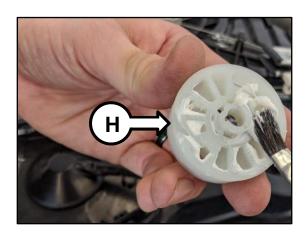
Using the Winding Tool SST, release the 7. wire cable (G) from one of the pulleys.



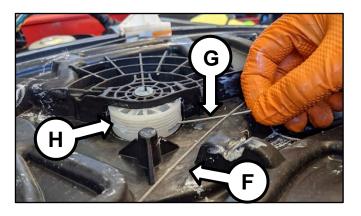
Using a pick tool, remove the drum gear (H) and then detach the two (2) wire cables (G) from the drum gear (H).



8a. Apply white lithium grease to the new drum gear (H) with a brush as shown.



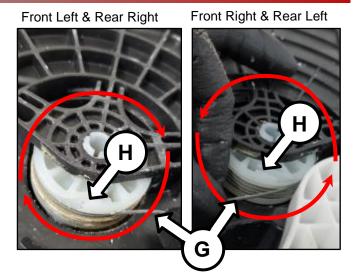
- 8b. Install the new drum gear (H) onto the window regulator assembly (F).
- 8c. Insert and attach the lower wire cable (G) onto the new drum gear.



- 9. Turn the drum gear (H) to wind the lower wire cable (G) to the drum gear in the specified direction:
 - Front Left & Rear Right Door: Turn clockwise.
 - Front Right & Rear Left Door: Turn counterclockwise.

(i) IMPORTANT

Refer to Parts table in this TSB to order the correct drum gear part number. These parts are NOT interchangeable.



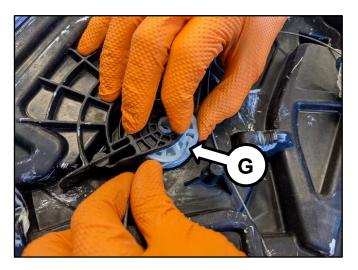
10. While holding on to the drum gear, insert and attach the <u>upper</u> wire cable (G) onto the drum gear (H).

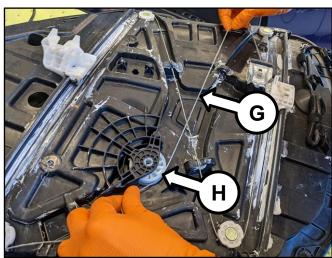
> Turn the drum gear (H) several times until slack within the wire cable (G) is removed.

- Front Left & Rear Right Door: Turn clockwise.
- Front Right & Rear Left Door: Turn counterclockwise.

* NOTICE

Be careful not to unwind the lower wire cable.

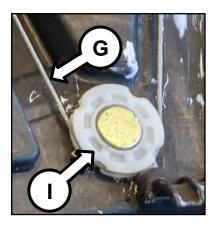




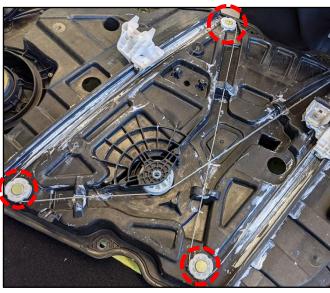
11. Wind the wire cables (G) onto the pulleys (I) on the door.

<u>Front Door</u>: Wind cables onto three (3) pulleys (I).

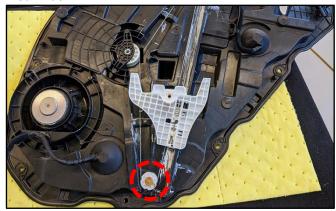
Rear Door: Wind cables onto one (1) pulley (I).



Front Door

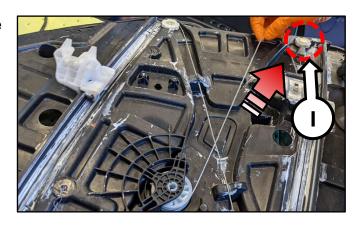


Rear Door

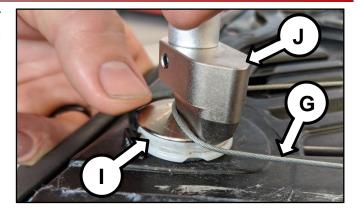


12. Pull the upper wire cable (G) towards the corner pulley (I) as shown.

Note: Front Door shown.



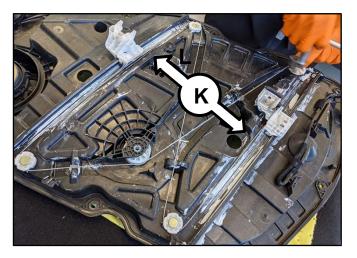
Insert the wire cable (G) around the SST
(J) and insert the SST over the pulley (I) as shown.



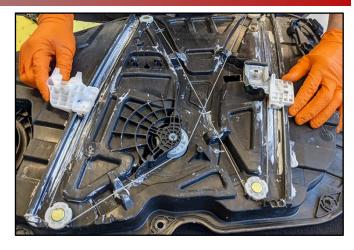
14. Turn the SST (J) counterclockwise to loop the wire cable (G) onto the pulley (I).



15. Using a brush, lubricate the window regulator tracking system (K) with white lithium grease.



16. Slide the tracking system (K) back and forth to confirm that the wire cable is engaged and winding as designed.



Note: Slide the tracking system (K) to the top right position as shown.

Front Door



- 17. Install all removed parts in reverse order of removal.
- 18. Confirm window operation is normal.

AFFECTED VEHICLE RANGE:

Model	Production Date Range		
Optima (JFa)	September 01, 2015 to July 31, 2016		

REQUIRED TOOL:

Tool Name	Figure	Comments
Winding Tool	**	Auto-Shipped to Dealers

REQUIRED PART:

Part Name	Part Number Figure		Qty.	Remark	
Drum Gear (B)	82473 D3000FFF		1	Use for Front Right (1R) Door and Rear Left (2L) Door	
Drum Gear (A)	82483 D3000FFF		1	Use for Front Left (1L) Door and Rear Right (2R) Door	
White Lithium Grease	N/A	N/A	Locally		
Brush			Sourced		

WARRANTY INFORMATION:

N Code: I11 C Code: ZZ3

Claim Type	Causal P/N	Qty.	Repair Description	Labor Op Code	Op Time	Replacement P/N	Qty.
00.474 D500	92474 DE000		Front Door Regulator Drum Replacement (One side)	82473F01	0.5 M/H	82473 D3000FFF <u>or</u> 82483 D3000FFF	1
	82471 D5000		Front Door Regulator		1.0	82473 D3000FFF	
w	0	Drum Replacement (Both sides)	82473F02	M/H	82483 D3000FFF	'	
83471 D5000	U	Rear Door Regulator Drum Replacement (One side)	82473F03	0.6 M/H	82473 D3000FFF <u>or</u> 82483 D3000FFF	1	
		Rear Door Regulator Drum Replacement	82473F04	1.0 M/H	82473 D3000FFF	1	
		(Both sides)			82483 D3000FFF		

