#### OMB Control No.: 2127-0004

# Part 573 Safety Recall Report

Manufacturer Name :Subaru of America, Inc.Submission Date :APR 11, 2019NHTSA Recall No. :19V-297Manufacturer Recall No. :WUF-91

### Manufacturer Information :

Manufacturer Name : Subaru of America, Inc. Address : One Subaru Drive

Camden NJ 08103 Company phone : 856-488-8500

### Vehicle Information :

	2009-2013 Subaru Forester				
01	LIGHT VEHICLES				
Body Style :	SUV				
Power Train :	GAS				
Descriptive Information :	-Description of the issue: On some of the potentially affected vehicles, a mechanical key ignition switch installed as a replacement part may contain a ball spring which could be susceptible to long-term wear and possible fatigue breakage.				
	-The basis for how the recall population was determined: Vehicles identified as potentially equipped with a replacement mechanical key ignition switch manufactured by the supplier during a specific time period and containing certain LOT numbers.				
	-How the recalled products differ from products that were not included in the recall: Vehicles equipped with a mechanical key ignition switch manufactured outside the subject period are unaffected, based on supplier production records. Vehicles equipped with a push-button start system are also not affected, because the vehicles are not equipped with the affected part.				
	The recall population includes certain 2009-2013 model year Forester vehicles. The number of affected Forester vehicles is 266.				
Production Dates :	JAN 16, 2008 - NOV 05, 2012				
VIN Range 1:	Begin :NREnd :NRNt sequential				
Vehicle 2:	2008-2014 Subaru WRX				
Vehicle Type :	LIGHT VEHICLES				
Body Style :	STATIONWAGON				
Power Train :					
Descriptive Information :	-Description of the issue: On some of the potentially affected vehicles, a mechanical key ignition switch installed as a replacement part may contain a ball spring which				
The ir	formation contained in this report was submitted pursuant to 49 CFR §573				

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### **Population :**

Number of potentially involved :511Estimated percentage with defect :3 %

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	could be sus	ceptible to lon	g-term wear and possible f	fatigue breakage.
	potentially e	quipped with ed by the supp	all population was determi a replacement mechanical lier during a specific time p	
	Vehicles equ subject peric equipped wi	ipped with a r od are unaffect	nechanical key ignition swi ted, based on supplier proc on start system are also no	were not included in the recall: itch manufactured outside the luction records. Vehicles ot affected, because the vehicles
			ides certain 2008-2014 mc ffected WRX STATION WAG	odel year WRX STATION WAGON GON vehicles is 15.
Production Dates :	SEP 08, 2007	7 - JAN 14, 201	4	
VIN Range 1:	Begin :	NR	End: NR	□ Not sequential
Vehicle Type : Body Style : Power Train :	LIGHT VEHIO STATIONWA GAS -Description key ignition	AGON of the issue: C switch installe		affected vehicles, a mechanical ay contain a ball spring which fatigue breakage.
	-The basis fo	or how the reca	all population was determi	ned: Vehicles identified as
	potentially e manufacture LOT number	quipped with ed by the supp rs.		key ignition switch period and containing certain
	potentially e manufacture LOT number -How the rec Vehicles equ subject perio equipped wi are not equip	quipped with ed by the supp 's. called product ipped with a r od are unaffect th a push-butt pped with the	a replacement mechanical lier during a specific time p s differ from products that nechanical key ignition swi ted, based on supplier prod on start system are also no affected part.	key ignition switch beriod and containing certain were not included in the recall: itch manufactured outside the luction records. Vehicles ot affected, because the vehicles
	potentially e manufacture LOT number -How the red Vehicles equ subject perio equipped wi are not equip The recall po	quipped with ed by the supp 's. called product ipped with a r od are unaffect th a push-butt pped with the opulation inclu	a replacement mechanical lier during a specific time p s differ from products that nechanical key ignition swi ted, based on supplier prod on start system are also no affected part.	key ignition switch beriod and containing certain were not included in the recall: itch manufactured outside the luction records. Vehicles ot affected, because the vehicles
Production Dates :	potentially e manufacture LOT number -How the rec Vehicles equ subject perio equipped wi are not equip The recall po WAGON veh	quipped with ed by the supp 's. called product ipped with a r od are unaffect th a push-butt pped with the opulation inclu icles. The nun	a replacement mechanical lier during a specific time p s differ from products that nechanical key ignition swi ted, based on supplier prod on start system are also no affected part. Ides certain 2005-2006 mo nber of affected Legacy STA	key ignition switch beriod and containing certain were not included in the recall: itch manufactured outside the luction records. Vehicles ot affected, because the vehicles odel year Legacy STATION
Production Dates : VIN Range 1 :	potentially e manufacture LOT number -How the rec Vehicles equi subject perio equipped wi are not equij The recall po WAGON veh APR 09, 200	quipped with ed by the supp 's. called product ipped with a r od are unaffect th a push-butt pped with the opulation inclu icles. The nun	a replacement mechanical lier during a specific time p s differ from products that nechanical key ignition swi ted, based on supplier prod on start system are also no affected part. Ides certain 2005-2006 mo nber of affected Legacy STA	key ignition switch beriod and containing certain were not included in the recall: itch manufactured outside the luction records. Vehicles ot affected, because the vehicles odel year Legacy STATION
VIN Range 1:	potentially e manufacture LOT number -How the red Vehicles equ subject perio equipped wi are not equij The recall po WAGON veh APR 09, 200 Begin :	quipped with ed by the supp 's. called product ipped with a r od are unaffect th a push-butt pped with the opulation inclu icles. The nun 4 - JUN 01, 200	a replacement mechanical lier during a specific time p s differ from products that nechanical key ignition swi ted, based on supplier prod on start system are also no affected part. Ides certain 2005-2006 mo hber of affected Legacy STA 05 End : NR	key ignition switch beriod and containing certain were not included in the recall: itch manufactured outside the luction records. Vehicles ot affected, because the vehicles odel year Legacy STATION ATION WAGON vehicles is 4.
VIN Range 1:	potentially e manufacture LOT number -How the rec Vehicles equ subject perio equipped wi are not equij The recall po WAGON veh APR 09, 200 Begin : 2005-2014 S	quipped with ed by the supp 's. called product ipped with a r od are unaffect th a push-butt pped with the opulation inclu icles. The nun 4 - JUN 01, 200 NR	a replacement mechanical lier during a specific time p s differ from products that nechanical key ignition swi ted, based on supplier prod on start system are also no affected part. Ides certain 2005-2006 mo hber of affected Legacy STA 05 End : NR	key ignition switch beriod and containing certain were not included in the recall: itch manufactured outside the luction records. Vehicles ot affected, because the vehicles odel year Legacy STATION ATION WAGON vehicles is 4.
VIN Range 1 : Vehicle 4 :	potentially e manufacture LOT number -How the red Vehicles equ subject perio equipped wi are not equij The recall po WAGON veh APR 09, 200 Begin : 2005-2014 S LIGHT VEHIC	quipped with ed by the supp 's. called product ipped with a r od are unaffect th a push-butt pped with the opulation inclu icles. The nun 4 - JUN 01, 200 NR	a replacement mechanical lier during a specific time p s differ from products that nechanical key ignition swi ted, based on supplier prod on start system are also no affected part. Ides certain 2005-2006 mo hber of affected Legacy STA 05 End : NR	key ignition switch beriod and containing certain were not included in the recall: itch manufactured outside the luction records. Vehicles ot affected, because the vehicles odel year Legacy STATION ATION WAGON vehicles is 4.
VIN Range 1 : Vehicle 4 : Vehicle Type :	potentially e manufacture LOT number -How the red Vehicles equi subject perio equipped wi are not equij The recall po WAGON veh APR 09, 200 Begin : 2005-2014 S LIGHT VEHIC	quipped with ed by the supp 's. called product ipped with a r od are unaffect th a push-butt pped with the opulation inclu icles. The nun 4 - JUN 01, 200 NR	a replacement mechanical lier during a specific time p s differ from products that nechanical key ignition swi ted, based on supplier prod on start system are also no affected part. Ides certain 2005-2006 mo hber of affected Legacy STA 05 End : NR	key ignition switch beriod and containing certain were not included in the recall: itch manufactured outside the luction records. Vehicles ot affected, because the vehicles odel year Legacy STATION ATION WAGON vehicles is 4.

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Descriptive Information :			ed as a replacement part ma ng-term wear and possible fa	y contain a ball spring which atigue breakage.
	-The basis f potentially	or how the rec equipped with red by the supp	all population was determir a replacement mechanical l	ned: Vehicles identified as
	Vehicles eq subject per equipped w	uipped with a 1 iod are unaffec	nechanical key ignition swit ted, based on supplier prod ton start system are also not	were not included in the recall tch manufactured outside the uction records. Vehicles t affected, because the vehicles
	-	-	udes certain 2005-2014 moo k vehicles is 108.	del year Outback vehicles. The
Production Dates :				
VIN Range 1:	Begin :	NR	End: NR	Not sequentia
Vehicle Type : Body Style : Power Train :	LIGHT VEH 4-DOOR GAS			
Descriptive Information :	key ignitior	n switch installe		ffected vehicles, a mechanical y contain a ball spring which atigue breakage.
	potentially	equipped with red by the supp	all population was determir a replacement mechanical k lier during a specific time p	
	Vehicles eq subject per equipped w	uipped with a 1 iod are unaffec	nechanical key ignition swit ted, based on supplier produ ton start system are also not	were not included in the recall tch manufactured outside the uction records. Vehicles t affected, because the vehicles
	-	-	ıdes certain 2009-2011 moo ffected Impreza 4-DOOR vel	v 1
Production Dates :				
VIN Range 1:	Begin :	NR	End: NR	Not sequentia
Vehicle 6:	2008-2011	Subaru Imprez	za	
Vehicle Type :		-		
Body Style :		AGON		
Power Train :	GAS			

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Descriptive Information :	key ignitio	n switch installe		ffected vehicles, a mechanical ay contain a ball spring which atigue breakage.
	potentially	equipped with a red by the suppl	ll population was determin a replacement mechanical l ier during a specific time p	
	Vehicles ec subject per equipped v	uipped with a m riod are unaffect	nechanical key ignition swi ed, based on supplier prod on start system are also no	were not included in the recall tch manufactured outside the uction records. Vehicles t affected, because the vehicles
	WAGON ve	chicles. The num	ber of affected Impreza ST	del year Impreza STATION ATION WAGON vehicles is 37.
Production Dates :				<b>— •</b>
VIN Range 1:	Begin :	NR	End: NR	Not sequentia
Vehicle 7:	2009-2014	I Subaru WRX		
Vehicle Type :	LIGHT VEH	HICLES		
Body Style :	4-DOOR			
Power Train :	GAS			
Descriptive Information :	key ignitio	n switch installe		ffected vehicles, a mechanical ay contain a ball spring which atigue breakage.
	potentially	equipped with a red by the suppl	ll population was determin a replacement mechanical l ier during a specific time p	
	Vehicles ec subject per equipped v	uipped with a m riod are unaffect	nechanical key ignition swi ed, based on supplier prod on start system are also no	were not included in the recall tch manufactured outside the uction records. Vehicles t affected, because the vehicles
	The number	er of affected WF	X 4-DOOR vehicles is 7.	del year WRX 4-DOOR vehicles
Production Dates : VIN Range 1 :		008 - SEP 26, 201 NR	3 End: NR	Not sequentia
vin kange 1.	Degin .	INIC	LIIU. INK	
Vehicle 8:	2005-2014	I Subaru Legacy		
Vehicle Type :				

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Power Train :	GAS					
Descriptive Information :	-Description of the issue: On some of the potentially affected vehicles, a mechanical key ignition switch installed as a replacement part may contain a ball spring which could be susceptible to long-term wear and possible fatigue breakage.					
	potentially e	equipped with ed by the supp	a replaceme	nt mechanic	al key ignition	es identified as a switch containing certain
	Vehicles equ subject peri- equipped w	uipped with a od are unaffeo	mechanical k cted, based or ton start syst	ey ignition s n supplier pr tem are also	witch manufa oduction reco	cluded in the reca ctured outside the rds. Vehicles because the vehicle
	-	opulation incl ne number of a			model year Leg rehicles is 43.	gacy 4-DOOR
Production Dates :	MAY 11, 200	04 - MAY 13, 2	014			
VIN Range 1:	Begin :	NR	End :	NR		Not sequenti
VI.L O	0000 0000					
Vehicle Type :		Subaru Tribec	a			
Body Style :		ICLES				
Power Train :						
Descriptive Information :	-Descriptior key ignition	switch install	ed as a repla	cement part		ball spring which
	potentially e	equipped with ed by the supp	a replaceme	nt mechanic	al key ignition	es identified as a switch containing certain
	Vehicles equ subject peri- equipped w	uipped with a od are unaffeo	mechanical k cted, based or ton start syst	ey ignition s n supplier pr tem are also	witch manufa oduction reco	cluded in the recal ctured outside the rds. Vehicles because the vehicle
		opulation incl iffected Tribec			model year Tri	ibeca vehicles. Th
Production Dates :	APR 26, 200	)5 - OCT 11, 20	007			
VIN Range 1:	Decim	NR	End :	NP		Not sequenti

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### **Description of Defect :**

Description of the Defect :	On some of the potentially affected vehicles, a mechanical key ignition switch installed as a replacement part may contain a ball spring which could be susceptible to long-term wear and possible fatigue breakage. If the ball spring breaks, the retention force of the ignition switch is reduced. If heavier items are attached to the ignition key and the vehicle is driven over rough surfaces, the weight of the items may exceed the retention force of the broken ball spring and pull the ignition switch from the "ON" position to the "ACC" position.
FMVSS 1 :	NR
FMVSS 2 :	NR
Description of the Safety Risk :	If the ignition switch is pulled from the "ON" position to the "ACC" position causing the engine to stop running while the vehicle is in motion, there may be an increased risk of a crash. If a crash occurs under this condition, the airbag system may not react as designed, increasing the risk of injury.
Description of the Cause :	Due to improper tooling maintenance on rollers used in the manufacturing process of subject ignition switch ball springs, stress-risers on certain ball springs may have formed, resulting in a potential diminished long-term fatigue performance.
Identification of Any Warning that can Occur :	None

#### **Supplier Identification :**

#### **Component Manufacturer**

Name :Alpha Technology CorporationAddress :1450 McPherson Park Drive<br/>Suite 200 PO Box 168 Howell MICHIGAN 48844-0168Country :United States

#### Chronology :

August 23, 2018 - The mechanical key ignition switch supplier informed Subaru Corporation (Subaru) that it had identified a tooling maintenance issue potentially affecting ball springs produced during a certain time period and installed in switches from specific replacement part LOT numbers.

August 27, 2018 – Subaru issued a hold for all potentially affected replacement ignition switch parts in inventory.

September 2018 to February 2019 – Subaru conducted testing for various vehicle mounting conditions. Excessive weight was simulated using multiple keys (up to 10), which were attached to the ignition key ring. Bench vibration testing was conducted to assess the subject condition and its potential effect on long-term

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durability of the ignition switch. At the conclusion of the testing, Subaru determined that if the ball spring is broken, it could not rule out the potential for inadvertent ignition switch movement from the "ON" position to the "ACC" position during certain rough driving conditions with heavier items attached to the ignition key ring.

September 2018 to March 2019 – Inventory replacement ignition switch parts and assemblies were returned to the supplier where the LOT numbers were inspected. Additionally, Subaru identified vehicles that may have had a replacement ignition switch installed within the timeframe of interest.

April 4, 2019 – Throughout the timeframe identified in this chronology, Subaru monitored all sources of field information and data. While Subaru continues to be unaware of any field incidents attributable to this issue, out of an abundance of caution, Subaru decided to conduct a voluntary safety recall.

### **Description of Remedy :**

Description of Remedy Program :	For all the potentially affected vehicles, Subaru dealers will inspect the LOT number of the ignition switch and if it is within the affected range, replace it with a remedied one.
	Replacement ignition switches are stamped with a LOT number corresponding to a production date outside of the affected range.
	Recalled Component Name: SWITCH IGNITION Recalled Component Description: Ignition Switch Recalled Component Part numbers: 83131KG000, 83131AG000
	The rollers used for formation of the ball springs were replaced with rollers without imperfections on June 15, 2017.

#### **Recall Schedule :**

Description of Recall Schedule :	Owner notification will occur within 60 days. Dealer notification is
	scheduled to begin on or about April 12, 2019.
Planned Dealer Notification Date :	APR 12, 2019 - APR 12, 2019
Planned Owner Notification Date :	MAY 10, 2019 <sup>-</sup> MAY 10, 2019

\* NR - Not Reported

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