OMB Control No.: 2127-0004

Part 573 Safety Recall Report

Manufacturer Name :Subaru of America, Inc.Submission Date :NOV 01, 2018NHTSA Recall No. :18V-772Manufacturer Recall No. :WTY-84

Manufacturer Information :

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

Camden NJ 08103 Company phone : 856-488-8500

Vehicle Information :

Vehicle 1:	2012-2014 Subaru Impreza
Vehicle Type :	LIGHT VEHICLES
Body Style :	4-DOOR
Power Train :	GAS
Descriptive Information :	-Description of the issue: The valve springs located inside the engine of the affected vehicles may fracture, which may cause an abnormal noise or engine malfunction. In the worst case, the engine may stall during driving.
	-The basis for how the recall population was determined: Vehicles equipped with engines which have an improper design of the valve train which may result in excessive stress to the valve springs are included in population. In May 2013, the lower limit of the tolerance of the valve spring wire diameter was raised to compensate for the excessive stress.
	-How the recalled products differ from products that were not included in the recall: Products that were not included in the recall are as follows:
	1. Products that do not have valve train containing valve springs manufactured with the original width of the tolerance of the spring wire diameter.
	2. Products that were manufactured before January 2012, when introduction of new type engine and production volume increase resulted in the rate of valve spring fracture to increase.
	- 27,114 2012-14MY Subaru Impreza 4-DOOR vehicles are affected
Production Dates :	JAN 17, 2012 - OCT 03, 2013
VIN Range 1:	
Vehicle 2:	2012-2013 Subaru Impreza
Vehicle Type :	LIGHT VEHICLES
Body Style :	STATIONWAGON
Thoir	formation contained in this report was submitted pursuant to 49 CFR §573
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Population :

Number of potentially involved : 165,534 Estimated percentage with defect : 1%

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Power Train :	GAS			
	-Description vehicles ma	ay fracture, wh		nside the engine of the affected noise or engine malfunction. In
	engines wł excessive s	nich have an im stress to the val t tolerance of th	proper design of the valve ve springs are included in p	ined: Vehicles equipped with train which may result in copulation. In May 2013, the er was raised to compensate fo
			ts differ from products that cluded in the recall are as f	were not included in the recall ollows:
			ve valve train containing va olerance of the spring wire	alve springs manufactured with diameter.
		e and productio		2012, when introduction of new d in the rate of valve spring
	- 63,998 2()12-13MY Suba	ru Impreza STATION WAG	ON vehicles are affected
Production Dates :			-	
VIN Range 1:	Begin :	NR	End: NR	Not sequentia
		3 Subaru BRZ		
Vehicle Type : Rody Style		IICLES		
Body Style : Power Train :				
			T1	
Descriptive information :	vehicles ma	ay fracture, wh		nside the engine of the affected noise or engine malfunction. In
	engines wł excessive s lower limit	nich have an im stress to the val	proper design of the valve ve springs are included in p ce of the valve spring wire of	population. In May 2013, the
	Products th	hat were not in	cluded in the recall do not l	were not included in the recall have valve train containing valv tolerance of the spring wire
		2MV Cubanu DI	RZ vehicles are affected	
	-9,467 201	SMT Subaru Di	L Venicles are affected	
Production Dates :				

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Vehicle 4:	2013-2013 T	'oyota Scion FR	-S		
Vehicle Type :		5			
Body Style :	2-DOOR				
Power Train :	GAS				
Descriptive Information :	vehicles may		h may cause ar	n abnormal nois	the engine of the affected e or engine malfunction. In
	engines which excessive str lower limit of compensate st -How the rect Products that	h have an impr ess to the valve f the tolerance for the excessiv alled products t were not inclu	oper design of springs are in of the valve sp re stress. differ from pro uded in the rec	f the valve train acluded in popul oring wire diame oducts that were call do not have	Vehicles equipped with which may result in ation. In May 2013, the eter was raised to e not included in the recall valve train containing valv ance of the spring wire
		3MY Toyota So	ion FR-S vehic	cles are affected	
Production Dates :		Ũ			
VIN Range 1:		NR	End: NI	R	Not sequentia
Vehicle Type : Body Style : Power Train :	NR				
Descriptive Information :	vehicles may		h may cause ar	n abnormal nois	the engine of the affected e or engine malfunction. In
	engines whic excessive str lower limit o	h have an impr ess to the valve	oper design of springs are in of the valve sp	f the valve train Icluded in popul	Vehicles equipped with which may result in ation. In May 2013, the eter was raised to
	Products that	t were not inclu	uded in the rec	all do not have	e not included in the recall valve train containing valv ance of the spring wire
	- 39,670 201	3MY Subaru XV	/ Crosstrek veł	nicles are affecte	ed
Production Dates :					
VIN Range 1 :		NR	End: NI	ה	Not sequentia

The information contained in this report was submitted pursuant to 49 CFR §573

Description of Defect :

Description of the Defect :	The valve springs located inside the engine of the affected vehicles may fracture, which may cause an abnormal noise or engine malfunction. In the worst case, the engine may stall during driving.
FMVSS 1 :	NR
FMVSS 2 :	NR
Description of the Safety Risk :	If a valve spring fractures, it may result in engine stalling and the inability to restart the vehicle, increasing the risk of a crash.
Description of the Cause :	Due to an improper design of the valve train within the engine, an excessive stress is generated compared to the design condition. Very small amount of the impurity within the composition of the spring material is not avoidable in the manufacturing process. The excessive stress combined with the dispersion of the impurity within the composition of the valve spring material under normal course of manufacturing may cause the valve spring to fracture.
Identification of Any Warning that can Occur :	Abnormal noise or vibration may occur prior to the engine stalling.

Supplier Identification :

Component Manufacturer

Name :	NHK SPRING CO., LTD.
Address :	3-10, Fukuura, Kanazawa-ku
	Yokohama FOREIGN STATES 236-0064
Country :	Japan

Chronology:

Chronology of defect provided via separate attachment (i.e. Subaru Chronology of Defect (WTY-84).pdf)

Description of Remedy :

Description of Remedy Program :	For all the affected vehicles, replace all valve springs with remedied ones.
	The remedy component manufactured with the lower limit of the tolerance of the spring wire diameter raised.
	Recalled Component Name: SPR-VALVE Recalled Component Description: VALVE SPRING Recalled Component Part numbers: 13217AA520
The information	contained in this report was submitted pursuant to 49 CFR §573

5	In order to meet the actual stress from the valve train to the valve spring, the lower limit of the tolerance of the spring wire diameter was raised. This improvement was implemented from May 14, 2013 on the engine manufacturing line.
Recall Schedule :	
Recall Schedule : Description of Recall Schedule :	Owner notification will occur within 60 days. If parts are not available by that time, owners will be notified that parts are not available yet and they will be re-notified once parts are available.
	that time, owners will be notified that parts are not available yet and they will be re-notified once parts are available.

* NR - Not Reported

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