

ATTENTION:

GENERAL MANAGER
 PARTS MANAGER
 CLAIMS PERSONNEL
 SERVICE MANAGER

IMPORTANT - All
 Service Personnel
 Should Read and
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QUALITY DRIVEN® SERVICE

SERVICE BULLETIN

APPLICABILITY: 2013-14MY Legacy & Outback Models
 with 2.5L FB Engine

NUMBER: 02-150-14R

DATE: 02/07/14

SUBJECT: Revised Valve Train Parts to Reduce a Warm
 Engine Tapping Sound from the Left Cylinder Head

REVISED: 03/3/14

INTRODUCTION

This bulletin announces the availability of revised valve train components developed to reduce a tapping sound (sometimes described as “a sewing machine type” sound) which may be heard coming from the left-hand (B2) side of the engine when the engine is warm. This bulletin does **not** address any cold engine or start-up sounds. The changes consist of:

- Design change to the valve rockers
- Camshaft profile change
- 1.65mm longer intake and 2.4mm longer exhaust valve stem lengths

PART INFORMATION

PART NAME		NEW	OLD
INTAKE VALVE	Part Number	13201AA670	13201AA640
	Change	Stem Length:	Stem Length:
		104.95mm	103.3mm
Identification	I31	I22	
EXHAUST VALVE	Part Number	13202AA750	13202AA670
	Change	Stem Length:	Stem Length:
		96.5mm	94.1mm
Identification	E3	E2	
VALVE ROCKER	Part Number	13249AA250	13249AA240
	Change	Change to Roller Portion	n/a
	Identification	Circular groove added on pivot side	n/a
INTAKE CAMSHAFT, LEFT	Part Number	13037AA960	13037AA850
	Change	Cam Profile Change	n/a
	Identification	38B360 or 38B410	38B250 or 38B300

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CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.

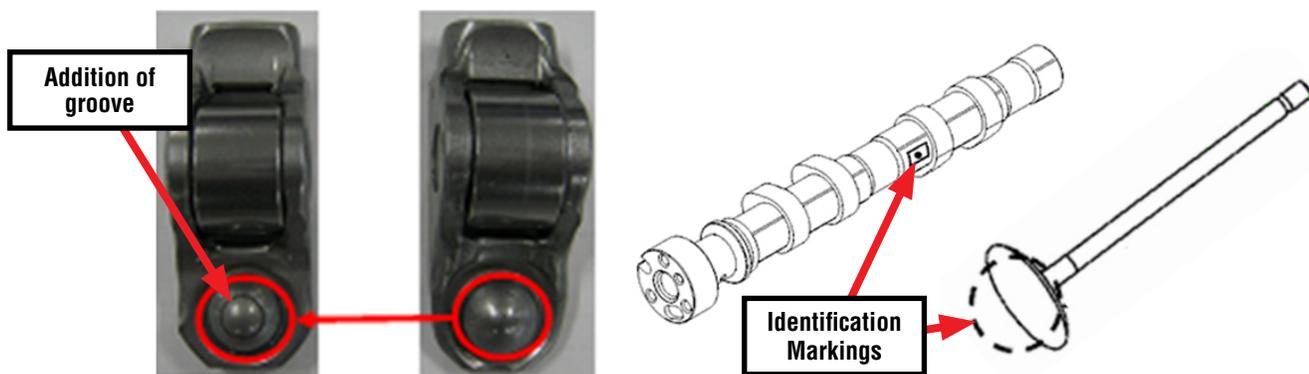
Subaru Service Bulletins are intended for use by professional technicians ONLY. They are written to inform those technicians of conditions that may occur in some vehicles, or to provide information that could assist in the proper servicing of the vehicle. Properly trained technicians have the equipment, tools, safety instructions, and know-how to do the job correctly and safely. If a condition is described, DO NOT assume that this Service Bulletin applies to your vehicle, or that your vehicle will have that condition.

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The international standard for excellence in Environmental Management Systems. Please recycle or dispose of automotive products in a manner that is friendly to our environment and in accordance with all local, state and federal laws and regulations.

PART NAME		NEW	OLD
EXHAUST CAMSHAFT , LEFT	Part Number	13052AA960	13052AA850
	Change	Cam Profile Change	n/a
	Identification	53B360 or 53B410	53B250 or 53B300
PIVOT, ROCKER ARM	Part Number	13296AA090	13296AA051
	NOTE: These revised rocker pivots were incorporated into production October 8, 2012, starting with VIN: Legacy: D*017921 Outback: D*242757		

The illustrations below show additional information about the changes to the valve rockers, camshafts and valves to help readily distinguish them from the previous version parts.



SERVICE PROCEDURE / INFORMATION

If you receive a customer concern of a tapping sound from the B2 cylinder head, confirm it is isolated to the B2 valve train area before proceeding with any repairs. Once verified, order and replace the intake and exhaust camshafts, the 4 intake and 4 exhaust valves, and all 8 rockers. Depending upon the VIN (see part information table) you may also need to replace all 8 rocker pivots. To clarify, if the VIN is BEFORE VIN D*017921 for Legacy or D*242757 for Outback, you will need to replace the rocker pivots. Vehicles built after these VINs already incorporate the new pivots. Refer to the service procedures outlined in the applicable Service Manual for installation.

NOTE: When setting the valve clearances, the intakes should be set to 0.13mm +0.02 / - 0.03 and the exhausts set to 0.22mm +/- 0.02. **These are revised clearance specifications and are not reflected in the Service Manual.**

IMPORTANT: Do not mix old and new parts together as it will become impossible to obtain intake valve clearances that are within specification.

TIP: An egg carton makes a perfect organizer tray. Make sure to mark it as necessary (front, intake, exhaust) to eliminate any mixing of parts.

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WARRANTY / CLAIM INFORMATION

For vehicles within the Basic New Car Limited and/or Powertrain Warranty, this repair may be claimed using the following information:

LABOR DESCRIPTION	LABOR OPERATION #	FAIL CODE	TRANSMISSION	LABOR TIME
H4 ENGINE R&R FOR CYLINDER HEAD SERVICING	B293-130	AER-48	M/T	3.4
			CVT	3.9
LH CYLINDER HEAD R&R	C293-132		All	4.9
ALL VALVES REPLACE, ONE CYLINDER HEAD Includes: Valve Seating, R&R of the Springs, Valve Seals & Valve Adjustment	C293-123			1.6
VALVE TRAIN NOISE DIAGNOSIS	C243-001			0.3