

**ATTENTION:**

GENERAL MANAGER   
 PARTS MANAGER   
 CLAIMS PERSONNEL   
 SERVICE MANAGER

IMPORTANT - All  
 Service Personnel  
 Should Read and  
 Initial in the boxes  
 provided, right.

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QUALITY DRIVEN® SERVICE

## SERVICE BULLETIN

**APPLICABILITY:** 2013MY BRZ

**NUMBER:** 02-151-14

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

**DATE:** 04/22/14

### 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 2.47mm longer exhaust valve stem lengths

### PART INFORMATION

| PART NAME             |                | NEW                                 | OLD          |
|-----------------------|----------------|-------------------------------------|--------------|
| INTAKE VALVE          | Part Number    | 13201AA660                          | 13201AA600   |
|                       | Change         | Stem Length:                        | Stem Length: |
|                       |                | 104.95mm                            | 103.3mm      |
| Identification        | I3H            | I2H                                 |              |
| EXHAUST VALVE         | Part Number    | 13202AA800                          | 13202AA740   |
|                       | Change         | Stem Length:                        | Stem Length: |
|                       |                | 97.9mm                              | 95.45mm      |
| Identification        | E3B            | E2B                                 |              |
| 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    | 13037AA980                          | 13037AA830   |
|                       | Change         | Cam Profile Change                  | n/a          |
|                       | Identification | 38B370                              | 38B230       |

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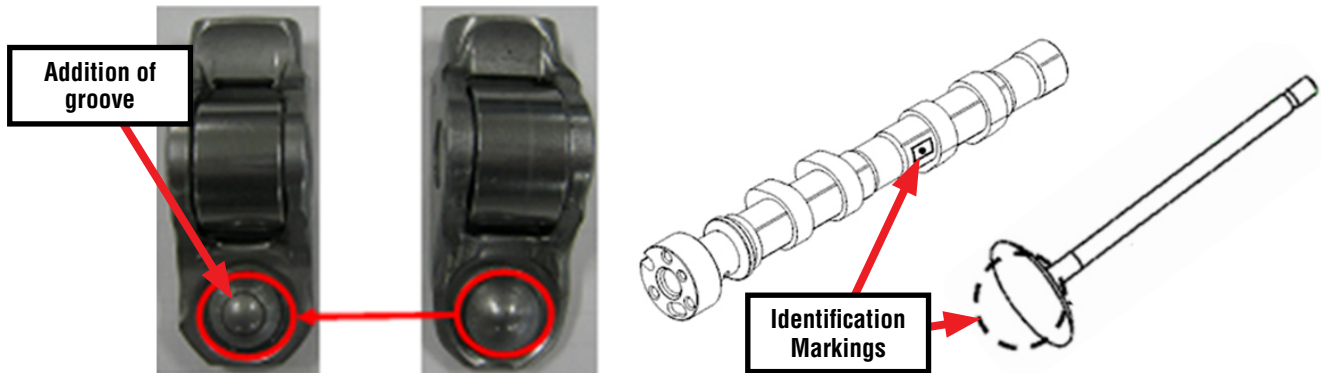
**CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.**

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.

**SUBARU OF AMERICA, INC. IS “ISO 14001 COMPLIANT”**

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    | 13052AA980         | 13052AA830 |
|                        | Change         | Cam Profile Change | n/a        |
|                        | Identification | 53B370             | 53B230     |
| PIVOT, ROCKER ARM      | Part Number    | 13296AA090         | 13296AA070 |



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 valves, 4 exhaust valves, all 8 rockers and all 8 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.

*Continued...*

## 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          | 2.8        |
|  |                   |           | 6AT          | 3.3        |
| LH CYLINDER HEAD R&R   | C293-132          |           | All          | 5.2        |
| ALL INTAKE VALVES REPLACE, ONE CYLINDER HEAD Includes: Valve Seating, R&R of the Springs, Valve Seals & Valve Adjustment | C293-122          |           |              | 0.8        |
| VALVE TRAIN NOISE DIAGNOSIS  | C243-001          |           |              | 0.3        |