

- 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:** 2013-14MY Legacy and Outback 2.5L N/A Models **NUMBER:** 11-140-14  
 2014-15MY Forester 2.5L N/A Models **DATE:** 05/23/14

**SUBJECT:** Reprogramming Files for Spark Knock (Ping) in High Altitude Areas

### INTRODUCTION

This bulletin announces availability of ECM reprogramming files to address customer concerns of persistent spark knock (ping) for vehicles operated in high altitude areas.

**NOTE:** This programming addresses a specific, persistent and severe spark knock (ping) condition which occurs only at high altitudes and occurs continually, using the required minimum 87 octane fuel or higher grades.

It is important to understand this reprogramming will not eliminate all possible sources of spark knock (ping). Depending upon vehicle load, altitude, fuel quality, and engine load, spark knock (ping) may still occur. This programming addresses a specific, persistent and severe spark knock (ping) condition which occurs only at high altitudes and occurs continually. In these cases, the concern occurred with vehicles using the required minimum 87 octane fuel or higher grades. This programming should not be applied unless use of improper fuel has been eliminated as a cause for the condition.

### COUNTERMEASURE IN PRODUCTION

MODEL	TYPE	STARTING VIN	PRODUCTION DATE
Legacy	4-Door	E*027353	2/13/2014
Outback	5-Door	E*286360	
Forester		F*425086	3/28/2014

### PACK FILE APPLICABILITY

MODEL / MODEL YEAR	EMISSION SPEC.	TRANS. TYPE	PAK FILE NAME	NEW ECM PART NUMBER	OLD ECM PART NUMBER	NEW CID NUMBER
2013-14 Legacy	FED	6MT	22765AE05E.pak	22765AE05E	22765AE05A, B, C, D	EA1P101e
2013-14 Outback	CAL		22765AE04E.pak	22765AE04E	22765AE04A, B, C, D	EA1P101c
2013-14 Legacy	FED	CVT	22765AE07E.pak	22765AE07E	22765AE07A, B, C, D	EA1P101f
2013-14 Outback	CAL		22765AE06E.pak	22765AE06E	22765AE06A, B, C, D	EA1P101d

*Continued...*

**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**

ISO 14001 is 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.

MODEL / MODEL YEAR	EMISSION SPEC.	TRANS. TYPE	PAK FILE NAME	NEW ECM PART NUMBER	OLD ECM PART NUMBER	NEW CID NUMBER
2014 Forester	FED	6MT	227654AE191.pak	22765AE191	22765AE190	EA1M501C
		CVT	22765AE201.pak	22765AE201	22765AE200	EA1M501D
2014 Forester	CAL	6MT	22765AE211.pak	22765AE211	22765AE210	EA1M501A
		CVT	22765AE221.pak	22765AE221	22765AE220	EA1M501B
2015 Forester	FED	6MT	22765AE721.pak	22765AE721	22765AE720	EA1M701C
		CVT	22765AE731.pak	22765AE731	22765AE730	EA1M701D
2015 Forester	CAL	6MT	22765AE741.pak	22765AE741	22765AE740	EA1M701A
		CVT	22765AE751.pak	22765AE751	22765AE750	EA1M701B

## SERVICE PROCEDURE / INFORMATION

### NOTES:

SOA highly recommends connecting the Midtronics GR8 Diagnostic Battery Charger to the vehicle and utilizing the Power Supply Mode feature anytime a vehicle control module is being reprogrammed. Once the GR8 is connected to the vehicle, as long as the battery is fully charged, it takes less than 3 minutes to boot-up the charger, select the Power Supply Mode, and have the battery voltage stabilized and ready for reprogramming.

**VERY IMPORTANT:** This information is applicable to the Midtronics GR8 Diagnostic Battery Charger **ONLY**. It does not apply to any other brand / type of “generic” battery charger whatsoever. **ONLY** the GR8 and its Power Supply Mode feature has been tested and approved by Subaru of America, Inc. (SOA).

- If the GR8 indicates the vehicle’s battery must be charged, charge the battery using the GR8 before proceeding to reprogram the vehicle while using the Power Supply Mode.
- Control module failures as a result of battery discharge during reprogramming are not a matter for warranty. Should any DTCs reset after the reprogramming update is performed, diagnose per the procedure outlined in the applicable Service Manual.

## WARRANTY / CLAIM INFORMATION

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

LABOR DESCRIPTION	LABOR OPERATION #	FAIL CODE	LABOR TIME
MFI OBDII ECM Reprogramming	A455-288	UPG-48	0.4