

**ATTENTION:**

GENERAL MANAGER ☐  
 PARTS MANAGER ☐  
 CLAIMS PERSONNEL ☐  
 SERVICE MANAGER ☐

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


© 2016 Subaru of America, Inc. All rights reserved.



**SUBARU**

QUALITY DRIVEN® SERVICE

## SERVICE BULLETIN

**APPLICABILITY:** 2014-2017MY Forester Turbo Models

**NUMBER:** 11-169-16R

**SUBJECT:** Reprogramming Files for Spark Knock (Ping),  
 Surging on Acceleration and / or P113A, P0137

**DATE:** 11/10/16

**REVISED:** 02/20/19

### INTRODUCTION:

This bulletin announces the availability of reprogramming files to optimize the ECM. These new files will address customer concerns of:

- Spark knock (ping) during high intake air temperature operation
- Surge on acceleration due to phantom knock detection
- Check Engine light illumination resulting from DTC P113A and / or P0137 being stored in the ECM memory.

**NOTE:** 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 spark knock (ping) condition which occurs only when high intake air temperatures are present. This programming should not be applied unless use of improper fuel has been eliminated as a cause for the condition.

### PRODUCTION CHANGE INFORMATION:

The new logic was incorporated into production starting with VIN H\*486635.

### PACK FILE APPLICABILITY:

NOTE: These new files will be included in the OCTOBER, 2016 SSM Update.

Model	PAK File Name	New ECM Part Number	Old ECM Part Numbers	Decryption Keyword	New CID Number
2014MY	22611BG960.pak	22611BG960	22611AW060, 61, 62, 63, 64, 65, 66, 67, 68 & 69	B1CBC644	AF56E00B
2015MY	22765AG976.pak	22765AG976	22765AG970, 71, 72, 73, 74 & 75	49B07B0D	LF61800B
2016MY	22765AH512.pak	22765AH512	22765AH510 & 11	A9FD034D	LF75400A
2017MY	22765AH921.pak	22765AH921	22765AH920	E8A3794B	LF78103B

*Continued...*

## SERVICE PROCEDURE:

- Reprogram the ECM following the normal Flashwrite procedure.

Subaru of America, Inc. (SOA) highly recommends connecting the Subaru Midtronics GR8 Diagnostic Battery Charger to the vehicle and utilizing the Power Supply Mode feature anytime a vehicle control module is being reprogrammed. Follow the procedure as outlined in document GR8-1100 on STIS for use of the GR8's Power Supply Mode:

- Confirm all electrical loads such as lights, audio, HVAC, seat heaters, and rear defroster are all switched **OFF** before setting up for Power Supply Mode.
- Select the correct battery type (Flooded, AGM or AGM Spiral).
- Select the CCA which matches the vehicle's battery (**NOTE:** OE and replacement batteries have different CCA ratings. Always confirm the battery rating before proceeding.)
- If the "Charge Battery" **WARNING** appears, the battery **MUST** be charged before attempting reprogramming.
- **DO NOT** connect the DSTi or SDI until the GR8 Power Supply mode has completed its battery test mode and the Charging Voltage has dropped to a steady 13.5 Volts on the display.
- If the GR8 "beeps" or the Status Light flashes, a diagnostic charge should be performed on the battery before proceeding further.
- Once Power Supply Mode reaches a steady 13.5 volts, connect the DSTi or SDI to the OBD connector and initiate the reprogramming process.
- Amperage will fluctuate based upon the vehicle's demand for power. **NOTE:** If the voltage rises beyond 14V while programming is in process, the procedure will abort. This can indicate a need to test or charge the vehicle battery before any further attempt at programming.

## 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 SOA.

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 Power Supply Mode, and have the battery voltage stabilized and ready for reprogramming.

**REMINDER:** If the GR8 indicates the vehicle's battery must be charged, charge the battery using the GR8 before proceeding to reprogram the vehicle.

**NOTE:** 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.

*Continued...*

## WARRANTY / CLAIM INFORMATION:

For vehicles within the Basic New Car Limited, an applicable Emission Warranty period or covered by an active Subaru Added Security Classic or Gold plan, this repair may be submitted using the following claim information:

Labor Description	Labor Operation #	Fail Code	Labor Time
MFI OBDII ECM Reprogramming	A455-288	UPG-48	0.4

**IMPORTANT:** Always note the original Calibration Identification number (CID) the vehicle came in with on the repair order before reprogramming and, make sure to list the **NEW** CID for any newly-installed programming (as confirmed from the actual control module **AFTER** installation). The **NEW** CID **MUST** also be noted on the repair order as this information is required for entry in the Miscellaneous Detail field during claim submission.

**NOTE:** The pack file listings provided in this bulletin are the latest available at the time of publishing. Updates are often released thereafter without revision to the original bulletin. For this reason, it is critical to always have the latest version of Select Monitor software installed on your system. You can confirm if a later version is available by entering the CID listed in this bulletin into FlashWrite. If a newer CID is shown as available in FlashWrite, reprogram using that file.

## IMPORTANT REMINDERS:

- SOA strongly discourages the printing and/or local storage of service information as previously released information and electronic publications may be updated at any time.
- Always check for any open recalls or campaigns anytime a vehicle is in for servicing.
- Always refer to STIS for the latest service information before performing any repairs.

**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.