

**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:** 2017-21MY Impreza 2.0L MT  
 2018-21MY Crosstrek 2.0L MT

**NUMBER:** 09-77-21R

**DATE:** 07/28/21

**REVISED:** 08/19/21

**SUBJECT:** Lack of Power / Hesitation During Acceleration

**INTRODUCTION:**

This bulletin announces the availability of ECM reprogramming files to correct a possible lack of power and/or hesitation during acceleration at engine speeds of 1500-3500 rpm. In some cases, the knock sensor may detect crank shaft vibration causing the ECM to interpret it incorrectly as engine knocking (pinging). This can result in incorrect ignition timing leading to a noticeable reduction or delay in acceleration. This new logic enhances engine knocking detection by the ECM.

**IMPORTANT NOTE:** This bulletin **ONLY** applies to models equipped with manual transmissions.

**PRODUCTION CHANGE INFORMATION:**

This logic has been installed on all Crosstrek models as of starting **VIN M9366120**.

The production change information for **Impreza** is **TBD**.

<p><b>CAUTION: VEHICLE SERVICING PERFORMED BY UNTRAINED PERSONS COULD RESULT IN SERIOUS INJURY TO THOSE PERSONS OR TO OTHERS.</b></p>	<p><b>Subaru of America, Inc. is ISO 14001 Compliant</b></p>
<p>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.</p>	<p>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.</p>

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**PAK FILE APPLICABILITY:**

Model	Model Year	Specification	Pak File Name	Decryption Keyword	New ECM CID Number
Impreza	17-18MY	2.0L NA AGS* 5MT	22765AJ59K.pak	9B767F3E	XH3J2C1C
	17-18MY	2.0L NA 5MT	22765AK61K.pak	9DB28E88	XH3J2C1A
	19MY	2.0L NA AGS* 5MT	22765AM64F.pak	EE846B14	XH3N601C
	19MY	2.0L NA 5MT	22765AM65F.pak	D16FD4BA	XH3N601A
	20MY	2.0L NA AGS* 5MT	22765AP11C.pak	149FBFC0	XE1M301C00G
	20MY	2.0L NA 5MT	22765AP12C.pak	5D1CB56E	XE1M301A00G
	21MY	2.0L NA AGS* 5MT	22765AP84B.pak	32AE558E	XE1P101C00G
	21MY	2.0L NA 5MT	22765AP85B.pak	18875822	XE1P101A00G
Crosstrek	18MY	2.0L NA 6MT	22765AJ617.pak	904A79D6	XH3J2C1E
	19MY	2.0L NA 6MT	22765AM815.pak	C19070B4	XH3N601E
	20MY	2.0L NA 6MT	22765AN932.pak	584FA350	XE1M301E00G
	21MY	2.0L NA 6MT	22765AP921.pak	E833E79F	XE1P101E00G

These reprogramming files are included in the July 2021 SSM4 software

**NOTE:** AGS – Active Grille Shutter

**SERVICE PROCEDURE / INFORMATION:**

**REMINDER:** Customer satisfaction and retention starts with performing quality repairs.

- Reprogram the ECM following the normal FlashWrite procedure.

Subaru of America, Inc. (SOA) highly recommends connecting either the Subaru Midtronics DCA8000 Dynamic Diagnostic Charging System or the Subaru Midtronics GR8-1100 Diagnostic Battery Charger to the vehicle and utilizing the Power Supply Mode feature anytime a vehicle control module is being reprogrammed. Once the Midtronics charger is connected to the vehicle, if the battery is fully charged, it takes less than three (3) minutes to boot-up the charger, select the Power Supply Mode, and have the battery voltage stabilized and ready for reprogramming.

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## NOTES:

- For instructions on using the power supply mode, reference the applicable User Manual for the Midtronics DCA-8000 Dynamic Diagnostic Charging System and the Midtronics GR8-1100 Diagnostic Battery Charger on STIS.
- Confirm all electrical loads such as lights, audio, HVAC, seat heaters, and rear defroster are all switched OFF before setting up the charger for Power Supply Mode.
- Select the correct battery type (Flooded, EFB, Gel, AGM or AGM Spiral).
- Input the CCA which matches the vehicle's battery. **NOTE:** OE and replacement batteries have different CCA ratings. Always confirm the battery's CCA rating before proceeding.
- If using a DCA-8000 Dynamic Diagnostic Charging System, set the power supply voltage to 13.5 volts.
- DO NOT connect the DST-i or SDI until the Power Supply mode function has completed its battery test mode and the Charging Voltage has dropped to and shows a steady 13.5 Volts on the display.
- Once Power Supply Mode reaches a steady 13.5 volts, connect the DST-i or SDI to the OBD connector and proceed with initiating the normal FlashWrite 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 is made.

**REMINDER:** If the DCA-8000 or GR8-1100 indicates the vehicle's battery must be charged, charge the battery fully before proceeding to reprogram the vehicle while using the Power Supply Mode.

**NOTE:** Control module failures resulting from 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.

## VERY IMPORTANT:

This information is applicable to the Subaru Midtronics DCA-8000 Dynamic Diagnostic Charging System and the Subaru Midtronics GR8-1100 Diagnostic Battery Charger ONLY. It does not apply to any other brand / type of "generic" battery charger whatsoever. ONLY the DCA-8000 and the GR8-1100 and their Power Supply Mode feature have been tested and approved by SOA.

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## WARRANTY / CLAIM INFORMATION:

For vehicles within the Basic New Car Limited Warranty period, 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 pak 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.