SUBARU

QUALITY DRIVEN® SERVICE

SERVICE BULLETIN

APPLICABILITY: 2015-20 MY WRX 2.0L DIT 2014-18MY Forester 2.0L DIT	**NUMBER:** 11-199-20R **DATE:** 02/11/20 **REVISED:** 02/04/21

SUBJECT: Reprogramming File Availability for Startability and Idle Stability at Low Temperatures

INTRODUCTION:

This bulletin announces availability of reprogramming files to optimize the Engine Control Module (ECM). The new logic will address isolated concerns of a hard start condition occurring in cold weather (+10 degrees Fahrenheit or lower) and / or high-altitude areas. When this scenario occurs, the A/F learning control values move toward lean. In addition, if the condition were to occur on an engine with relatively high mechanical friction (typically, an engine with low mileage), a hard start condition may result.

PRODUCTION CHANGE INFORMATION:

This latest ECM logic was incorporated into WRX production starting with the following VINs: (bullet points)

6MT: **L9830186**

CVY: **L8806372**

Starting VINs for Forester will be added when they become available.

PACK FILE APPLICABILITY:

For WRX Models:

Model	PAK File Name	New ECM Part Number	Old ECM Part Numbers	Decryption Keyword	New ECM CID Number
2015MY WRX, FED Spec, w/ 6MT	22765AR961.pak	22765AR961	22765AG230, 31, 32, 33, 34, 35, 36, 37, 38, 39 & AR960	9B7C74CA	LF75404S
2015MY WRX, FED Spec, w/ CVT	22765AR970.pak	22765AR970	22765AG240, 41, 42, 43, 44, 45, 46, 47, 48 & 49	8EF10D7F	LF75403T
2016MY WRX, FED Spec, w/ 6MT	22765AH616.pak	22765AH616	22765AH610, 11, 12, 13, 14 & 15	2A46DCFD	LF75404H
2016MY WRX, FED Spec, w/ CVT	22765AH625.pak	22765AH625	22765AH620, 21, 22, 23 & 24	F9D722A5	LF75403G

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Model	PAK File Name	New ECM Part Number	Old ECM Part Numbers	Decryption Keyword	New ECM CID Number
2017MY WRX, FED Spec, w/ 6MT	22765AK385.pak	22765AK385	22765AK380, 81, 82, 83 & 84	B8B0D83C	LF79103P
2017MY WRX, FED Spec, w/ CVT	22765AK394.pak	22765AK394	22765AK390, 91, 92 & 93	AB1258AB	LF79102N
2018MY WRX, FED Spec, w/ 6MT	22765AL004.pak	22765AL004	22765AL000, 001, 002 & 003	8C1EEE9C	LF9C102P
2018MY WRX, FED Spec, w/ CVT	22765AL012.pak	22765AL012	22765AL010 & 011	AEA0F0B8	LF9C002N
2019MY WRX, FED Spec, w/ 6MT	22765AM553.pak	22765AM553	22765AM550, 551 & 552	75ED5C0F	LF9D012h
2019MY WRX, FED Spec, w/ CVT	22765AM562.pak	22765AM562	22765AM560 & 561	CFD506D3	LF9D011g
2020MY WRX, FED Spec, w/ 6MT	22765AN623.pak	22765AN623	22765AN620, 621 & 622	91D4548C	LF9G003T
2020MY WRX, FED Spec, w/ CVT	22765AN632.pak	22765AN632	22765AN630 & 631	D2C02B24	LF9G002S

For Forester Models:

Model	PAK File Name	New ECM Part Number	Old ECM Part Numbers	Decryption Keyword	New ECM CID Number
2014MY Forester	22611BG963.pak	22611BG963	22611AW060, 61, 62, 63, 64, 65, 66, 67, 68 & 69 2611BG960, 61 & 62	F2EF6EEB	AF56E03B
2015MY Forester	22765AG979.pak	22765AG979	22765AG970, 71, 72, 73, 74, 75, 76, 77 & 78	DCE18725	LF61803B
2016MY Forester	22765AH516.pak	22765AH516	22765AH510, 11, 12, 13, 14 & 15	997384B8	LF75403A
2017MY Forester	22765AH925.pak	22765AH925	22765AH920, 21, 22, 23 & 24	C1B8C648	LF78106B
2018MY Forester	22765AL593.pak	22765AL593	22765AL590, 91 & 92	207581E8	LF9C002B

NOTE: All these reprogramming files were included in the **January 2020** SSM software update.

SERVICE PROCEDURE:

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

• Reprogram the ECM following the normal FlashWrite procedure.

SERVICE PROCEDURE / INFORMATION:

Subaru of America, Inc. (SOA) highly recommends connecting either the Subaru Midtronics DCA-8000 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

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than three (3) minutes to boot-up the charger, select the Power Supply Mode, and have the battery voltage stabilized and ready for reprogramming.

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.

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.

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.

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	455-288	UPG-48	0.4

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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.

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