

ATTENTION:

GENERAL MANAGER

PARTS MANAGER

CLAIMS PERSONNEL

SERVICE MANAGER

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

© 2020 Subaru of America, Inc. All rights reserved.



QUALITY DRIVEN® SERVICE

SERVICE BULLETIN

APPLICABILITY: 2020MY Legacy and Outback
2019-2020MY Forester

NUMBER: 07-176-20R

DATE: 05/18/20

SUBJECT: DTCs B118B, B11E5, B11E6 in Driver Monitoring System (DMS)

REVISED: 05/13/21

INTRODUCTION:

This bulletin announces availability of DMS reprogramming files to address the following DTCs: B118B, B11E5, B11E6 when they appear in memory all at the same time as a group. A workflow to follow for proper diagnosis is also supplied in the Service Procedure section below.

PRODUCTION CHANGE INFORMATION:

This new DMS logic was incorporated into production vehicles starting with the following VINs:

- Legacy: **L3005662**
- Outback: **L3116345**
- Forester: **T.B.D.**

PACK FILE APPLICABILITY:

Model	PAK File Name	OLD DMS ECU Part Number	NEW DMS ECU Part Number	Decryption Keyword
2020MY Legacy & Outback	98401AN00AtoB-1.pak2 98401AN00AtoB-2.pak2	98401AN00A	98401AN00B	B80240B9 E33027FA
2019-2020MY Forester (file set 1)	98401SJ010to013-1.pak2 98401SJ010to013-2.pak2	98401SJ010	98401SJ013	038BA84E A65F57D4
2019-2020MY Forester (file set 2)	98401SJ011to013-1.pak2 98401SJ011to013-2.pak2	98401SJ011		CFBB4ECE A65F57D3
2019-2020MY Forester (file set 3)	98401SJ012to013-1.pak2 98401SJ012to013-2.pak2	98401SJ012		EA1EDD4A A65F57D4

NOTE: BOTH Pack files listed in the table above above MUST be installed to complete this software update.

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.

Continued...

SERVICE PROCEDURE / INFORMATION:

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

Workflow:

Step 1) Using the SSM4, check for any stored DTCs.

Step 2) Diagnose any stored DTCs **OTHER THAN** B118B, B11E5, B11E6 stored in DMS system per the applicable Service Manual.

Step 3) Turn the ignition OFF then back ON again.

Step 4) Recheck for any stored DTCs.

CHECK #1: Are DTCs B118B, B11E5, B11E6 stored together in the DMS system?

- **YES:** Check for any memorized (past) DTCs.
- **NO:** Diagnose any other stored DTCs per the applicable Service Manual.

CHECK #2: Is either B11E7 or B11E8 stored in memory?

- **YES:** Diagnose per the applicable Service Manual.
- **NO:** Proceed to **Step 5** below.

Step 5) IMPORTANT: Outback and Legacy models have only one (1) applicable update file set available while Forester models have three (3) file sets available. As a result, when updating a **Forester**, the currently installed (OLD) DMS ECU Part Number must be identified then compared against the table above to determine the applicable update file set to install. Using the SSM4, go to: Diagnosis > Confirm Vehicle VIN > Each System > Driver Monitor > Work Support > ECU Parts Number. When the update is completed successfully, the corresponding **NEW** DMS ECU Part Number will be displayed.

Step 6) Before installation of the first reprogramming file can be accomplished, the DMS / CAN system must be “put to sleep” using the following procedure:

- a) Switch the ignition OFF.
- b) Close all windows, doors and rear gate
- c) **WAIT** approximately 2 minutes.
- d) When the red LED in the small DMS window located above the CP-1 multi-function touch screen display goes out, the DMS is “asleep”.

NOTE: For push-button start vehicles, the keyless access remote must be **at least** 7 feet away for the system to go to sleep.

IMPORTANT: This DMS update requires installation of 2 reprogramming files as shown above. Each file will take about 15 minutes to install. BOTH update files MUST be installed. If this update has been performed previously, a “Latest version already installed” message will be displayed when beginning installation of the first file. Due to the system structure, the FlashWrite reprogramming procedure must be performed twice (once for each file) to complete the update.

REMINDER: Subaru of America, Inc. (SOA) highly recommends connecting either the Subaru Midtronics DCA-8000 Dynamic Diagnostic Charging System or the Subaru Midtronics GR8-100 Diagnostic Battery Charger to the vehicle and utilizing the Power Supply Mode feature to supply a stable **13.5 volts** anytime a vehicle control module is being reprogrammed.

Continued...

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.

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.

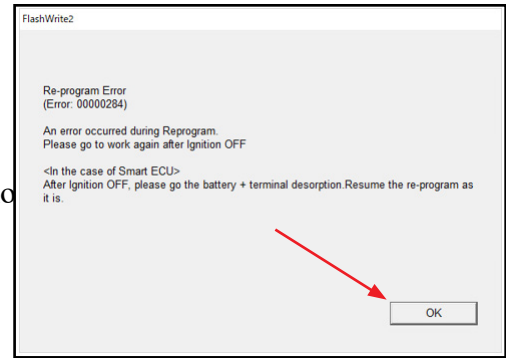
REMINDER: If the DCA-8000 or GR8-1100 indicates the vehicle's battery must be charged, charge it fully using the DCA-8000 or GR8-1100 before proceeding to reprogram the vehicle using the Power Supply Mode.

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.

Continued...

Step 7) Proceed with reprogramming. Install the **FIRST** of **TWO** DMS update files using FlashWrite.

NOTE: If during the reprogramming, the **Error** screen shown here is displayed, ignore it and select OK. If no error screen is displayed, select OK.



Step 8) After the **FIRST** file installation is successfully completed, switch the ignition back on and repeat the FlashWrite procedure to install the applicable **SECOND** file.

Step 9) After successful installation of **BOTH** update files, switch the ignition back ON and using the SSM4 and check again for any stored DTCs.

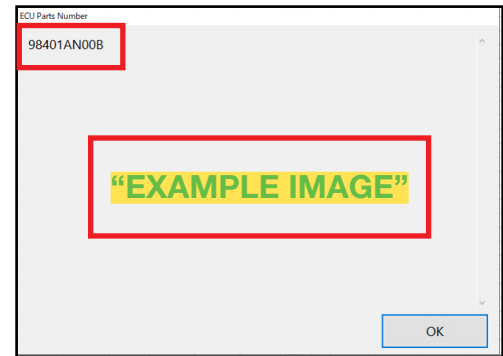
CHECK: Are any of DTC B118B, B11E5, B11E6 stored?

- **YES:** Diagnose any stored DTC per the applicable Service Manual.
- **NO:** Proceed to **Step 10**.

Step 10) Repeat **Step 6** above and put the CAN / DMS system back to sleep.

Step 11) Using the SSM4, confirm the DMS **ECU** Part Number to confirm the update was successful. Go to: Diagnosis > Confirm VIN > Each System > Driver Monitor (scroll down) > Work Support > ECU Parts Number.

Confirm the update has been performed successfully by comparing the (NEW) ECU Parts Number with the chart provided above. Select **OK** to complete the procedure.



WARRANTY / CLAIM INFORMATION:

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

Labor Description	Labor Operation #	Labor Time	Fail Code
DRIVER MONITORING SYSTEM CONTROL MODULE REPROGRAMMING	A067-458	0.8	ZTC-48

Continued...

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.